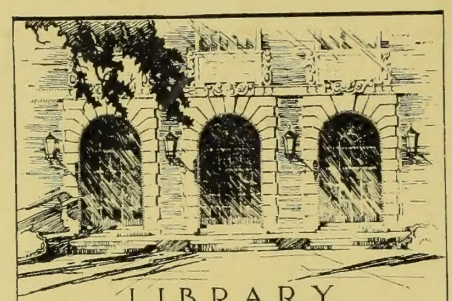


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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., JANUARY, 1929. NO. 1.

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GENERAL SUMMARY.

The opening month of 1929 in Missouri was outstanding for frequent sharp cold waves, with very little recovery between them, and much snow, especially heavy over the northern-third. Notwithstanding it was the most persistent cold January in several years, no low temperature records were broken.

The mean temperature was 25.1°, or 5.4° below the normal, the coldest for the State as a whole since 1924, but the coldest since 1918 over the northern half of the State, that January having a mean of 16.4°. A rather unusual feature was the marked differences between northern and southern stations. Along the northern border there were fifteen days of zero or lower temperatures and about 22 days when the temperature did not rise above 32°, while in the southeast section there were no zero values, and 10 to 12 days when the minimum did not go as low as freezing. Furthermore, the northern half of the State was covered with snow continuously, depths ranging from 7 to 13 inches, 19 inches being the maximum depth, while many of the southern stations, especially on the southern and eastern slopes of the Ozark plateau had not even a trace.

With 3.47 inches of precipitation, it was the wettest January since 1916. Precipitation fell almost daily in some part of the State, being heavy to excessive in the southeast lowlands during a three-day period, 22d, 23d, and 24th, some stations reporting more than three inches. Sleet, (or glaze) was a large part of the general state-wide precipitation.

Farm activities were at a standstill, save of course the usual daily chores. Livestock did well but feed was getting low in some northwest counties. The ground was deeply frozen, on an average of 18 inches, as many measurements, reported by telephone companies digging post holes, showed. Wheat condition is problematical. Nearly all traffic was hampered by ice covered streets, highways and byways.

TEMPERATURE.

The monthly mean for the State as a whole, based upon the records of 67 stations, was 25.1°, or 5.4° above the normal, and the coldest January since 1924. The cold was steady and persistent, although less marked in southern sections than in the central and northern sections. The average daily negative departures ranged from slightly more than 2° in the southeastern lowlands to nearly 9° in the northwest plateau. The warmest days were the 18th and 22d, when maxima ranged well into the 60s over the southern half of the State, 72° being the highest at Caruthersville. The minimum for the State was −13°, at Unionville, on the 7th. Temperatures were 32° or lower on thirty days, and zero or lower on three days for the State as a whole.

PRECIPITATION.

The average precipitation for the State, 98 stations, reporting, was 3.47 inches, or about 1.43 inches more than the 60 years' average. It also was the wettest January since 1916. All parts of the State received excess moisture. Precipitation was frequent, occurring almost daily in some part of the State, and mostly in the form of snow or sleet or rain freezing as it fell. The days of the heaviest and general precipitation probably were the 5th, 18th, 22d, and 24th. The greatest local monthly total was 8.64 inches, at Dexter; and the greatest amount in any twenty-four consecutive hours was 3.50 inches, at Campbell.

The snowfall averaged 6.8 inches, about one inch more than the normal. Monthly totals over the northern half of the State ranged from 7 to 13 inches, 29 inches at Unionville, Putnam County, being the largest amount. The fall was rather light over the Ozark plateau, and hardly any at all along the southern slope.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—2d, 5th, 16th, 17th, 18th, 22d, and 24th.
Halos, lunar.—3d, 4th, 19th, 21st, 23d, 25th, and 26th.
Halos, solar.—1st, 3d, 21st, 22d, 23d, 26th, 29th, 30th, and 31st.
Sleet.—(mostly glaze, and while covering all outdoor objects, was not of a damaging nature.)—4th, 5th, 9th, 14th, 16th, 18th, 21st, 23d, 24th, and 27th.
Thunderstorms.—At Springfield on the 24th.

SPECIAL STORM NOTES.

Tornado.—Between the hours of 10.30 a. m. and 12.30 p. m. January 18, high winds occurred in the southeast part of the State, and especially in Cape Girardeau and Scott Counties. A well defined tornado, according to reports, developed about four miles south of Benton, Scott County. The path was about 200 feet wide and about two miles long, extending in a general way from southwest to northeast. Three persons were killed, two children instantly, and one woman who died later from injuries received. Six other persons were injured but none seriously. The property loss, two farm houses completely demolished and several out buildings badly damaged, was estimated to be about $15,000. High wind, although doing no material damage, was felt at Cape Girardeau, Benton, Commerce, Diehlstadt, and Charleston.

Jan. 24.—An ice storm, glaze or rain freezing as it fell, occurred quite generally on this date. There was a good coating over all outdoor objects, but no damage apparently occurred, the only report was broken tree limbs at Arcadia, Iron County. Highways, however, were dangerously slippery, many accidents occurring to automobile traffic.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.12	83	76	158	52	6,360	8.5	33	n.	11
Hannibal	30.13	79	..	....	..	6,373	8.6	30	w.	22
Kansas City	30.13	81	69	168	55	7,793	10.5	35	nw.	11
St. Joseph	30.14	82	74	123	41	6,365	8.6	37	nw.	22
St. Louis	30.12	80	70	133	44	9,155	12.3	41	sw.	22
Springfield	30.10	88	76	138	45	8,581	11.5	38	w.	22
Cairo, Ill.	30.14	84	71	...	..	7,275	9.8	48	sw.	18
Keokuk, Iowa	30.16	80	76	143	48	5,690	7.6	30	nw.	11

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JANUARY.

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	21.5	−8.7	74	−32	1.91	−0.08	....	....	6	..	..	..
1889	33.8	+1.6	69	− 2	2.36	+0.37	....	....	6	..	..	..
1890	33.8	+3.6	81	−19	4.25	+2.26	....	....	9	..	..	..
1891	34.1	+3.9	74	− 1	1.52	−0.47	....	4.3	6	..	..	..
1892	24.0	−6.2	67	−25	1.80	−0.19	....	....	4	14	8	9
1893	22.5	−7.7	66	−14	0.45	−1.54	0.90	2.4	3	9	11	11
1894	31.4	+1.2	77	−35	2.21	−0.22	2.96	2.7	5	13	9	9
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	9.4	5	14	8	9
1896	32.9	+2.7	71	− 9	1.17	−0.82	2.44	3.1	4	10	7	14
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	4.0	8	12	7	12
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	8.4	9	11	8	12
1899	30.2	0.0	70	−21	1.55	−0.44	2.40	4.0	6	12	8	11
1900	34.5	+4.3	77	− 9	1.22	−0.77	2.30	0.2	4	14	7	10
1901	35.0	+4.8	72	−11	1.30	−0.69	2.95	0.8	4	17	7	7
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	6.9	5	16	7	8
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	5.0	6	13	6	12
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	7.4	8	14	6	11
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	6.8	8	14	6	11
1906	35.6	+5.4	76	− 8	3.64	+1.65	3.00	9.2	6	14	5	12
1907	34.3	+4.1	79	− 5	5.10	+3.11	4.42	2.8	12	7	6	18
1908	34.4	+4.2	68	−10	1.51	−0.48	2.13	3.6	5	19	5	7
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	6.5	7	6	7	18
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	3.5	5	13	6	12
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	0.7	5	8	7	16
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	6.5	4	14	7	10
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	2.6	8	13	6	12
1914	38.1	+6.9	78	− 1	1.42	−0.92	2.00	1.0	4	12	7	12
1915	29.1	−2.2	76	−24	2.92	+0.59	3.10	5.4	8	12	5	14
1916	31.6	+0.7	72	−24	7.36	+5.16	4.65	3.4	12	9	4	18
1917	32.9	+2.5	76	−10	1.52	−0.64	2.50	2.3	5	15	7	9
1918	16.4	−14.0	67	−24	1.68	−0.71	3.20	16.6	7	12	7	12
1919	34.0	+3.6	70	−23	0.40	−1.88	3.05	1.4	2	20	5	6
1920	28.6	−1.4	72	− 5	1.57	−0.65	4.15	5.7	5	15	5	11
1921	37.1	+7.2	74	− 1	1.88	−0.38	1.45	5.4	6	10	7	14
1922	29.5	−0.6	66	− 6	1.21	−1.05	2.95	3.9	5	14	5	12
1923	39.2	+8.5	75	3	2.72	+1.81	3.52	0.6	6	12	7	12
1924	24.9	−5.5	68	−25	1.54	−0.49	1.78	5.7	7	14	5	12
1925	29.7	−0.7	65	−15	1.00	−1.03	2.10	4.7	4	15	7	9
1926	32.7	+2.3	70	−20	1.90	−0.13	2.51	4.2	6	11	7	13
1927	30.8	+0.4	73	−24	3.05	+1.02	4.40	3.6	6	13	6	12
1928	33.3	+2.9	77	−18	0.87	−1.16	1.25	0.5	3	16	7	8
1929	25.1	−5.4	72	−13	3.47	+1.43	3.50	6.8	8	11	6	14

Climatological Data for January, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	19.6	− 7.2	50	17†	− 1	2	39	3.41	+1.78	1.08	11.4	12	12	2	17	nw.	O. K. Benecke
Clifton Hill	Randolph	731	29	19.7	− 9.0	53	22	− 7	2	39	2.96	+1.36	1.04	16.0	10	9	3	19	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	23.5	− 5.7	63	22	0	2	47	2.09	+0.17	0.98	4.7	9	9	9	13	e.	U. S. Weather Bureau
Downing	Schuyler	876	7	15.6	.....	41	22	−12	7	38	2.60	+0.87	0.77	19.4	10	15	1	15	e.	James Taylor
Fayette	Howard	661	48	21.6	− 5.6	52	22	− 6	2	43	2.49	+0.50	1.50	8.5	4	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	23.4	− 6.3	65	22	− 1	2	42	2.56	+0.21	1.09	3.7	13	9	11	11	e.	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	3.45	+1.90	1.23	9.7	8	7	10	14	ne.	J. W. Pulliam
Hannibal	Marion	534	36	21.0	− 6.1	56	22	− 3	13	39	3.33	+1.61	1.21	8.0	15	11	6	14	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	26.7	− 3.1	70	22	3	15	53	2.47	+0.25	1.06	5.8	9	11	9	11	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	16.7	− 8.2	42	22	−10	7	36	3.63	+2.10	1.68	17.8	10	7	2	22	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	34	23.2	− 4.7	55	18	− 4	2	34	....	.....	....	....	..	15	9	7	e.	Stark Bros. Nurseries
Macon	Macon	875	29	18.3	−10.2	48	18	− 7	7†	48	2.40	+0.75	1.03	7.1	9	13	6	12	e.	W. C. Brown
Mexico	Audrain	800	39	20.6	− 7.7	61	22	− 2	14†	41	3.12	+1.07	1.10	12.3	14	17	0	14	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	2 76	.....	0.96	10.0	8	8	8	15	sw.	J. S. Conway
St. Charles	St. Charles	456	40	27.3	− 3.8	64	22	1	14	35	2.16	−0.11	0.62	6.0	9	7	9	15	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	27.6	− 3.5	61	22	3	13	34	2.11	−0.23	0.70	3.3	12	12	6	13	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	26.2	− 4.0	62	22	3	13	37	2.46	−0.61	0.70	3.6	14	12	3	16	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	2.76	+1.04	1.25	7.0	5	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	19.4	− 8.4	44	18†	− 9	7†	40	2.86	+0.67	1.50	14.0	10	12	9	10	e.	Frank Hall
Unionville	Putnam	1,062	35	15.2	− 8 3	40	22	−13	7	39	4.35	+2.51	1.60	29 0	10	10	6	15	n.	Geo. W. Davis
Warrenton	Warren	816	46	26.6	− 2.4	65	22	− 1	13	46	4.07	+1.69	1.17	8.5	12	9	12	10	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	17.6	− 7.3	46	22	− 8	7	35	3.14	+1.58	1.09	9.4	12	11	5	15	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	21.6	− 6.2	70	22	−13	7	53	2.91	+0.96	1.68	10.2	10	11	6	14	e.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	37.2	.....	70	18	13	2	30	5.85	.....	3.50	T.	6	8	4	19	n.	Jeff. King
Caruthersville	Pemiscot	265	32	38.8	− 0.2	72	18	14	2	30	3.57	−1.18	0.95	0	7	8	7	16	n.	Sam Smith
Doniphan	Ripley	344	24	33.0	− 3.2	62	22	8	2	34	7.92	+3.71	2.25	0	7	13	11	7	sw.	W. W. Martin
Jackson	Cape Girardeau	428	37	31.9	− 2.1	61	22†	7	2	41	6.77	+3.05	2.66	0.5	8	10	5	16	n.	John G. Putz
Marble Hill	Bollinger	470	33	31.8	− 3.0	61	22	5	2	37	6.20	+2.67	2.40	0	7	12	4	15	n.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	7.75	+3.52	3.25	0	10	13	3	15	n.	John A. Spence
Poplar Bluff	Butler	339	24	33.4	− 3.2	62	18	10	2	31	8.61	+4.64	2.80	0	11	15	7	9	e.	J. H. Wolpers
Sikeston	Scott	318	23	35.4	− 2.2	70	19	12	2†	40	6.83	+2.60	3.00	0	10	11	6	14	sw.	Glen R. Fisher
Cairo, Ill	Alexander, Ill	358	53	33.4	− 1.5	70	18	13	6	37	4.98	+1.22	2.29	T.	11	7	8	16	ne.	U. S. Weather Bureau
Section means and	extremes	....	..	34.4	− 2.2	72	18	5	2	41	6 50	+2.53	3.50	0.1	8	11	6	14	n.	
Ozark Plateau																				
Arcadia	Iron	926	47	27.4	− 4.7	61	22	3	2†	41	3.39	+0.17	1.61	T.	6	21	1	9	ne.	Arcadia College
Aurora	Lawrence	1,370	38	31.2	− 2.3	66	22	6	2†	33	3.14	+0.74	1.15	0.8	5	11	5	17	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	32.0	− 2.4	64	22	6	2†	34	5.09	+2.03	2.30	0	7	14	4	13	sw.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ‡‡	McDonald	1,000	31	32.6[k]	− 3.6	63	22	− 2	6	40	3.80	+1.56	1.55	2.5	6	14	10	7	sw.	H. E. Dean
Eldon	Miller	934	32	25.4[c]	− 6.0	58	17	0	2	37	2.30	+0.76	1.15	4.7	7	6[c]	9[c]	13[c]	n.	E. H. Shepherd
Farmington	St. Francois	918	17	29.2	− 3.6	62	22	4	2	37	4.38	+2.03	1.88	0.2	8	8	13	10	sw.	Robert Forsyth
Goodland	Iron	1,000	34	30.3	− 2.3	63	22	3	2	46	3.55	+0.68	1.52	0.5	9	15	5	11	n.	F. M Adams
Greenville	Wayne	381	6	32.0[b]	.....	64	18	3	2	39	6.10	.....	2.18	0	11	18	2	11	s.	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	2.87	.....	2.00	2.2	4	12	7	12	w.	A. W. Madison
Koshkonong	Oregon	958	27	33.2	− 3.3	65	22	8	2	37	6.05	+2.51	3.42	0	8	10	6	15	e.	R. M. Hitt
Lebanon	Laclede	1,265	40	26.6	− 6.4	65	21	0	2†	44	2.85	+0.40	1.40	T.	4	14	6	11	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	30.7	− 2.6	58	19	4	2†	34	2.32	+0.66	1.00	6.0	7	13	4	14	ne.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	27.9	− 5.3	63	22	0	2	43	4.23	+1.36	0.95	2.0	12	9	8	14	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	33.4	− 1.7	65	22	0	2	43	1.90	−0.60	1.12	9.5	5	18	2	11	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	27.6	− 3.7	65	22	3	2†	42	3.15	+0.70	0.75	3.0	9	..	..	..	s.	F. H. Lane
Salem(near)	Dent	1,173	24	29.5	− 3.4	65	22	− 4	2	45	3.10	+0.25	1.21	1.0	9	9	10	12	se.	A. C. Leech
Seligman	Barry	1,542	26	34.2	− 0.5	62	18†	3	6	36	5.21	+2.97	1.70	2.1	6	13	7	11	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	30.2	− 4.1	62	22	− 3	2	33	3.57	+0.87	1.74	2.0	5	12	5	14	se.	Ira H. Hailey
Springfield	Greene	1,324	40	29.4	− 4.1	65	22	5	25	42	2.53	+0.19	1.04	1.8	9	12	6	13	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	30.2	− 3 5	66	22	− 4	2	46	3.66	+1.02	3.42	2.0	7	13	6	12	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	26.0	− 5.3	62	22	0	2	37	2 57	+0.74	1.36	2.1	9	8	15	8	nw.	W. G. Bigelow
Centerview	Johnson	872	41	24.2	− 4.7	55	18	− 1	2	38	4.49	+2.70	1.75	0.5	8	7	7	17	sw.	E. A. Markey
Clinton	Henry	765	35	26.2	− 5.2	52	18	0	2	40	2.11	−0.13	0.85	6.0	6	11	6	14	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	20.8	− 6.4	54	17†	− 2	2†	44	3.26	+1.66	1.45	10.0	7	2	5	24	n.	John H. Patterson
Lamar	Barton	980	41	28.2	− 4.2	63	22	2	2	43	2.48	+0.78	1 30	6.0	10	14	5	12	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	23.8	− 4.9	57	22	− 3	2	39	2.49	+0.71	0.90	11.5	9	8	11	12	nw.	J. E. Wheeler
Marshall	Saline	779	39	22.6	− 5.0	56	18†	− 5	2	38	1.35	−0.47	0.55	8.0	5	4	10	17	nw.	Dr. W. H. Black
Nevada	Vernon	862	35	28.4	− 3.3	63	22	4	2†	40	2.18	+0.21	1.40	4.5	7	12	5	14	ne.	George A. Kaupp
Warsaw	Benton	687	28	29.2	− 3.6	68	22	− 6	2	45	1.13	−1.25	0.35	6.0	4	15	4	12	n.	Everett Martin
Section means and	extremes	.....	..	25.5	− 4.7	68	22	− 6	2	45	2.45	+0.55	1.75	6.1	7	9	8	14	nw.	
Northwest Plateau																				
Bethany	Harrison	916	36	15.9	− 8.7	39	12	− 9	15	39	2.95	+1.65	0.80	15.0	8	8	6	17	nw.	M. H. Moulton
Chillicothe	Livingston	779	19	15.6	−13.2	42	22	− 8	15	45	4.15	+2.49	1.04	13.5	5	16	4	11	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	39	15.6	− 9.2	41	8	− 9	15	43	2.04	+1.09	0.73	10.5	7	11	5	15	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	20.4[g]	.....	42	22	− 2	24	36	1.96	+0.69	0.82	5.9	9	9[b]	1[b]	19[b]	n.	Fred L Stiff
Grant City	Worth	1,134	24	14.8	−10.1	39	8	−11	15	38	2.70	+1.74	0.85	16.2	10	12	11	8	ne.	W. P. Spillman
Kansas City	Jackson	963	39	21.0	− 7.2	53	18	0	25	35	3.12	+1.93	1.56	10.2	10	7	9	15	n.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	13 8	−13.1	40	12†	− 6	15	43	2.06	+0.76	0.75	9.1	7	11	6	14	n.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	3.31	.....	1.24	22.1	10	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	22.4	− 5.1	51	19	0	15†	45	3.98	+2.41	1.55	21.7	7	11	12	8	n.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	15.8	− 6.6	40	12	− 7	25	38	1.99	+0.91	0.60	8.0	10	15	6	10	n.	J. R. Brink
Oregon	Holt	1,048	72	18.9	− 5.0	43	12	− 5	25	39	2.93	+1.54	1.63	9.0	6	9	12	10	nw.	Mina Wright
St. Joseph	Buchanan	967	20	18.2	− 9.3	42	8	− 3	25	36	2.96	+2.17	1.20	9.9	9	11	6	14	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	25	13.8	− 9.1	39	12	− 7	25	37	1.81	+1.02	0.85	14.3	7	7	8	16	ne.	Albert Volker
Trenton	Grundy	822	32	16.8	− 9.9	38	12	− 6	15	36	3.35	+1.97	1.43	12.0	12	8	8	15	n.	W. H. Estes
Section means and	extremes	.....	..	17.2	− 8.9	53	18	−11	15	45	2.81	+1.57	1.63	12.7	8	10	7	14	n.	
State means and	extremes	.....	..	25.1	− 5.4	72	18	−13	7	53	3.47	+1.43	3.50	6 8	8	11	6	14	n.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

551.05
UNMS
1929-35

Daily Precipitation for January, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain																																	
Boonville‖	Missouri	.30	T.			.93	.13				.16						.08	.02	.04	T.			.22	T.	.03	.08							1.94
Brunswick‖	Grand	.10				1.08	.26				.25		T.	.02			.02	.08	.17				.98	.08	.33	.04							3.41
Clifton Hill	Chariton	.50			.11	.65				.22	T.		T.	.10			T.	.14	.03				1.04		.10	.07							2.96
Columbia***	Missouri	.08			.32	.83				.23	T.	T.	T.	T.	T.		.05	.04	.10			.25	T.	T.	.19							T.	2.09
Downing	Mississippi	.12			.02	.46				.20			.01	.15			T.	.30	.10				.77		.35						.12		2.60
Fayette‖	Missouri	.40				1.50																	.30		.29								2.49
Fulton‖	....do	.17				1.09	.16				.07			.01		T.	.04	.02	.01	.31			.29		.16	.22					.01		2.56
Gorin	Mississippi	.04				.90				.31								.10	.11				1.23		.68					.08		3.45
Hannibal***	....do	.09			.44	.95				.18	T.	T.	.11	.02	.01		.04	.06	.17			.04	.66		.42			T.		.01	.13	T.	3.33
Hermann‖	Missouri	.13	.01			.88	.20				.30			.01		.03		.04	.01	.58			.24	T.	.30	.20					.02		2.95
Jefferson City‖	....do		.11			1.06	.11											.20	.04	.40			.19		.06	.30				.10			2.47
Kirksville	Mississippi	.40			T.	.80				.08				.20			.01	.05	.01				1.68		.30						.01		3.63
Louisiana	....do																																
Lucerne‖	Grand	.23					.74				.37			.24				T.	.08	.10			.37	.22		.12					.08	T.	2.55
Macon ‖	Chariton	.24				1.03	.06							.12				.10					.28		.30	.20					.07		2.40
Mexico ‖	Mississippi	.34	.03			1.10	.35				.20			.08	T.		.05	.04	.05	.15			.40	.08		.20					.05		3.12
Milan‖	Grand	.20					.50			.50			T.	.20				.05				T.			.20						.15		1.80
Monroe City	Mississippi	.12				.96				.29						T.	.23	.08					.79		.07						.22		2.76
Pacific‖	Meramec	.01				.73					.32			.02		.01			.01	.53			.03		.40	.34					.02		2.42
St. Charles	Missouri	.30			.01	.62	T.			.15			T.	.20		T.	T.		.48				.21		.14						.05		2.16
St. Louis (1)***	Mississippi	.06		T.	.26	.11	T			.19		T.	T.	.07	.02		.01	T.	.54			.01	.12		.70	T.					.02	T.	2.11
St. Louis (2)*	....do	.06		T.	.24	.27				.21				.03	.15	.01		.01	.05	.49		.01	.18		.70						.05	T.	2.46
Shelbina ‖	....do	.18				1.25				.15	.22												.96								T.		2.76
Steffenville	....do	.20			.10	1.50				.05		.05	T.	.04		.07	T.			T.			.30		.50	T.					.05		2.86
Union‖	Meramec	.20	.01			.80	.15				.40			.02		.05		.02		.68			.06		.40	.35					.02		3.16
Unionville	Chariton	.10				1.60				.50				.30					.35				.60		.40	.10					.30	.10	4.35
Warrenton	Mississippi	.30			.40	1.17	.03			.35	T.		T.	.10	T	.10	T.	T.	.62	.10			.38		.42	T.					.10		4.07
Keokuk, Ia.***	....do	.07			.37	.84				.12	T.	T.	.05		.03		T.	.11	.13			T.	.89		.42			T.		.02	.09	T.	3.14
Southeast Lowlands																																	
Campbell‖	St. Francis					.47				.87							.40		.45						3 50			.16					5.85
Cape Girardeau‖	Mississippi	.18				.26	.51				.56						.17	.46	.02	.03	2 15		T.	.02	.02	.92	1.76							7.06
Carruthersville ‖	... do					.40				.80									.95			.10		.20	.70		.42						3.57
Dexter‖	St. Francis					.30	T.				.80						T.	1.21	05	1.88	.75		.05	.06	1.02	2.50		.02						8.64
Doniphan	Black				.75	.75				.62								T.		1.55			.25	1.75	2.25								7.92
Jackson	Mississippi	.05				.93				.57								1.00	.05	1.35			.16		2.66								6.77
Marble Hill	Mississippi					.65				.60								.45	.20	1.60			.30		2.40								6.20
Morehouse	....do	.32				.70				.84							.21	.76	.05	1.37			T.		3.25	.20		.05					7.75
New Madrid‖	....do	.30				.20	.25				.88						.25	.22		.05	1.60		.06	.20	.30	2.25		.20	.05				6.81
Poplar Bluff‖	Black					.38	.18				.65						.26	.53	.02		2.00		.08	.15	1.56	2.80							8.61
Sikeston‖	Mississippi	.16					.05			.83							.05	.10	.40	1.60					3.00	.60		.04					6.83
Cairo, Ill.***	.. do	T.			T.	.31				.65		T.			.10	.06	.80	.04	.58			T.	.04	.16	2.19	T.		.05				T.	4.98
Ozark Plateau																																	
Arcadia ‖	St. Francis	.06	T.	T.		.40	T.				.39							T.		.88			T.		.05	1.61		T.					3.39
Aurora	Neosho	T.			.14	1.15				.25					T.			T.	.50						1.10								3.14
Birchtree (near)	Black				.42	.62				.57							.10		.95				.13		2.30								5.09
Bolivar	Osage																																
Caplinger Mills	Osage	.23	T.		T.	.99		.20	T.	.33					T.	T.	T.	T.	T.				T.		T.	.15							1.90
Dean	Neosho				.10	1.45				.25							.35		.95			T.	.10		1.55	T.							3.80
Eldon‖	Missouri	.12				1.15	.15											.15	.19				.38			.16						T.	2.30
Farmington	St. Francis	T.			.09	.63				.41					T.		T.	.12	.70				.17		1.88	.38							4.38
Fredericktown‖	... do		T.		.45	.45	.25			.35						.10		.10		.85			.08	.90		1.20							4 73
Galena‖	White				.10														.18	.25						.35	1.00							1.88
Goodland	Black	.05			.20	.50				.40							.18	.01	.53				.16		1 52								3.55
Greenville	St. Francis	.15			.10	.75				.58							.32	.48	.12	1.20			.12		2.18	.10							6.10
Hailey	White	.02			.20												.65																2.87
Koshkonong	Black				.35	.45				.74								.19	.20	.58			.12		3.42								6.05
Lebanon ‖	Osage	T.		T.	1.40				T.	T.					T.	T.			1.10			.25			T.	T.		T.	.10				2.85
Leeper‖	Black	.02					.78				.10						.46	.37			.63				.29	.68	.17							3.50
Lockwood	Osage	.23			.02	1.00				.34					T.			T.	.10	.23						.40	T.							2.32
Mountain Grove‖	White	.20	T.		.09	.94	.06				.36						.07		.02	T.	.65		.21	.05	.63	.95								4,23
Neosho	Neosho	.04			.20	1.12				.18							T.	T.	T.	T.		T	T.		.36	T.								1.90
Owensville ‖	Gasconade	T.	.05			.80	.10				.25						.03		.02		.70		.31			.30								2.56
Ozark Beach‖	White					.85	.40			.21							.06			.22	.36		.05		1 20	.96							4.31
Rolla ‖	Meramec	.10			.10	.70				.30					.30	.10		.70		T.		.10			.75	T.							3.15
Salem (near)	....do	.28			.04	.57	T.			.30						T.	.10	T.	.50				.10		1.17	.04							3.10
Seligman	Neosho				.21	1.40				.30						T.			1.70				.15		1.45								5.21
Seymour (near)	White	.10			T.	1.21				.22		T.			T.	T.	T.	T.	.30						1.74	T.							3.57
Springfield***	....do	.02			.14	.93				.19		T.			.04	.01	T.	T.	.39			.01	T.	T.	.80							T.	2.53
Steelville‖	Meramec	.28	T.			.55	.09				.30					T.	T.	.20	.10	.51			.08		.35	.73							3.19
Stover‖	Missouri	.18				1.11	.10				.27								.24	.08		.08				.11							2.17
Tuscumbia ‖	Osage	.28	T.			1.03	.09				.30						T.	.12	T.	T.	.30		T.		.23	05							2.40
Williamsville‖	Black	.10				.55	T.				.62						.22	.45			1.23			.08	.01	1.63	1.27							6.16
Willow Sprgs. ‖ (near)	White	.08	T.			1.03	.17				.51						T.	.02	.07		.55			.17	.14	1.12	1.28							5.14
Southwest Plain																																	
Appleton City	Osage	.18			T.	1 36	T.			.38					T.	.03	T.	.05	.14				.17	T.	.25	.01							2.57
Centerview	Missouri				.12	1.00				1.75							.02	.10	T.			.75			.25	.50							4.49
Clinton	Osage		.25		.08	.85				.48					T.		T.	T.	.25				.20										2.11
Concordia‖	Missouri	.97																					1.10										2 07
Harrisonville‖	Osage	.53				1.45				.28	.42							.09					.47	.02									3.26
Joplin‖	Neosho				.63	.52				.37					T.				.19			T.		.26	.62								2 59
Lamar‖	....do	.27				1.30	.15				.30						.12	T.	.07	.05	.08		.04			.10		T.						2.48
Lamonte	Missouri	.05			.09	.90	.03			.32									.10	.05			.30		.65	T.							2.49
Marshall	.... do	.35			.10	.30				T.	T.							T.	T.	T.			.55		.05	T.							1.35
Nevada	Osage				T.	1.40				.35					T.	.08	T.	.06	.14				.10		T.	.05							2.18
Osceola‖	....do					1.13	.42				.31							.11	.17				.07			.06							2.27
Warsaw	....do	.18				.35				.30					T.		T.		.30														1.13
Waverly ‖	Missouri	.60				1.35	.12			T.	.34						T.	T.	T	T.			.78	T.	.22	.10			T	T.			3.51
Northwest Plateau																																	
Albany‖	Grand					.60					T.		T.					T.	.10					T.										0.70
Bethany	....do	.50			.25	.80				.35			T.	.10	T.		T.	T.	.34				.43			T.			T.	.18			2.95
Chillicothe ‖	....do.	.97				1.00	1.04			T.	.64			T.			T.	T.	T.	T.			.50		T.	T.					T.		4, 15
Conception	Missouri				.05	.30		T.		.73	.10		T.				T.	T.	.10				.56		.20			T.	T.	T.			2.04
Edgerton	....do	.20			.02	.82				.49							T.	T.	.01				.27		.02	.12		T.	.01		T.		1.96
Gallatin ‖	Grand	.32				.82	.14			.11	.27			.07			T	.10	T.	.07			.12	T.	.09	.10			T.	T.	T.		2 21
Grant City	... do				.03	.41				.85				.10			.02	.15	.11	T.			.70		.19			T.			.14		2.70
Kansas City***	Missouri	.02			.75	.81				1.07				T.			.01	.04	T.	T.		.03	.18		.20			.01	T.		T.		3.12
Kidder ‖	Grand	.24				.32				.05									T.				.75	.60	T	.06		.04					2.06
King City	Missouri				.03	1.24				1.15				.08			.04	.04	.17				.35		.19			.02				T.	3.31
Lexington	....do	.68					1.55				.55						.20						.78		.12	.10							3.98
Maryville ‖	....do					.30	.10				.35	.60		.05			T.		T.	.15			.24		.10	.05			T.		.05		1.99
Oregon	....do				.08	.66				1.63							T	T.	.16				.30		.10			T.					2.93
St. Joseph***	....do				.75	.45		T.		1.16			T.				.01	.01	.08	T.		T.	.39	.02	.09			T.	T.	T.	T.		2.96
Tarkio	....do					.36				.85				.07			.03		.30	T.			.15		.05				T.				1.81
Trenton	Grand	.25			.02	1.43	T.			.49				.11	T.		.03	.08	.12				.47		.21	.07			T.		.07		3.35

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for January, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick §§	Maximum	20	27	37	37	27	29	8	40	38	40	26	40	20	27	19	31	50	50	40	27	38	46	20	24	16	30	27	28	27	39	13	30.4
	Minimum	10	−1	0	18	22	2	1	1	5	19	12	7	2	4	0	0	14	31	19	8	12	21	4	5	1	1	16	10	12	13	3	8.8
Columbia	Maximum	24	27	38	37	38	32	22	45	41	34	37	40	23	27	19	28	46	55	41	27	34	63	23	32	19	32	31	29	31	39	23	33.5
	Minimum	6	0	24	22	7	4	3	10	34	19	9	9	3	10	2	17	28	24	21	11	25	16	9	9	4	15	17	14	18	23	5	13.5
Fayette	Maximum	34	27	41	36	33	33	14	41	38	38	25	43	25	27	21	33	51	51	50	30	39	52	38	30	24	32	31	31	33	43	25	34.5
	Minimum	10	−6	0	17	22	−3	0	−2	4	19	12	4	0	2	−2	11	17	32	16	7	10	26	5	8	−1	4	14	10	13	17	1	8.6
Hannibal	Maximum	27	26	35	36	36	27	20	42	41	35	37	37	16	16	15	25	40	52	39	24	16	9	22	17	7	11	4	11	18	13	16	20	4	11.7
	Minimum	11	1	21	18	10	5	−3	7	35	22	7	7	−3	1	−2	8	25	24	16	9	22	17	7	11	4	11	18	13	16	20	4	11.7
Jefferson City §§	Maximum	40	39	43	42	43	38	41	50	39	37	32	34	30	38	30	44	59	56	50	35	59	70	30	40	26	39	43	38	39	43	23	41.0
	Minimum	13	12	12	17	21	22	7	7	11	11	12	11	4	12	3	7	15	20	20	13	13	17	12	12	4	6	10	15	18	19	7	12.4
Kirksville	Maximum	33	23	34	34	33	23	21	34	39	39	36	35	29	15	13	18	32	32	33	26	31	42	23	17	16	32	23	20	20	28	27	27.8
	Minimum	5	−2	18	11	10	−2	−10	−2	32	15	5	−1	−8	−4	−9	1	17	21	12	0	12	22	−1	6	−5	−2	9	6	5	15	−3	5 6
Louisiana	Maximum	35	25	37	35	35	28	28	40	40	35	25	40	15	20	20	20	45	55	45	40	37	55	30	35	25	35	37	36	35	36	25	33.8
	Minimum	13	−4	20	9	17	4	−2	6	30	25	15	15	−2	0	−2	15	30	19	10	20	30	10	19	8	13	20	14	15	21	8	12.7	
Macon §§	Maximum	20	27	35	36	33	25	11	41	38	36	25	37	15	22	27	33	47	48	38	27	35	35	22	30	14	30	26	28	28	35	10	29.5
	Minimum	18	0	4	15	19	−1	−7	−7	11	18	9	4	−4	−2	−6	−5	11	32	16	6	14	20	2	3	−1	−1	13	12	12	14	0	7.1
Mexico §§	Maximum	18	26	38	36	34	30	11	40	39	31	23	39	5	25	17	36	52	52	41	28	40	61	27	32	17	31	30	29	29	39	19	31.5
	Minimum	13	0	4	16	21	4	−1	−1	11	20	17	8	−1	−2	−2	−2	14	35	19	9	9	27	8	10	3	3	14	14	15	10	6	9.7
St. Louis(1)	Maximum	34	28	41	38	45	36	30	46	42	39	38	41	31	31	21	31	53	59	40	35	40	61	29	37	26	33	35	34	35	38	34	37.5
	Minimum	15	11	25	25	14	9	8	14	35	26	13	11	3	7	6	14	31	27	25	16	29	27	16	26	8	13	23	18	21	25	8	17.7
Unionville	Maximum	32	29	35	32	30	25	25	33	38	35	37	36	28	15	15	17	32	32	30	24	34	40	30	12	12	25	22	20	21	30	26	27.5
	Minimum	3	−2	18	8	8	−3	−13	−4	26	14	5	−3	−10	−4	−11	3	16	20	7	−2	6	18	−5	4	−7	−5	−5	0	5	10	−6	2.9
Warrenton	Maximum	40	24	39	38	36	33	33	46	42	41	37	40	38	25	22	26	54	56	50	40	36	65	57	36	35	31	32	31	32	40	34	38.4
	Minimum	13	2	20	19	16	4	2	8	34	23	15	8	−1	1	0	10	25	45	20	11	22	32	11	19	4	11	22	17	16	22	7	14.8
Southeast Lowlands																																	
Campbell	Maximum	39	32	42	49	52	42	37	45	49	50	46	42	36	42	42	34	58	70	66	55	46	63	54	44	45	37	43	44	40	40	40	45.9
	Minimum	25	13	24	34	27	16	23	19	38	40	28	18	23	19	26	29	34	53	36	35	37	36	30	34	22	24	31	29	28	27	29	28.6
Caruthersville	Maximum	41	32	41	51	52	35	42	48	50	51	42	48	41	47	47	42	61	72	65	62	50	66	61	42	50	50	43	40	43	40	41	48.3
	Minimum	27	14	25	35	34	15	23	21	45	37	31	18	26	18	26	26	35	55	35	35	36	40	33	33	21	21	30	29	27	33	27	29.4
Doniphan	Maximum	37	30	41	42	49	33	37	43	46	47	44	46	37	40	39	34	52	60	54	40	49	62	48	48	41	33	38	36	40	39	36	42.6
	Minimum	24	8	20	25	23	19	17	13	30	34	22	12	20	14	20	20	31	50	31	30	31	40	24	30	12	15	22	20	20	29	18	23.4
Jackson	Maximum	45	39	43	45	50	43	35	41	42	45	37	39	39	39	41	34	47	58	55	46	49	61	61	54	47	36	40	39	29	42	38	43.8
	Minimum	19	7	20	20	26	9	12	11	29	29	21	10	11	9	14	18	29	44	24	23	25	40	20	26	12	12	22	20	18	26	15	20.0
Poplar Bluff	Maximum	39	31	42	45	50	34	40	45	45	47	43	42	36	40	39	35	50	62	54	41	48	61	40	38	42	36	49	39	48	42	33	43.1
	Minimum	20	10	21	24	30	11	18	14	28	26	21	12	25	14	21	25	32	49	32	30	32	40	24	29	14	15	26	22	19	28	20	23.6
Sikeston	Maximum	50	48	46	49	50	48	34	53	45	48	41	41	41	43	41	33	53	58	70	40	38	65	60	46	40	34	36	35	39	42	40	45.4
	Minimum	30	12	23	30	40	12	16	20	34	34	29	15	18	13	20	23	31	50	30	30	30	36	26	24	19	17	28	24	21	28	21	25.3
Cairo, Ill.	Maximum	38	28	40	49	55	31	29	43	49	48	36	38	35	43	38	33	61	70	44	39	51	64	40	49	43	37	37	33	40	41	34	42.5
	Minimum	17	14	24	33	18	13	17	17	39	32	19	15	13	14	19	24	32	40	30	30	32	40	26	32	18	19	29	24	25	30	17	24.3
Ozark Plateau																																	
Arcadia §§	Maximum	21	30	44	45	46	36	29	44	44	39	39	46	22	41	28	37	59	60	42	37	59	61	32	35	27	34	43	37	39	43	26	39.5
	Minimum	19	3	3	17	23	7	7	10	13	29	25	9	12	9	10	12	21	34	20	20	21	31	17	17	7	7	9	18	14	14	14	15.2
Aurora	Maximum	20	30	47	40	39	37	49	51	42	36	45	38	50	35	39	56	61	60	38	45	66	39	32	24	36	39	40	40	43	36	41.7	
	Minimum	12	6	26	30	11	6	12	20	35	23	18	15	20	21	18	27	35	31	32	20	31	39	18	17	6	14	23	17	22	31	7	20.7
Birchtree	Maximum	39	30	40	44	42	36	35	47	43	45	42	45	42	44	42	33	54	59	54	42	48	64	52	35	34	34	40	38	43	38	36	42.6
	Minimum	17	6	6	29	18	8	18	14	35	29	21	11	20	12	21	22	32	50	27	26	31	41	21	24	8	12	24	18	20	28	12	21 3
Eldon §§	Maximum	..	..	4	43	35	38	29	46	42	38	27	44	22	32	40	40	58	57	47	30	48	64	29	30	25	34	34	34	35	47	21	[b]37.0
	Minimum	..	0	..	..	26	4	4	9	13	24	23	10	11	11	7	7	22	39	20	14	14	29	13	13	5	5	12	14	15	18	6	[c]13 9
Farmington	Maximum	20	30	46	38	42	35	32	44	40	44	33	45	40	41	39	33	50	55	50	36	46	62	54	33	33	33	38	32	37	42	37	40.0
	Minimum	15	4	21	22	18	7	15	10	31	27	20	8	10	9	11	15	31	50	20	19	24	35	17	23	7	10	20	20	16	27	11	18.5
Koshkonong	Maximum	41	30	46	38	44	38	38	42	46	45	41	50	39	45	40	32	55	60	54	43	49	65	53	38	38	37	48	39	42	40	37	43.6
	Minimum	18	8	21	26	18	9	22	15	35	30	22	13	22	13	21	19	31	51	30	28	32	40	21	27	9	13	25	19	20	30	16	22.7
Lebanon §§	Maximum	23	44	41	35	35	25	51	48	39	36	44	21	40	28	45	60	59	49	36	49	65	34	34	21	34	36	33	49	49	45	23	39.7
	Minimum	11	0	1	24	0	4	9	21	23	15	9	14	14	10	10	25	41	23	14	14	31	11	11	2	2	11	12	12	18	19	5	13.4
Mountain Grove §§	Maximum	18	26	48	41	36	37	36	45	46	37	35	45	25	47	33	44	57	57	47	40	48	63	33	37	24	35	42	40	43	38	24	39.6
	Minimum	13	0	5	22	30	5	7	16	17	26	24	10	16	12	14	14	25	42	24	21	21	34	15	16	3	5	13	13	14	18	8	16.2
Neosho	Maximum	32	33	48	46	45	39	39	49	52	45	38	48	49	51	48	41	55	61	63	61	45	65	48	32	34	43	40	43	44	53	48	46.4
	Minimum	12	0	26	24	13	2	12	15	36	23	21	12	22	23	19	27	37	33	26	18	30	40	18	24	5	14	19	17	20	33	8	20.3
Rolla	Maximum	45	27	42	39	42	35	36	46	42	43	39	44	42	38	39	34	57	59	46	44	40	65	47	33	32	33	36	34	35	44	42	41.3
	Minimum	3	3	16	25	3	3	8	8	31	21	6	6	3	3	9	12	24	32	21	17	22	30	13	13	6	9	21	15	19	24	7	14.0
Springfield	Maximum	23	27	43	42	42	36	30	47	50	34	38	43	40	46	30	36	57	62	50	38	44	65	29	36	21	35	37	39	39	40	28	39.6
	Minimum	9	7	24	29	8	6	17	22	33	22	14	14	18	20	15	28	35	28	26	18	33	23	17	9	5	17	21	18	23	28	6	19.1
Southwest Plain																																	
Appleton City	Maximum	20	30	41	36	35	38	32	44	40	38	31	49	41	34	27	29	50	55	49	33	35	62	28	27	22	34	34	28	35	42	36	36.6
	Minimum	11	0	23	22	10	4	4	8	33	19	16	12	10	15	6	21	28	29	21	12	25	28	10	13	2	13	20	12	16	29	5	15.4
Centerview	Maximum	26	27	38	34	40	31	30	41	38	40	40	45	30	28	28	25	42	55	25	40	44	52	32	22	21	35	28	26	30	44	36	34.6
	Minimum	9	−1	18	17	10	14	5	3	33	17	10	10	7	9	2	16	22	25	12	26	30	32	6	12	1	8	22	10	9	26	4	13.7
Clinton	Maximum	20	28	40	35	35	46	44	43	41	39	47	35	32	29	25	31	51	52	35	30	36	50	32	26	20	26	34	30	35	45	40	35.9
	Minimum	11	0	28	24	10	6	8	8	34	20	23	20	12	10	8	18	30	30	22	12	22	25	12	12	3	12	22	12	17	32	5	16.4
Harrisonville §§	Maximum	23	27	42	38	21	38	15	42	36	39	29	46	24	31	22	34	54	53	35	36	49	54	20	18	24	33	33	23	29	42	20	33.2
	Minimum	9	−2	−2	19	20	0	1	3	5	15	12	9	7	8	1	2	16	32	19	8	10	22	4	4	−1	−1	17	7	7	11	2	8.5
Lamar §§	Maximum	21	33	44	42	25	35	27	47	46	38	27	49	33	44	31	48	58	55	54	34	59	63	28	30	26	38	36	37	38	43	21	39.0
	Minimum	13	2	5	28	25	5	10	14	20	23	23	16	18	17	15	15	30	48	24	16	16	30	16	16	6	6	17	17	17	21	8	17.3
Lamonte	Maximum	20	27	38	35	38	33	30	42	39	35	39	42	36	32	22	28	46	52	41	31	36	57	20	24	22	34	28	28	28	45	32	34.2
	Minimum	7	−3	23	25	10	3	6	3	33	17	10	8	7	12	4	18	28	24	20	10	21	20	7	11	2	12	19	10	14	26	4	13.3
Marshall	Maximum	31	27	38	33	38	32	28	39	39	37	26	44	37	20	19	24	41	56	40	43	37	56	26	26	17	32	28	31	32	42	36	34.0
	Minimum	8	−5	20	17	10	1	1	1	33	11	10	6	4	2	0	14	24	25	18	9	20	25	5	12	−1	12	18	9	14	25	3	11.3
Nevada	Maximum	25	31	42	40	42	36	33	44	46	39	39	48	44	39	30	31	52	56	51	34	38	63	30	28	24	36	35	32	58	42	39	39.6
	Minimum	11	4	27	24	13	6	13	9	33	20	14	14	13	13	9	25	30	29	22	14	24	29	13	12	4	16	22	14	18	32	6	17.2
Warsaw	Maximum	40	30	41	38	36	37	38	50	46	47	41	46	44	37	35	42	55	59	52	40	39	68	39	36	47	42	41	34	37	46	45	42.8
	Minimum	12	−6	26	25	11	5	8	5	34	21	11	12	10	14	8	19	29	29	18	13	24	33	12	17	4	12	18	12	16	30	6	15.7
Northwest Plateau																																	
Chillicothe §§	Maximum	22	25	37	34	23	30	15	41	36	39	28	39	17	22	16	27	38	34	38	25	37	42	21	14	15	32	28	24	21	36	12	28.0
	Minimum	4	−6	−4	14	18	−2	−4	−4	1	12	7	3	−5	−5	−8	−7	10	25	13	2	3	10	−2	−2	−4	−4	10	3	9	12	−3	3.1
Grant City	Maximum	22	27	33	27	23	29	25	39	37	33	38	38	33	15	13	17	27	31	25	21	32	34	11	9	10	26	19	17	16	26	21	25.0
	Minimum	5	6	20	14	8	−2	−7	3	31	6	4	1	−5	−1	−11	4	15	22	5	−4	6	11	−6	2	−7	0	12	1	7	14	−7	4.7
Kansas City	Maximum	21	30	36	32	32	32	22	42	42	36	42	44	22	28	18	23	45	53	33	23	34	47	16	16	19	33	28	22	25	38	16	30.6
	Minimum	9	9	24	21	8	7	3	7	29	17	12	15	6	10	0	13	23	27	12	8	21	13	1	3	0	16	13	7	9	12	2	11.5
Kidder §§	Maximum	18	23	34	32	22	29	7	39	37	38	25	40	12	20	13	26	34	34	32	22	35	40	10	10	12	28	22	20	20	33	10	25.1
	Minimum	4	−2	−1	14	15	−4	−2	−4	0	10	7	1	−2	−1	−6	−6	8	24	12	1	1	10	−4	−4	−5	−5	8	1	4	10	−4	2.6
Lexington	Maximum	39	30	31	38	33	36	33	29	41	40	35	37	42	38	28	20	22	36	51	33	32	33	48	24	16	21	33	29	26	25	38	32.8
	Minimum	9	8	23	18	11	4	4	3	29	11	11	10	5	7	0	12	20	25	20	8	21	23	3	12	0	13	15	8	11	24	2	11.9
Maryville	Maximum	25	32	35	28	26	32	24	38	39	33	39	40	35	16	14	16	28	32	27	23	33	34	12	8	12	27	25	18	16	27	23	26.4
	Minimum	5	6	20	16	5	−4	−4	1	32	7	4	2	1	1	−6	5	5	23	5	−2	6	10	−5	3	−7	5	5	2	7	14	−5	5.1
Oregon	Maximum	24	28	40	30	22	35	30	42	40	33	40	43	39	20	21	17	31	32	29	30	40	35	14	10	20	31	27	24	18	31	25	29.1
	Minimum	7	10	23	18	7	0	1	3	32	11	6	12	6	6	−2	9	16	24	10	4	12	13	−2	4	−5	10	13	4	8	12	−3	8 7
St. Joseph	Maximum	22	28	38	30	27	33	18	42	41	33	41	41	21	20	17	20	33	34	32	24	35	39	12	10	18	31	24	21	19	32	14	27.4
	Minimum	7	10	23	20	5	2	2	6	26	14	7	13	7	6	−2	11	20	25	9	8	14	8	−2	1	−3	12	8	5	10	8	−2	9.0
Trenton	Maximum	26	24	35	33	27	26	26	35	34	33	25	38	31	20	13	17	32	32	33	23	31	36	16	11	12	28	22	24	22	31	26	26.5
	Minimum	6	6	18	16	10	−1	−5	−1	33	13	4	2	−4	1	−6	6	17	22	16	2	9	16	−2	6	−4	2	9	4	17	10	−3	7.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 3-7-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., FEBRUARY, 1929. No. 2.

GENERAL SUMMARY.

February's weather was a continuation of the abnormally cold weather that started with the first day of the year. Temperatures for the month, as a whole, were unusually and persistently low throughout Missouri, save perhaps the extreme southeast counties. The greatest cold appeared over all the northwest section of the State, and over all the Ozark Plateau. Kidder, and Chillicothe had 14 to 15 days with zero cold and lower, and most of the other northern stations had from 9 to 12 days. Zero occurred in the southeast in one or two counties on one day, except in three or four of the extreme southeast where 7° to 10° was the lowest.

Considering the persistent as well as widespread cold, January and February made one of the coldest 2-month periods in nearly thirty years, the mean of 59 days being 25°. The records show a few other notable cold similar periods, running back some forty years. The two same months in 1905, had a mean of 21.4°, the lowest of record for a 2-month period. January, 1918, with 16.4°, was the coldest January of record. Considering the mean temperature alone the following named Februarys were colder than the present one: 1895, 1899, 1902, and 1905. The absolute minimum of the present February was −23°. This is many degrees short of the record low minimum temperatures. February, 1905, had a mean temperature of 21.5°, and an absolute minimum of 40° below zero; and February, 1899, ran off a mean of 20.4°, and absolute minimum of 32° below zero. These two are the coldest Februarys in the annals of Missouri's climatology.

During the first week or more, frequent precipitation occurred over all the State. Following this there were some breaks of a few days at a time, with two rather outstanding wet periods, centered around the 19th, and the 25th. The snowfall was general and heavier than for several years. The greatest monthly fall totaled 21 inches. Over much of the State there was appreciable snow cover from the beginning of the year to about February 26, when a moderate general thaw set in. At the close of the month the ground was frozen to depths of from 18 to 36 inches depending upon the locality, or 10 to 20 inches deeper than during a normal winter. Soil moisture is ample for all present needs.

There were no farm activities, save the usual chores. The influence of the cold weather on the wheat crop in the main producing counties is still indefinite, but reports indicated that apparently no general, serious harm had occurred up to present time. The Ozark peach crop, however, was injured by the low temperatures. Peach buds will stand 9° below zero. Lower is harmful, particularly if cold persisted. The Koshkonong district and thence east embracing the extreme southeast counties doubtless escaped any serious injury, as the lowest temperatures were from about −4° to +10°. Back of this line running up into the hills, temperatures fell as low as −23°, and −12° to −18° were more or less general.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 65 stations, was 25.0°, or about 7.4° below the normal, and the same as the preceding month January. The highest monthly mean was 36.8°, at Campbell; and the lowest was 16.9°, at Kidder. The highest temperature, 64°, occurred at Caruthersville on the 26th; and the lowest, −23°, occurred at Bethany, Salem, and Seymour on the 10th. Temperatures were zero or lower on 5 days; and 32° or lower on 27 days.

PRECIPITATION.

The average precipitation for the State, 96 stations reporting, was 1.92 inches, which approximates the 60 years' normal closely, or only 0.19 inch less. Precipitation was general and frequent the first week or more, less so the remainder of the month although with two rather outstanding wet spells about the 19th and 24th–26th.

The greatest monthly amount was 5.90 inches, at Campbell, while not much more than one-half inch fell at Macon, and Louisiana. The greatest amount in 24 hours was 4.25 inches, at Campbell on the 24th.

The average snowfall for the State was 9.4 inches, more than 2 inches more than the normal. Over the northern half depths were from 5 to 11 inches; about 11 inches in the southeastern lowlands: 13 inches over the Ozark, and 8 inches in the southwestern plains. The greatest monthly amount was 21 inches, at Tarkio, and Marble Hill. The northern half of the State was snow covered most of the time from the beginning of the year up to February 25th. And was still of considerable depths on the north side of of hills in the Ozarks to the end of the month.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—16th, 24th, 25th, 26th, and 28th.
Halos, lunar.—1st, 16th, 17th, 21st, 23d, and 24th.
Halos, solar.—1st, 2d, 14th, 15th, 20th, 27th, and 28th.
Sleet, or glaze.—5th, 6th, 10th, 15th, 18th, 19th, 25th, 26th, and 28th. No damage reported from any part of the State.
Thunderstorms, local.—19th, 24th, and 25th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.16	85	71	150	50	4,539	6.8	23	sw.	16
Hannibal	30.16	81	..	...	..	5,041	7.5	28	sw.	25
Kansas City	30.15	82	69	176	59	5,958	8.9	30	n.	17
St. Joseph	30.14	84	75	146	49	4,762	7.1	24	nw.	17
St. Louis	30.14	80	63	121	40	6,122	9.1	33	nw.	23
Springfield	30.13	91	80	120	40	5,410	8.1	24	s.	23
Cairo, Ill	30.15	84	68	...	..	5,348	8.0	27	sw.	26
Keokuk, Iowa	30.17	79	69	156	52	4,299	6.4	24	sw.	26

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR FEBRUARY.

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	33.0	+2.0	73	−11	2.04	−0.28	....	....	7	..	..	..
1889	29.3	−1.7	73	− 9	2.57	+0.25	....	....	7	..	..	..
1890	35.5	+4.5	81	− 7	2.24	−0.08	....	....	7	..	..	..
1891	32.7	+1.7	76	− 8	2.28	−0.04	....	2.4	6	..	..	..
1892	37.7	+6.7	71	2	4.15	+1.83	....	....	9	7	6	16
1893	27.9	−3.1	65	−20	1.98	−0.34	2.30	4.6	6	10	7	11
1894	30.8	−0.2	72	−12	2.52	+0.20	2.60	11.2	6	10	8	10
1895	23.6	−7.4	77	−26	0.55	−1.77	1.10	3.3	5	10	10	8
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	4.1	5	12	8	9
1897	34.8	+3.8	74	−15	2.30	−0.02	3.60	8.2	7	7	7	14
1898	35.4	+4.4	78	− 9	1.62	−0.70	2.90	0.8	5	13	6	9
1899	20.4	−10.6	72	−32	2.17	−0.15	4.30	5.3	6	12	8	8
1900	26.2	−4.8	70	−16	3.92	+1.60	2.85	16.6	10	10	6	12
1901	28.1	−2.9	76	−19	1.63	−0.69	2.36	7.6	6	13	7	8
1902	24.0	−7.0	72	−17	1.50	−0.82	2.35	5.8	5	11	8	9
1903	29.8	−1.2	74	−25	2.92	+0.60	2.65	5.3	7	11	6	11
1904	30.0	−1.0	82	−18	0.91	−1.41	1.46	1.5	5	11	8	10
1905	21.5	−9.5	69	−40	1.64	−0.68	1.20	13.2	8	11	6	11
1906	33.7	+2.7	73	−13	2.28	−0.04	2.40	4.1	7	15	6	7
1907	34.8	+3.8	77	−15	1.65	−0.67	3.72	4.5	6	12	5	11
1908	35.6	+4.6	78	− 7	4.32	+2.00	4.28	4.1	9	13	6	10
1909	38.8	+7.8	71	− 4	3.38	+1.06	2.50	3.1	9	13	5	10
1910	28.3	−2.7	72	−24	1.98	−0.34	3.00	7.7	6	12	6	10
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	6.3	8	12	5	11
1912	28.3	−2.7	72	−12	2.45	+0.13	3.20	11.9	6	10	7	12
1913	29.8	−1.7	78	− 9	2.21	−0.18	4.78	8.5	7	12	5	11
1914	28.3	−3.2	75	−11	2.71	+0.42	2.80	14.0	7	12	6	10
1915	39.4	+8.0	72	7	3.18	+0.81	2.05	4.1	8	9	5	14
1916	31.4	+0.2	78	−12	0.98	−1.48	2.70	5.0	5	13	6	10
1917	30.5	−1.0	83	−22	0.41	−2.03	1.24	1.4	2	14	7	7
1918	34.9	+4.6	83	−25	1.11	−1.26	2.00	0.6	4	15	6	7
1919	35.3	+4.0	71	−10	1.98	−0.35	2.20	6.4	7	13	4	11
1920	34.5	+3.2	78	− 5	0.57	−1.68	1.41	1.2	4	11	6	12
1921	40.1	+9.1	86	5	0.94	−1.33	2.00	1.8	4	14	6	8
1922	35.4	+4.1	80	− 5	1.79	−0.44	1.65	1.9	5	14	6	8
1923	30.2	−1.2	75	− 9	1.37	−0.88	2.20	1.4	5	13	5	10
1924	33.8	+2.0	79	− 5	1.84	−0.31	1.60	8.1	7	14	4	11
1925	38.7	+6.9	78	1	1.85	−0.30	1.78	1.7	6	12	6	10
1926	39.4	+7.6	76	− 4	2.08	−0.07	2.00	2.9	6	11	6	11
1927	41.3	+9.5	78	1	1.08	−1.07	1.48	2.3	5	10	8	10
1928	37.0	+5.2	71	− 2	2.28	+0.13	3.25	1.8	7	12	6	11
1929	25.0	−7.4	64	−23	1.92	−0.19	4.25	9.4	7	10	5	13

Climatological Data for February, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	21.3	— 7.8	54	17	−12	10	36	1.85	0.00	0.73	14.0	6	12	0	16	nw.	O. K. Benecke
Clifton Hill	Randolph	731	29	22.9	— 6.3	55	17	−16	10	44	1.56	+0.23	0.70	4.6	8	13	3	12	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	25.4	— 6.3	56	17	— 5	10	36	1.03	−1.01	0.74	3.5	9	7	6	15	e.	U. S. Weather Bureau
Downing	Schuyler	876	7	19.8	.....	52	17	−12	9†	48	1.14	−0.26	0 38	8.0	8	11	7	10	s.	James Taylor
Fayette	Howard	661	48	22.8	— 7.4	58	17	−13	10	49	1.32	−0.58	0.45	4.5	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	24.8	— 7.9	59	23	— 6	10	49	0.58	−1.31	0 27	3.6	8	9	8	11	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	0.95	−0.54	0.59	6.0	6	9	5	14	nw.	J. W. Pulliam
Hannibal	Marion	534	36	23.4	— 6.3	55	17	— 6	10	38	0.84	−1.02	0.52	3.9	9	7	7	14	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	25.0	— 5.9	58	17†	— 6	10	47	0.62	−1.47	0.30	2.3	5	12	4	12	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	19.6	— 6.3	47	23	−10	9†	35	1.50	−0.32	0.58	9.8	6	11	4	13	w.	Prof. J. S. Stokes
Louisiana	Pike	469	34	24.6	— 5.1	58	24	— 8	10	41	0.53	−1.82	0.20	3.6	5	12	8	8	s.	Stark Bros. Nurseries
Macon	Macon	875	29	20.8	— 7.9	54	17	−10	9	44	0.53	−1.42	0.30	2.9	3	11	6	11	ne.	W. C. Brown
Mexico	Audrain	800	39	23.6	— 5.7	56	17	— 3	9†	47	0.83	−1.38	0.45	3.2	7	16	0	12	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	0.56	.....	0.38	3.9	6	13	4	11	sw.	J. S. Conway
St. Charles	St. Charles	456	40	27.0	— 5.5	61	24	— 3	10	36	1.13	−1.50	0.50	6.6	7	8	8	12	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	28 8	— 6.0	58	24	4	9	28	0.88	−1.68	0.52	5.7	10	8	8	12	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	27.8	— 4.4	56	24	2	9	25	0.78	−1.53	0.37	4.1	10	10	9	9	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	1.54	−0.38	....	....	..	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	21.9	— 6.5	50	17†	−13	10	46	1.35	−0.50	0.50	8.0	8	10	10	8	e.	Frank Hall
Unionville	Putnam	1,062	35	18.2	— 7.2	46	16†	−15	9	37	1.30	−0.53	0.70	7.0	7	10	2	16	nw.	Geo. W. Davis
Warrenton	Warren	816	46	27.3	— 2.6	60	24	— 3	9†	44	0.66	−1.53	0.46	2.5	4	8	8	12	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	21.4	— 6.9	52	23	— 6	9	39	0.97	−0.58	0.61	5.8	11	7	7	14	e.	U. S Weather Bureau
Section means and	extremes	.....	..	23.5	— 6.2	61	24	−16	10	49	1.02	−0.87	0.74	5.4	7	10	6	12	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	36.8	.....	60	25	9	10	29	5.90	.....	4.25	6.6	7	13	2	13	n.	Jeff. King
Caruthersville	Pemiscot	265	32	35.3	— 3.6	64	26	10	10	24	2.85	−0.95	1.40	4.5	5	9	5	14	n.	Sam Smith
Doniphan	Ripley	344	24	30.6	— 7.5	60	25†	— 4	10	35	3.02	−0.13	1.17	14.6	9	11	5	12	nw.	W.W. Martin
Jackson	Cape Girardeau	428	37	29.1	— 6.4	60	26	−10	10	36	2.85	−0.04	1.58	8.6	9	6	6	16	n.	John G. Putz
Marble Hill	Bollinger	470	33	29.4	— 5.9	59	26	— 6	10	34	4.54	+1.26	1.70	21.0	8	8	4	16	n.	R.A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	5.20	+1.94	1.75	10.8	11	14	1	13	n.	John A. Spence
Poplar Bluff	Butler	329	24	31.0	— 5.3	60	26	— 7	11	36	4.49	+1.53	1.71	11 2	9	11	5	12	n.	J. H. Wolpers
Sikeston	Scott	318	23	31.0[a]	— 5.6	60	26	— 1	10	30	4.58	+1.32	2.00	10.4	6	12[a]	5[a]	10[a]	ne.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	31.4	— 7.1	60	25	5	10	22	4.20	+1.07	2.32	11.5	8	7	8	13	n.	U. S. Weather Bureau
Section means and	extremes	....	..	31.8	— 5.9	64	26	−10	10	36	4.18	+0.75	4.25	11.0	8	10	5	13	n.	
Ozark Plateau																				
Arcadia	Iron	926	47	25.9	— 7.6	57	24	— 9	10	48	1.87	−1.29	0.95	11.4	6	18	2	8	nw.	Arcadia College
Aurora	Lawrence	1,370	38	27.4	— 6.2	55	17	−11	10	40	1.83	−0 99	0.70	9.0	5	12	1	15	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	28.8	— 6.1	56	24	−12	10	38	2.36	−0.13	1.20	15.0	6	12	3	13	ne.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	30.9[c]	— 3.9	57	17†	— 1	9	35	2.90	+1.07	1.50	18.3	5	11	5	12	sw.	H. E. Dean
Eldon	Miller	934	32	23.8	— 8.1	55	17†	— 8	10†	40	0.80	−1.30	0.45	5.3	7	13	5	10	n.	E. H. Shepherd
Farmington	St. Francois	918	17	27.8	— 7.8	57	24	— 7	10	39	1.70	−1.59	0.86	9.5	8	9	8	11	sw.	Robert Forsyth
Goodland	Iron	1,000	34	27.0	— 5.9	58	24	−17	10	48	1.76	−0.73	0.70	13.4	7	14	1	13	n.	F. M Adams
Greenville	Wayne	381	6	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....		..	1.98	.....	0.75	15.4	7	10	0	18	w.	A. W. Madison
Koshkonong	Oregon	958	27	30.2	— 7.3	57	26	— 4	10	31	4.06	+1.27	1.72	21.5	9	8	1	19	ne.	R. M. Hitt
Lebanon	Laclede	1,265	40	23.1	−10.8	54	15	−16	10	53	3.03	+0.53	1.20	19.5	9	10	3	15	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	27.3	— 8.2	55	25	−12	10	42	1.21	−0.76	0.52	8.7	6	14	1	13	nc.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	24.6	— 9.2	54	17†	−12	10†	40	2.18	−0.08	0.76	12.5	9	12	5	11	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	28.4	— 8.2	60	17	−20	10	52	3.37	+0.99	1.62	11.0	7	14	2	12	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	27.0	— 8.2	57	24	— 8	10	42	1.61	−0.73	0.67	9.5	11	9	4	15	w.	F. H. Lane
Salem(near)	Dent	1,173	24	26.4	— 8.1	55	24	−23	10	48	1.74	−0.64	0.55	10.7	10	11	3	14	nw.	A. C. Leech
Seligman	Barry	1,542	26	28.8	— 7.4	56	17	— 7	9	36	3.03	+1.15	0.91	18.1	6	9	3	16	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	25.7	— 6.7	53	17	−23	10	49	2.60	+0.15	1.30	13.0	5	10	3	15	nw.	Ira H. Hailey
Springfield	Greene	1,324	40	26.5	— 8.7	55	17	— 3	10	28	1.55	−0.80	0.57	9.8	9	10	2	16	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	27.0	— 7.6	60	17	−23	10	53	2.20	−0.23	1.72	12.9	7	11	3	14	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	26.2	— 6.1	55	17	— 7	10	38	1.16	−0.81	0.70	4.1	8	8	11	9	se.	W. G. Bigelow
Centerview	Johnson	872	41	24.2[b]	— 7.1	56	26	— 8	9	36	2.11	−0.02	1.06	12.2	6	9[b]	4[b]	13[b]	ne.	E. A. Markey
Clinton	Henry	765	35	26.2	— 5.7	51	23†	−10	10	34	1.04	−1.06	0.40	8.0	5	10	6	12	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	22.7	— 7.0	54	17†	— 9	9	46	0.96	−1.06	0.49	4.0	4	4	7	17	n.	John H. Patterson
Lamar	Barton	980	41	25.4	— 9.1	56	17	−13	10	42	1.41	−0.82	0.58	10.6	7	10	6	12	ne.	Jesse A. Mann
Lamonte	Pettis	867	27	24.2	— 7.4	58	17	−12	10	40	2.06	+0.15	1.05	8.5	7	16	6	6	se.	J. E. Wheeler
Marshall	Saline	779	39	24.2	— 5.3	56	17	−14	10	39	1.78	−0.06	0.90	7.5	7	9	5	14	se.	Dr. W. H. Black
Nevada††	Vernon	862	35	28.0	— 3.9	56	17	— 7	9	37	1.18	−0.90	0.76	5.6	6	11	3	14	s.	George A. Kaupp
Warsaw	Benton	687	28	27.4	— 6.4	57	17	−16	10	46	1.72	−0.84	0.90	9.0	5	11	6	11	n.	Everett Martin
Section means and	extremes	.....	..	25.1	— 6.8	58	17	−16	10	46	1.53	−0.56	1.06	8.0	6	10	6	12	ne.	
Northwest Plateau																				
Bethany	Harrison	916	36	18.8	— 8.2	46	27	−23	10	45	1.83	+0.39	0.54	15.5	10	8	7	13	nw.	M. H. Moulton
Chillicothe	Livingston	779	19	18.0	−14.5	51	23	−22	10	61	1.63	−0.38	0.51	10.0	6	14	3	11	e.	Wm. J. Olenhouse
Conception	Nodaway	980	39	19.0	— 8.1	45	23†	−18	9	40	1.59	+0.40	0.62	10.5	7	8	10	10	n.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	21.9	.....	51	23	−21	10	45	1.33	−0.12	0.68	7.2	11	14	2	12	n.	Fred L. Stiff
Grant City	Worth	1,134	24	17.9	— 9 4	43	27	−14	9	34	1.74	+0.62	0.38	11.3	11	4	13	11	se.	W. P. Spillman
Kansas City	Jackson	963	39	24.0	— 7.2	52	23	— 5	9	40	1.79	+0.04	0.82	10.2	14	6	11	11	n.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	16.9	−10.9	52	17	−16	10	48	1.50	−0.02	0.75	11.0	5	12	1	15	n.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	1.70	.....	0.49	9.5	10	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	24.6	— 4.8	53	18†	— 7	10	52	1.99	−0.01	0.60	9 5	7	10	9	9	n.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	19.0	— 5.1	45	16	−15	9	37	1.22	−0.22	0.40	8.3	8	9	3	16	n.	J. R. Brink
Oregon	Holt	1,048	72	22.8	— 5.4	50	23†	−12	9	39	1.49	−0.13	0.42	9.0	9	12	6	10	sw.	Mina Wright
St. Joseph	Buchanan	967	20	21.8	— 9.8	50	23	−10	9	37	1.57	+0 06	0.72	7.7	13	10	7	11	nw.	U. S Weather Bureau
Tarkio	Atchison	916	25	18.8	— 9.2	45	23†	−13	9	38	1.28	+0.21	0.42	21.0	10	11	6	11	se.	Albert Volker
Trenton	Grundy	822	32	19.6	— 8.9	48	23	−18	10	36	2.21	+0.68	0.76	7.5	10	11	7	10	n.	W. H. Estes
Section means and	extremes	.....	..	20.2	— 8.5	53	18†	−23	10	61	1.63	+0.12	0.82	10.6	9	10	6	12	n.	
State means and	extremes	.....	..	25.0	— 7.4	64	26	−23	10	61	1 92	−0.19	4.25	9.4	7	10	5	13	n.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for February, 1929

Stations.	Drainage-basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																															
Boonville‖	Missouri		T.		.02	.03		T.	.12					T.						.01					.68	.20						1.06
Brunswick‖	Grand		.12		.52				.17											.13					.73	.18						1.85
Clifton Hill	Chariton				.28			T.	.06			T.		.02						.03					.39	.70	.05		.03			1.56
Columbia***	Missouri		.01	.03	.11	T.		.10	T.		T.			.01					T.	.01		T.			65	.09			.02			1.03
Downing	Mississippi			.06	.12		T.	.05	.10				.06	.04						.02					T.	.38	.31						1.14
Fayette‖‖	Missouri				.10	.10			.20																.45	* *	.47						1.32
Fulton‖‖	do			.03	.05				.07		.06			.01						.03						.27	.06						0.58
Gorin	Mississippi			.02	.18				.10				.04							.02					T.	.59			T.				0.95
Hannibal***	do		.02	.02	.11	T.	T.	.04	.08				T.	T.					.02	.02		T.				.52	T.		.01				0.84
Hermann‖	Missouri			.01	.01	T.	T.		.01	T.				T.						.03	T.	T.				.41	.09						0.56
Jefferson City‖	do				.04	T.			.08											.08	T.					.30	.12						0.62
Kirksville	Mississippi		T.	.05	.40	T.		T.	.35				.05							.07						.58			T.				1.50
Louisiana	do		T.		.15	T.	T.		.15				T.	T.					.20	T.					.02	.01							0.53
Lucerne‖‖	Grand			T.	.12	T.			.07			T.		T.						.02						.53	.70						1.44
Macon ‖	Chariton					.08			.15											T.						.30	T						0.53
Mexico ‖	Mississippi		T.		.05	.07			.10					.03						.05						.45	.08						0.83
Milan‖	Grand			.05	.20		T.	.10	.25			T.								.05						.40	.35						1.40
Monroe City	Mississippi		.02	.01	.05				.07				T.	T.						.03						.38	T						0.56
Pacific‖	Meramec			.05	.05	.02	.01		.05	.05				T.						.01		.03				.29	.20						0.76
St. Charles	Missouri			.01	.30		T.		.10					.02					T.	.10		.10				.50							1.13
St. Louis (1)***	Mississippi		T.	.01	.12		.03	.06	.07	T.		T.		T.		T.			.02	.01	.03	.01			T.	.52							0.88
St. Louis (2)*	do			.01	.12		.02	.05	.08					.01		T.			.02	.05	T.	.05				.37							0.78
Shelbina ‖‖	do																									1.38	.16						1.54
Steffenville	do	.20		.04	.20		T.	T.	.20				.05	.06						T.						.50	.10						1.35
Union‖	Meramec			.03	.03	.01	.01		.06	.03										.01	.01	.01				.36	.18						0.74
Unionville	Chariton			.10	.10			.10	.20			T.	T.	T.						.10						.35	.35		T.				1.30
Warrenton	Mississippi		T.	.10	.04				.06	T.				T.					T.	T.		T.				.46	T.						0.66
Keokuk, Ia.***	do	T.		T.	.08	.01	T.	.05	.07		T.		.04	.01					.01	.05					.01	.61	T.		.03				0.97
Southeast Lowlands																															
Campbell‖	St. Francis			.35								.30				.03	.15			.69					4.25				.13				5.90
Cape Girardeau‖	Mississippi			.03	.15	.04			.07	.20							T.			.15	.09	.15				.44	1.86		.05				3.23
Caruthersville‖	do		.05				.15			.25						T.	T.			T.	T.					1.40	1.00						2.85
Dexter‖	St. Francis			.05	.10		T.		T.	.40										.61	.22	.32	T.			.62	2.41		.02				4.75
Doniphan	Black		T.	.12		.08		T.	.30	.75										T.	.24	.30	.01			1.17		T.	.05				8.02
Jackson	Mississippi			.02	.22			T.	.26	.11										.25	T.	.25				1.58		.04	.12				2.85
Marble Hill	Mississippi			.22	.45				.55	.42										.40		.60				1.70			.20				4.54
Morehouse	do			.11	.34				.27	.62							T.			.43	.05	.33	.02			1.75	1.26		.02				5.20
New Madrid‖	do			.16	.20	.08	.10		.01	.50						.05				.05	.65	.42	T.	.01		48	2.35		.05				5.11
Poplar Bluff‖	Black	T.	.13							.44										.78	.66	.25	.02		T.	.45	1.71		.05				4.49
Sikeston‖	Mississippi		T.	.12	.06						.25											.23				2.00	1.92						4.58
Cairo, Ill.***	do		.02	T	.17		T.	.02	.60	T.										.58	.48	T.	.01			2.32		T.	T.				4.20
Ozark Plateau																															
Arcadia ‖	St. Francis				.08	.02	T.	T.	.14	.40				T.			T.		T.	T	.28						.95		T.				1.87
Aurora	Neosho		.29		T.	T.	T.	.24	.28							T.				.32		T.	T.			.70			T.				1.83
Birchtree (near)	Black		.12					.32	.40											.25						1.20		.07					2.36
Bolivar	Osage																																
Caplinger Mills	Osage		.16	T.				.07	.18					T						T.					.10	.65			T.				1.16
Dean	Neosho		.20				.08		.72											.40					T.	1.50			T.				2.90
Eldon‖	Missouri		.05	.13	.04				.04							T				.07	.02					.45							0.80
Farmington	St. Francis		.07	.10	.03		T.	.04	.40											.17		.03				.86							1.70
Fredericktown‖	do		.01	.01	.05				.07	.63		.10								.42	1.18						1.56						4.03
Galena‖	White									.74										.10						.10	.75						1.69
Goodland	Black		.03	.10	.14		.10		.70							T.				.14						.55							1.76
Greenville	St. Francis																																
Hailey	White	.15	.01					.02					.75	.25						.30						.50							1.98
Koshkonong	Black		.30					.25	1.00											.20		.30	.10			1.72		.14	.05				4.06
Lebanon ‖	Osage		.12	.34					.22	.40				.30					.04	.16			1.20		.25								3.03
Leeper‖	Black		.07	.18					.11	.57											.06	.11				.11	2.31		.13				3.65
Lockwood	Osage		.30		.01			.15	.20											.03						.52			T.				1.21
Mountain Grove‖	White		.05	.25	T.		.10		.25	.50				T.			T.			.05	.05	T.				.17	.76						2.18
Neosho	Neosho		.46					.35	.25							T.				1.62		T.	T.	.03		.59			.07				3.37
Owensville ‖	Gasconade								.10	.15											.11					.38	.25						0.99
Ozark Beach‖	White			.22					.45	.27										.36						.14	.73						2.17
Rolla ‖	Meramec		.25	.06	.06		.03	.08	.25			T.		.03		.05				.06		.07			T.	.67							1.61
Salem (near)	do		.35	.10	.08		.10	.05	.35	.04						T.				.07	T.	.05				.55							1.74
Seligman	Neosho		.55	T.	T.		.30	.25	.52							T.		T.		.50	T.		T.		T.	.91			T.				3.03
Seymour (near)	White		.20		T.	T.	T.	.21	.68							T.				.21						1.30			T.				2.60
Springfield **	do		08	T.	.01	.04	T.	.38	.22					T.		T.			T.	.24	.01	T	T.		.29	.28			T.				1.55
Steelville‖	Meramec			.16			T.		.10	.19										T.		.12				26	.32						1.15
Stover‖	Missouri		T.	.33		.01			.10											.02						.85	.11						1.42
Tuscumbia ‖	Osage		.15	.14	.04				.17	.02				T.						T.						.34	.15						1.01
Williamsville‖	Black		.04	.18	.12	.04	.01		.10	.27										.31	.08	.18				.20	1.56		.22				3.31
Willow Sprgs. ‖ (near)	White			.39	.07		.08		.14	.30							T.			.42	.04	.03				.24	1.02						2.73
Southwest Plain																															
Appleton City	Osage		.20	.01	.01	T.		.08	.06					T					T.	.01					.09	.70	T.		T.				1.16
Centerview	Missouri	.02	.50	.36				.16						.01						T.						1.06							2.11
Clinton	Osage		.40				.08	.16																	.15	.25							1.04
Concordia‖	Missouri																									1.10	.46						1.56
Harrisonville‖	Osage		.06	.16																T.						.25	.49						0.96
Joplin‖	Neosho			.26		.05		.32	.02																.48	.20			.03				1.36
Lamar ‖	do		.03	.04	.12	T.			T.	.28	.06					T.				T.						.58	.30						1.41
Lamonte	Missouri		.42	.22	.04				.24					T.						T.					.05	1.05			.04				2.06
Marshall	do		.20		.36	T.		.12	T.					T.		T.	T.		T.	T.		.10			.05	.90			.05				1.78
Nevada	Osage		.20	.01	.10	T.			.08					T						.03					T.	.76							1.18
Osceola‖	do		.24	.04										T.												.65	.59						1 52
Warsaw	do		.38					.10	.26																.08	.90			T.				1.72
Waverly ‖	Missouri		06	.05	22	T.		T.	.13	T.				T.						.02	T.		T.			.67	.40						1.55
Northwest Plateau																															
Albany‖	Grand		.20		.80			.10	.10					T.						T.						T.	.50						1.70
Bethany	do	T.	.16	.07	.54	T	.02	.01	.12		T.	T.	T.		T.					.06		T.			T.	.35	.40		.10				1.83
Chillicothe‖	do		.12	T.	.51	T.	T.	T.	.16			T.		T.						.08						.28	.48						1.63
Conception	Missouri		.08		.62		T.	.03			T.									.04					T.	.35	.42		.05				1.59
Edgerton	do	T.	.14		.06	T.	T.	.14	.04					.01		.02				.01		T.			.09	.68	.12		.02				1.33
Gallatin ‖	Grand		.06	.13	.70	T.		.04	.20			T								.06						.61	.64		T.				2.44
Grant City	do		.11	.06	.26	T.	.05	.10	.11		T.	T.			T.				T.	.04					.33	.30	.28		.05				1.74
Kansas City***	Missouri	.08	.28	.03	.10	T.	.01	.19	.08				T.	.01		.01			.01	.04		T.			.42	.50			.03				1.79
Kidder ‖	Grand		.04		.45			T.	.20											.06						.75							1.50
King City	Missouri		.15		.38		.01	.08	.09											.15					.14	.49	.18		.03				1.70
Lexington	do			.23	.29			.10	.20											.05						.60	.52						1.99
Maryville ‖	do		.10	.07	.40		T.	.05	.15					T.						.05					.08	.32	T						1.22
Oregon	do		.21		.14		T.	.16	.10					T.						.08					.13	.42	.22	T.	.03				1.49
St. Joseph***	do	.09	.15	.07	.04	T.	.02	.09	.04		T.		T.	.01		T.			.01	.03		T.			.59	.40	T.		.03				1.57
Tarkio	do		.10	.03	.06		.05	.10	.07					T.											.10	.25	.42		.10				1.28
Trenton	Grand		.05	T.	.24	T.	.01	.04	.13			T.	T.							T.	.05		T.		.11	.76	.68		.14				2.21

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for February, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	Mean
Northeast Plain																																	
Brunswick §§	Maximum	20	30	28	34	33	34	18	12	− 1	24	16	31	22	33	40	47	54	12	13	26	37	35	53	40	42	42	44	40	..	..	..	30.7
	Minimum	2	5	18	24	25	25	14	5	− 8	−12	− 1	− 1	3	4	20	21	23	2	2	− 2	3	6	10	29	35	30	25	26	..	..	..	11.9
Columbia	Maximum	23	29	28	32	33	34	31	18	13	26	21	41	25	37	39	49	56	20	15	26	38	35	55	48	48	40	42	42	..	..	..	33.7
	Minimum	4	18	23	25	25	27	18	5	− 4	− 5	3	12	13	18	25	24	20	7	3	0	19	7	28	36	39	31	28	26	..	..	..	17.0
Fayette	Maximum	24	31	27	34	34	36	26	19	11	21	24	40	28	39	41	48	58	29	16	28	41	35	56	42	44	44	43	44	..	..	..	34.4
	Minimum	1	12	19	21	21	22	15	5	− 9	−13	− 2	4	8	11	18	18	22	2	− 1	− 3	3	2	7	29	35	28	22	20	..	..	..	11.3
Hannibal	Maximum	15	24	28	29	31	36	28	18	11	22	19	35	21	34	39	49	55	17	12	23	36	30	53	46	48	42	42	44	..	..	..	31.7
	Minimum	− 1	12	20	24	25	26	18	4	− 2	− 6	3	4	10	12	22	26	17	4	2	0	13	5	26	38	36	32	28	27	..	..	..	15.2
Jefferson City §§	Maximum	28	37	31	36	34	37	30	21	16	29	29	43	33	43	43	51	58	25	19	30	40	41	58	58	51	43	44	43	..	..	..	37 5
	Minimum	5	8	10	22	24	24	23	13	− 1	− 6	− 4	− 2	9	12	14	19	23	10	4	3	6	10	11	15	18	30	26	24	..	..	..	12.5
Kirksville	Maximum	13	21	26	37	30	32	30	15	15	18	18	21	20	31	35	40	46	43	10	23	37	26	47	45	37	36	42	41	..	..	..	29.8
	Minimum	− 6	6	18	21	20	24	10	1	−10	−10	−10	0	0	0	14	17	11	− 5	− 2	− 9	13	− 1	20	32	32	29	24	25	..	..	..	9.4
Louisiana	Maximum	15	25	33	30	30	37	35	25	15	33	20	35	30	35	40	45	55	32	15	20	40	30	45	58	56	40	40	50	..	..	..	34.4
	Minimum	0	12	20	23	22	25	23	13	− 3	− 8	5	0	12	5	16	22	24	8	5	− 2	15	7	21	30	35	32	26	25	..	..	..	14.8
Macon §§	Maximum	17	26	28	33	35	36	23	12	10	23	18	36	21	32	38	44	54	14	14	27	37	34	53	43	41	40	43	43	..	..	..	31.2
	Minimum	− 3	0	14	22	23	24	15	2	−10	− 9	− 3	0	3	5	19	23	19	− 1	− 1	− 5	− 1	2	9	32	34	30	25	27	..	..	..	10.5
Mexico §§	Maximum	21	30	28	30	35	35	27	14	18	24	23	41	28	40	40	50	56	15	15	25	40	34	55	50	48	38	43	45	..	..	..	33.9
	Minimum	0	1	17	22	23	24	20	10	− 3	− 3	− 3	3	12	12	19	23	24	5	2	− 1	3	6	8	29	36	30	28	24	..	..	..	13.2
St. Louis(1)	Maximum	19	28	30	31	36	39	37	29	20	23	26	34	31	43	40	49	55	33	19	23	44	33	55	58	53	52	45	46	..	..	..	36.8
	Minimum	6	15	22	25	26	27	27	13	4	5	10	12	21	17	27	27	33	14	8	6	20	14	27	36	38	34	32	34	..	..	..	20.7
Unionville	Maximum	15	25	28	30	32	32	30	14	10	20	18	18	18	30	36	46	44	30	7	22	30	24	45	46	40	37	44	40	..	..	..	29.0
	Minimum	−10	5	16	20	20	22	7	0	−15	−10	− 7	1	− 5	5	12	16	8	− 7	− 5	−11	5	− 3	15	30	32	26	20	23	..	..	..	7.5
Warrenton	Maximum	22	26	27	27	33	34	35	33	18	28	25	39	38	40	38	49	56	53	25	22	46	36	56	60	56	52	42	46	..	..	..	37.9
	Minimum	2	15	20	24	23	26	23	13	− 3	− 3	5	7	15	13	22	21	27	9	4	0	16	8	24	33	38	31	27	27	..	..	..	16.7
Southeast Lowlands																																	
Campbell	Maximum	31	32	42	37	37	45	40	40	37	29	33	38	43	43	43	49	57	56	44	32	55	53	52	49	60	54	54	49	..	..	..	44.1
	Minimum	30	28	30	32	32	32	35	35	22	9	13	15	32	28	36	31	36	36	25	23	23	27	23	24	47	47	35	38	..	..	..	29.4
Caruthersville	Maximum	31	32	33	34	34	45	45	42	35	25	30	38	46	44	43	48	57	55	43	23	40	41	48	55	60	64	54	50	..	..	..	42.7
	Minimum	17	25	27	30	21	32	35	34	18	10	15	20	31	25	33	29	33	33	19	18	23	24	36	32	44	44	35	38	..	..	..	27.9
Doniphan	Maximum	32	29	30	33	33	47	38	36	39	28	30	36	40	43	42	50	55	48	34	21	41	40	46	50	60	60	48	45	..	..	..	40.5
	Minimum	10	20	22	27	28	23	28	27	13	− 4	7	7	22	13	29	20	20	28	16	12	18	23	16	23	38	38	26	27	..	..	..	20.6
Jackson	Maximum	29	32	31	33	35	42	38	35	29	24	24	35	38	43	43	46	54	53	46	23	42	40	50	55	55	60	51	51	..	..	..	40.6
	Minimum	6	15	21	24	26	26	27	22	9	−10	− 4	− 1	19	9	19	19	22	22	10	7	13	18	18	28	38	40	24	27	..	..	..	17.6
Poplar Bluff	Maximum	33	28	31	34	36	45	39	37	29	26	35	32	42	40	43	54	57	40	34	30	42	45	49	55	59	60	49	47	..	..	..	41.1
	Minimum	11	21	24	28	28	27	30	15	12	10	7	8	24	10	21	21	21	27	19	13	12	24	17	23	38	38	26	31	..	..	..	20.9
Sikeston	Maximum	28	31	32	32	32	40	42	38	35	17	32	37	40	40	42	49	55	50	36	23	38	35	45	50	53	60	45	..	..	..	..	[a]39.1
	Minimum	11	20	22	28	30	24	32	31	14	− 1	12	10	26	30	20	25	25	27	15	12	19	23	16	29	37	48	30	..	..	..	..	[a]22.8
Cairo, Ill.	Maximum	26	30	32	33	34	42	39	36	22	22	27	34	39	41	41	46	54	43	31	23	38	34	45	52	60	59	44	50	..	..	..	38.5
	Minimum	11	20	25	28	26	31	32	21	14	5	12	17	26	21	30	26	33	26	16	12	21	23	23	33	43	41	34	34	..	..	..	24.4
Ozark Plateau																																	
Arcadia §§	Maximum	31	28	29	33	31	40	38	30	24	31	32	38	35	44	39	49	54	33	17	23	49	42	52	57	56	48	44	46	..	..	..	38.3
	Minimum	5	6	17	20	22	23	26	26	6	− 9	− 7	− 3	− 1	7	8	14	15	19	11	− 1	1	14	18	25	29	37	24	27	..	..	..	13.5
Aurora	Maximum	30	28	28	32	32	33	31	20	15	29	29	41	35	47	55	46	55	46	22	23	44	39	52	51	50	46	42	40	..	..	..	36.3
	Minimum	10	21	22	25	26	24	20	10	− 4	−11	4	10	18	12	28	22	31	17	7	9	22	16	28	27	41	28	30	25	..	..	..	18.5
Birchtree	Maximum	35	30	29	33	33	40	39	31	20	28	30	35	30	45	39	47	55	49	31	36	47	49	51	56	55	55	40	44	..	..	..	39.7
	Minimum	8	19	20	25	28	25	21	18	2	−12	7	2	20	7	26	11	21	22	11	10	12	20	18	29	40	33	24	30	..	..	..	17 8
Eldon §§	Maximum	19	27	27	34	32	34	34	14	14	29	26	30	28	41	40	36	55	25	20	25	45	40	49	55	50	31	44	40	..	..	..	33.7
	Minimum	6	7	19	20	22	26	23	13	− 3	− 8	− 8	4	8	12	17	20	20	11	5	3	5	11	10	27	39	31	26	24	..	..	..	13.9
Farmington	Maximum	24	24	28	29	34	37	35	31	18	30	30	39	33	43	40	47	55	46	24	22	49	38	53	57	50	47	43	45	..	..	..	37.5
	Minimum	5	16	20	24	22	26	25	17	2	− 7	8	0	22	7	21	29	25	22	9	2	17	14	22	30	38	32	26	27	..	..	..	18.0
Koshkonong	Maximum	32	29	32	33	33	42	37	32	22	27	31	30	37	45	38	50	55	47	36	19	45	40	50	56	56	57	42	41	..	..	..	39.1
	Minimum	10	21	22	26	29	26	30	19	5	− 4	7	11	15	16	31	22	29	26	11	13	18	23	22	30	41	33	31	30	..	..	..	21.3
Lebanon §§	Maximum	29	27	29	34	34	34	28	12	17	26	41	38	37	44	54	25	18	24	45	39	35	51	50	39	42	38	40	22	..	..	..	34.0
	Minimum	4	5	19	19	21	17	20	12	− 9	−16	−12	0	9	17	19	12	5	3	6	11	11	26	26	20	27	24	24	22	..	..	..	12.2
Mountain Grove §§	Maximum	30	24	29	32	31	36	31	20	18	26	28	34	32	45	38	46	54	29	20	22	46	40	51	54	52	43	43	42	..	..	..	35.6
	Minimum	5	5	18	19	24	24	24	16	− 5	−12	−12	2	13	7	14	17	18	16	9	6	7	15	15	23	30	28	26	26	..	..	..	13.5
Neosho	Maximum	32	32	32	33	34	34	33	21	20	32	34	44	40	45	40	50	60	57	24	27	46	49	54	53	52	46	45	44	..	..	..	39.8
	Minimum	12	21	23	27	27	25	18	8	−13	−20	− 8	5	18	6	28	14	25	17	8	11	20	18	23	50	43	28	23	23	..	..	..	17.1
Rolla	Maximum	28	28	28	32	34	36	34	29	15	25	25	36	34	40	39	46	53	51	21	22	46	44	53	57	54	55	43	44	..	..	..	37.6
	Minimum	6	14	17	20	24	24	25	12	− 2	− 8	5	0	16	9	22	21	25	9	5	6	12	13	27	34	40	31	28	28	..	..	..	16.5
Springfield	Maximum	28	28	28	31	33	32	30	17	13	25	23	37	30	39	36	44	55	31	16	21	42	37	51	50	50	41	43	42	..	..	..	34.0
	Minimum	8	22	22	26	27	25	17	7	− 3	− 3	5	16	15	16	26	22	31	16	6	8	21	16	27	36	34	29	31	29	..	..	..	19.0
Southwest Plain																																	
Appleton City	Maximum	27	29	29	32	32	33	32	15	15	31	25	38	33	37	41	47	55	43	18	29	45	39	53	47	44	45	44	41	..	..	..	35.7
	Minimum	8	22	22	24	26	26	14	7	− 5	− 7	1	9	12	15	25	21	27	8	4	4	19	11	25	32	38	28	26	28	..	..	..	16.8
Centerview	Maximum	25	26	28	33	37	36	20	14	11	28	30	28	27	35	37	46	52	40	24	30	40	40	55	52	56	44	..	..	..	..	..	[b]34 4
	Minimum	5	3	11	26	25	28	12	6	− 8	− 3	− 3	12	2	15	23	22	30	4	3	1	18	9	26	33	36	30	..	..	..	..	..	[b]14.1
Clinton	Maximum	27	32	30	35	32	31	30	15	14	30	34	35	37	38	36	48	46	45	14	30	36	39	51	51	45	43	43	40	..	..	..	35.2
	Minimum	9	21	21	25	27	22	12	2	− 3	−10	7	11	10	17	26	24	26	11	4	5	20	11	28	35	40	30	27	27	..	..	..	17.3
Harrisonville §§	Maximum	23	26	27	34	31	34	16	11	15	30	28	38	31	38	41	51	54	10	16	31	41	42	54	47	40	42	47	43	..	..	..	33.6
	Minimum	1	9	19	20	22	24	10	4	− 9	− 8	− 3	0	10	12	15	20	22	2	1	1	4	6	8	28	36	26	24	25	..	..	..	11.8
Lamar §§	Maximum	30	31	33	33	32	33	20	14	19	27	31	41	34	43	40	47	56	18	19	28	48	41	54	46	48	46	45	42	..	..	..	35.7
	Minimum	7	11	24	25	27	18	18	8	− 9	−13	−11	− 1	14	14	17	22	23	14	7	6	14	17	17	30	38	30	27	28	..	..	..	15.1
Lamonte	Maximum	25	26	27	32	31	33	32	14	10	28	22	41	27	38	38	46	58	34	14	29	40	38	55	48	43	42	45	38	..	..	..	34.1
	Minimum	5	22	20	24	26	25	13	1	− 9	−12	0	5	4	13	23	20	23	5	3	3	18	6	26	24	32	30	25	26	..	..	..	14.3
Marshall	Maximum	23	28	29	35	33	34	31	14	11	25	21	38	32	35	39	47	56	42	12	27	38	37	55	47	44	44	45	39	..	..	..	31.3
	Minimum	5	18	20	25	25	25	14	5	−10	−14	− 3	4	2	13	20	20	25	3	1	− 1	17	7	25	34	37	29	25	25	..	..	..	14.1
Nevada	Maximum	29	30	32	34	33	34	34	15	16	28	30	40	35	41	40	48	56	47	19	29	46	40	50	48	45	45	45	43	..	..	..	36.9
	Minimum	9	24	24	25	27	26	14	9	− 7	− 3	3	10	17	20	27	25	29	10	5	7	21	14	30	30	39	39	29	30	..	..	..	19.0
Warsaw	Maximum	29	30	35	35	35	34	35	22	15	30	31	40	41	39	40	50	57	52	17	28	45	40	55	51	50	47	45	40	..	..	..	38.1
	Minimum	7	22	21	25	27	27	17	10	− 5	−16	4	6	11	10	25	20	23	10	5	4	22	10	28	36	41	30	24	22	..	..	..	16.6
Northwest Plateau																																	
Chillicothe §§	Maximum	19	28	27	34	34	34	18	11	9	24	26	30	21	34	39	43	49	21	13	19	28	34	51	37	37	40	46	35	..	..	..	30.0
	Minimum	− 3	− 1	13	20	22	22	8	− 1	−15	−22	− 9	− 6	− 4	− 4	13	17	15	− 4	− 4	− 6	− 4	−10	−10	28	33	28	24	24	..	..	..	5.9
Grant City	Maximum	17	24	25	32	31	31	19	11	9	22	20	17	22	30	35	42	37	19	8	21	32	30	40	39	34	36	43	37	..	..	..	27.2
	Minimum	− 4	12	19	21	23	19	4	− 1	−14	−12	− 5	− 1	1	8	15	18	8	− 7	− 6	−11	10	− 4	23	23	32	26	19	25	..	..	..	8.6
Kansas City	Maximum	23	27	26	33	30	32	16	12	11	26	21	32	28	36	38	47	52	12	11	30	38	42	52	43	42	41	47	39	..	..	..	31.7
	Minimum	9	20	22	23	26	16	9	3	− 5	2	4	11	10	23	25	29	12	− 1	1	3	17	9	32	36	31	27	32	31	..	..	..	16.4
Kidder §§	Maximum	17	27	25	32	31	30	11	10	3	22	17	33	22	30	35	40	52	6	7	24	34	35	47	35	37	37	45	37	..	..	..	27.9
	Minimum	− 4	0	14	18	21	21	5	− 3	−15	−16	− 7	− 5	− 4	0	10	17	12	− 5	− 6	− 8	− 6	− 2	− 1	26	30	29	20	24	..	..	..	5.9
Lexington	Maximum	33	22	28	26	35	30	35	31	14	13	26	24	36	30	35	40	46	53	45	15	29	40	38	53	46	37	44	45	..	..	..	33 9
	Minimum	6	19	22	22	25	25	11	5	− 6	− 7	1	10	3	17	23	27	22	1	2	3	15	6	31	36	27	29	28	29	..	..	..	15.4
Maryville	Maximum	16	26	25	32	32	30	30	9	5	24	18	22	21	32	37	45	37	19	9	21	31	34	43	40	34	37	43	40	..	..	..	28.4
	Minimum	− 1	14	20	21	24	15	4	− 2	−15	−13	− 7	8	− 1	5	15	18	13	− 6	− 5	− 5	15	− 1	24	28	30	25	20	29	..	..	..	9.7
Oregon	Maximum	25	28	27	32	34	32	17	11	13	29	27	28	26	36	40	49	46	26	11	30	33	43	50	45	35	40	50	44	..	..	..	32.4
	Minimum	4	12	21	23	25	15	4	− 2	−12	− 3	− 2	11	10	13	22	24	18	− 4	− 3	− 3	19	4	30	34	30	26	25	31	..	..	..	13.3
St. Joseph	Maximum	21	27	26	32	33	29	12	10	9	26	21	24	26	32	36	46	46	9	10	29	35	42	50	42	35	38	48	37	..	..	..	29.7
	Minimum	6	17	22	24	25	12	6	− 1	−10	− 8	0	12	10	18	24	26	9	− 3	− 2	0	12	7	32	35	30	27	28	30	..	..	..	13.9
Trenton	Maximum	20	26	29	32	32	37	22	11	7	21	20	30	25	31	34	39	46	17	9	24	31	32	48	38	36	37	42	36	..	..	..	29.0
	Minimum	− 3	10	20	23	24	22	8	1	−11	−18	− 2	− 6	− 2	9	16	19	15	− 4	− 4	− 8	14	0	24	32	32	29	26	23	..	..	..	10.3

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-6-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., MARCH, 1929. No. 3.

GENERAL SUMMARY.

In contrast to the outstanding cold weather that prevailed during January and February, the temperatures for March averaged high for the season in all parts of Missouri. The first ten days of March averaged near the normal, but beginning with the 11th there was a steady and persistent gain in warmth up to the last week when there was some lowering of the temperatures but still generally higher than normal.

The warmest spell was from the 21st to the 25th, when most stations reported maximum temperatures as high or higher, than previously recorded in March. The absolute maximum reported, 97°, has been exceeded by one degree, once, at one station, in the past 40 years. There was practically no freezing after the 18th.

The monthly precipitation exceeded the normal by a small amount; and was well distributed. The spring opened with excess ground moisture, the five months, November to March, inclusive, giving about 4.50 inches of water in excess of the normal. Consequently plowing for and sowing oats was much delayed. Wheat and grass responded quickly to the warmth and moisture; also most fruits. At the end of the month fruits, even apples, were unfavorably advanced, and there is much danger of harm from later freeze.

TEMPERATURE.

The monthly mean temperature for the State, 67 stations reporting, was 48.6°, or 4.7° warmer than normal, and the warmest March since 1921. The highest monthly mean was 57.4° at Campbell; and the lowest 42.0° at Tarkio, and Kidder. The highest temperature was 97°, at Jefferson City on the 24th, and the lowest, 11°, occurred at Seymour, Webster County, on the 10th. The number of days with 32° or lower averaged about ten.

PRECIPITATION.

The average precipitation, 99 stations reporting, was 3.30 inches, or about 0.28 inch more than the 60 years' normal. Precipitation was scattered and unimportant during the first ten days, except the 3d, 4th, and 5th were rather wet in the southeastern lowlands. A general wet spell prevailed from the 11th to 16th, and rain was frequent although only occasional heavy during the last ten days of the month. The greatest monthly amount was 6.13 inches, at Monroe City, while not much more than one-half inch fell at Grant City, Worth County. The greatest amount that fell in any twenty-four consecutive hours was 3.30 inches at Steffenville, Lewis County, on the 31st. The snowfall was light and unimportant.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—At a few stations on the 13th.

Hail.—Heavy, large stones, at Fulton 26th, Brunswick, St. Charles, Steffenville, Lebanon, Neosho, and Rolla, on the 31st. At St. Charles some stones were the size of small hen eggs; at Rolla some birds were killed. The damage was unimportant owing to the season.

Hail, light to moderate without damage.—Bethany, 14th; Caplinger Mills, 25th; Dean, 26th, and 31st; Seymour, 26th; St. Louis, 25th and 31st; Springfield, 25th and 31st; Kansas City, 24th and 31st; Maryville, Kirksville, Aurora, Warrensburg, and Lexington on the 31st.

Halos, lunar.—19th, 20th, 21st, 22d, and 24th.

Halos, solar.—2d, 3d, 4th, 7th, 8th, 12th, 13th, 14th, 18th, 21st 22d, 24th, 25th, 26th, 27th, 28th, and 29th.

Thunderstorms.—11th, 13th, 14th, 19th, 23d, 24th, 25th, 30th, and 31st.

SPECIAL STORM NOTES.

Heavy rain with hail and high wind occurred in southeast Missouri the evening of March 31. It also appears that a tornado occurrred or crossed Ripley County, developing over the line in Arkansas. At Poynor, Ripley County, Mo., the storm struck about 9 p. m., according to a report by the local postmaster. This might be an error in the clock as the storm struck Doniphan, 10 miles farther northeast at 8.30 p. m. The path as it passed Poynor was 50 to 75 yards wide. Timbers and small buildings indicated a rotary movement of the winds. Four persons were injured but none killed. The damage sustained was about $6,000, confined to livestock, chickens, fences, and small houses. Going northeast the storm struck Doniphan at 8.30 p. m., the path averaging about one-fourth mile wide. The estimated damage was put at $150,000 to $200,000. The main buildings almost totally wrecked and damaged included the County Court House, the Grammar School building, the Masonic Temple, and the Mabrey Homestead. Few persons were injured and none killed. Our correspondent states further, "the remarkable feature of the whole thing is that there were no serious injuries nor loss of life. A part of which is attributed to the fact it was Sunday night and the main buildings mentioned were not occupied by persons at the time." High straight-line winds with scattered but not very large damage occurred northeast from Doniphan and near Poplar Bluff, Butler County, in Carter, Stoddard, Wayne, Bollinger, St. Francois, and Washington Counties. At Mineral Point, Washington County, considerable wind damage occurred at about 8.15 p. m., estimated to be around $5,000. Three persons were injured, one dying a few days later from such injury. This doubtless was a tornado, as "two small houses were completely blown to pieces; three stores and dwellings badly damaged, and a few other buildings were more or less wrecked." Daylight indicated that the storm path ran southwest to northeast; about 900 feet wide generally but not more than 300 feet in places, and where the greatest damage was done.

Over the entire southeast Missouri storm area it seems probably, according to special reports and press news, that around 20 to 22 persons were injured, one dying later from injury received, but no other deaths. Between thirty and forty small farm buildings wrecked or damaged, with loss of livestock, farmyard fowls, etc., resulting in a total loss of about $211,000. The American Red Cross representative, Mr. Walter Over, is reported as saying, "there was much scattered damage in the storm district, the most serious being at Doniphan, where, with a population of 1600, there were 300 storm insurance claims."

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

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Stations	Mean barometric pressure (sea level)	Mean relative humidity 7 a. m.	Mean relative humidity 7 p. m.	Sunshine Total hours	Sunshine Percentage of possible	Wind Total movement miles	Wind Average hourly velocity	Wind Max. velocity Miles per hour	Wind Max. velocity Direction	Wind Max. velocity Date
Columbia	29.92	79	56	224	60	6,093	8.2	36	nw.	6
Hannibal	29.92	77	..	....	..	6,979	9.4	32	w.	6
Kansas City	29.92	72	52	242	65	7,514	10.1	42	nw.	31
St. Joseph	29.90	75	52	209	56	6,285	8.4	34	nw.	6
St. Louis	29.94	76	61	189	51	9,995	13.4	40	nw.	6
Springfield	29.94	78	60	168	45	7,948	10.7	30	se.	12
Cairo, Ill.	29.98	81	61	....	..	7,314	9.8	37	sw.	31
Keokuk, Iowa	29.93	78	60	221	60	5,788	7.8	34	w.	6

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR MARCH.

Year	Temperature Mean	Temperature Departure	Temperature Highest	Temperature Lowest	Precipitation Mean	Precipitation Departure	Precipitation Greatest in 24 hours	Precipitation Total snowfall, unmelted	Number of days With .01 inch or more	Number of days Clear	Number of days Partly cloudy	Number of days Cloudy
1888	38.5	−4.8	90	1	4.02	+1.11	....	..	10	..	..	..
1889	44.3	+1.0	84	13	1.98	−0.93	....	..	5	..	..	..
1890	37.3	−6.0	76	−11	2.61	−0.30	....	5.7	8	..	..	..
1891	36.6	−6.7	78	−11	3.01	+0.10	....	7.1	10	..	..	..
1892	38.9	−4.4	87	5	3.11	+0.20	....	....	8	8	10	13
1803	40.5	−2.8	86	1	2.86	−0.05	2.15	3.2	7	11	10	10
1894	47.7	+4.4	89	2	2.93	+0.02	3.20	0.2	6	15	9	7
1895	42.4	−0.9	98	0	2.14	−0.77	3.00	4.4	9	14	7	10
1896	39.2	−3.9	82	2	2.05	−0.86	4.47	5.2	8	11	9	11
1897	44.2	+0.9	93	− 5	6.07	+3.16	4.10	1.0	2	9	9	13
1898	44.7	+1.4	83	9	7.09	+4.18	3.87	0.6	11	11	7	13
1899	37.4	−4.1	78	− 8	2.93	+0.02	4.30	8.9	16	9	11	11
1900	40.4	−1.9	88	− 4	1.48	−1.43	3.41	0.2	6	15	9	7
1901	42.7	−0.6	85	− 1	3.74	+0.83	3.21	1.8	8	11	8	12
1902	45.3	+2.0	85	1	3.49	+0.58	5.60	0.8	9	10	10	11
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	1.1	8	13	7	11
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	1.2	9	11	9	11
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	T.	8	11	8	12
1906	34.6	−8.7	75	− 5	3.93	+1.02	3.00	8.6	11	6	7	18
1907	53.9	+10.6	95	16	2.82	−0.09	3.08	1.0	7	14	7	10
1908	50.1	+6.8	89	14	2.58	−0.33	2.55	1.0	7	14	7	10
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	0.6	6	13	9	9
1910	55.8	+12.5	96	15	0.66	−2.25	2.25	0.1	2	20	7	4
1911	46.8	+3.5	91	5	1.85	−1.06	2.00	1.4	6	16	8	7
1912	35.2	−8.1	89	− 4	4.62	+1.71	2.85	16.5	11	12	6	13
1913	40.6	−3.7	84	−12	4.36	+1.31	7.97	5.0	9	12	8	11
1914	43.2	−1.3	87	− 2	2.75	−0.41	3.01	4.7	8	13	7	11
1915	36.4	−8.1	70	6	1.50	−1.74	1.85	7.9	6	7	8	16
1916	47.0	+1.3	95	− 2	2.53	−0.65	4.25	3.1	7	14	8	9
1917	45.2	+1.7	86	− 7	2.91	−0.42	4.08	1.5	7	15	7	9
1918	50.9	+7.8	95	8	0.94	−2.05	2.25	0.1	4	18	6	7
1919	46.3	+2.9	90	− 2	2.40	−0.69	5.37	0.7	6	15	8	8
1920	44.6	+1.4	86	− 6	5.01	+2.09	6.00	1.4	8	15	6	10
1921	51.9	+8.5	90	11	4.69	+1.68	2.88	0.5	10	13	9	9
1922	45.6	+1.4	80	3	6.46	+3.38	4.00	2.2	12	11	6	14
1923	40.4	−3.1	83	−11	4.12	+1.00	2.84	2.3	8	14	6	11
1924	38.4	−5.4	80	8	2.55	−0.45	2.38	9.4	8	8	8	15
1925	47.7	+3.9	86	− 5	1.95	−1.05	2.55	0.8	5	17	8	6
1926	39.6	−4.2	83	8	2.89	−0.11	1.77	7.0	8	13	6	12
1927	45.9	+2.1	80	0	5.87	+2.87	4.90	3.7	11	12	8	11
1928	46.3	+2.5	89	10	1.54	−1.46	1.60	2.4	5	15	9	7
1929	48.6	+4.7	97	11	3.30	+0.28	3.30	T.	8	12	8	11

Climatological Data for March, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	46.7	+ 4.8	88	24	18	9	45	3.34	+0.78	1.30	T.	10	15	3	13	sw.	O. K. Benecke
Clifton Hill	Randolph	731	29	46.7	+ 4.5	87	24	15	9	44	5.71	+3.06	3.21	T.	8	15	7	9	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	48.5	+ 5.9	89	24	19	9	41	4.05	+1.11	1.95	T.	8	9	10	12	s.	U. S. Weather Bureau
Downing	Schuyler	876	7	46.1	.....	84	24	14	9	46	3.29	+0.83	1.50	0	6	11	6	14	sw.	James Taylor
Fayette	Howard	661	48	46.1	+ 4.0	91	24	16	9	47	2.62	−0.19	0.88	0	8	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	47.6	+ 3.2	85	23	20	9	47	2.86	−0.18	1.51	T.	8	15	9	7	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	3.21	+0.75	1.62	T.	7	9	9	13	nw.	J. W. Pulliam
Hannibal	Marion	534	36	48.0	+ 7.0	87	24	19	9	41	5.11	+2.51	1.96	T	8	9	8	14	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	49.6	+ 6.4	97	24	21	9†	50	4.38	+1.56	1.58	0	8	12	8	11	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	44.8	+ 5.3	84	24	14	9	46	4.01	+1.24	1.87	0	4	16	3	12	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	34	50.2	+ 6.9	90	24	20	7†	42	4.41	+1.51	2.50	0	9	12	13	6	s.	Stark Bros. Nurseries
Macon	Macon	875	29	46.2	+ 3.6	87	24	16	9	46	2.59	−0.10	1.83	0	8	14	9	8	w.	W. C. Brown
Mexico	Audrain	800	39	44.9	+ 2.9	87	24	18	9†	47	3.41	+0.62	1.35	T	10	22	0	9	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	6.13	.....	2 29	0	6	15	5	11	ne.	J. S. Conway
St. Charles	St. Charles	456	40	51.2	+ 6.8	93	24	20	10	44	4.99	+1.90	2.38	T.	8	7	11	13	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	50.8	+ 6.7	92	24	22	10	40	5.33	+1.95	1.96	T.	11	12	8	11	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	50.6	+ 7.0	93	24	20	10	39	5.25	+2.30	1.50	T.	10	14	11	6	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	4.45	+1.60	1.60	T.	7	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	45.8[a]	+ 3.4	84	24	16	9	44	5.90	+2.99	3.30	T.	7	9	11	11	e.	Frank Hall
Unionville	Putnam	1,062	35	44.3	+ 5.7	84	24	12	9	48	1.40	−0.99	0.90	0	3	11	8	12	sw.	Geo. W. Davis
Warrenton	Warren	816	46	51.2	+ 9.0	92	24	18	10	42	4.88	+1.51	2.00	T.	9	10	11	10	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	46.0	+ 7.1	81	24	16	9	38	4.78	+2.40	2.04	T.	9	7	7	17	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	47.6	+ 5.6	97	24	12	9	50	4.19	+1.29	3.30	T.	8	12	8	11	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	57.4	.....	92	24	32	2†	36	3.80	.....	1.49	0	8	16	4	11	s.	Jeff. King
Caruthersville	Pemiscot	265	32	55.8	+ 4.6	88	24†	28	10	35	5.08	+1.08	0.96	0	12	9	8	14	s.	Sam Smith
Doniphan	Ripley	344	24	52.0	+ 2.6	92	24	20	10	40	4.08	+0.49	1.03	0	8	15	7	9	sw.	W.W. Martin
Jackson	Cape Girardeau	428	37	49.6	+ 2.4	86	24	15	10	41	3.55	−0.79	1.16	0	8	7	7	17	s.	John G. Putz
Marble Hill	Bollinger	470	33	51.6	+ 4.2	90	24	17	10	38	5.68	+1.50	1.80	0	9	9	9	13	n.	R.A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	3.74	−0.76	1.10	0	8	13	8	10	s.	John A. Spence
Poplar Bluff	Butler	339	24	52.4	+ 3.6	92	24	20	2†	41	5.12	+0 60	1.80	0	7	17	5	9	s.	J. H. Wolpers
Sikeston	Scott.	318	23	53.2	+ 4.8	88	24	21	10	38	3.44	−1.06	1.30	0	5	14	4	13	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	52.9	+ 5.7	88	24	26	10	25	3.54	−0.21	0.82	T.	13	8	7	16	s.	U. S. Weather Bureau
Section means and	extremes	....	..	53.1	+ 4.0	92	24	15	10	41	4.23	+0.11	1.80	0	9	12	7	12	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	47.4	+ 2.6	91	24	14	10	44	2.49	−1.58	1.02	0	7	21	3	7	s.	Arcadia College
Aurora	Lawrence	1,370	38	50.7	+ 5.1	92	24	25	1†	36	3.28	−0.40	0.63	0	10	16	4	11	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	52.0	+ 4.6	91	24	18	10	40	1.58	−2.67	0.55	0	5	16	5	10	s.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	51.5	+ 2.6	92	24	20	1	44	2.67	−0.68	0.80	0	7	15	9	7	sw.	H. E. Dean
Eldon	Miller	934	32	47.0	+ 3.5	89	24	22	2†	47	3.56	+0.73	1.46	T.	7	11	12	8	s.	E. H. Shepherd
Farmington	St. Francois	918	17	50.7	+ 3.8	94	24	15	10	38	3.09	−0.18	1.08	0	10	12	11	8	sw.	Robert Forsyth
Goodland	Iron	1,000	34	49.3	+ 4.4	92	24	12	10	47	2.22	−2.03	0.58	0	8	13	7	11	s.	F. M. Adams
Greenville	Wayne	381	6	51.0[c]	.....	92	24	16	2	49	5.11	.....	1.40	0	6	15	6	10	sw.	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	1.20	.....	0.70	0	2	12	7	12	w.	A. W. Madison
Koshkonong	Oregon	958	27	52.6	+ 3.0	92	24	19	10	43	2.13	−1.68	0.60	0	8	12	3	16	sw.	R. M. Hitt
Lebanon	Laclede	1,265	40	46.8	+ 1.4	89	24	20	2†	48	4.43	+0.98	1.20	T.	8	15	7	9	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	50.2	+ 2.3	92	24	24	1	38	2.77	+0.31	0.73	0	9	12	4	15	se.	C. S. Crow
Mountain Grove (near)	Wright	1,463	27	48.2	+ 2.2	89	24	18	10	51	2.62	−1.72	1.28	0	9	11	11	9	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	51.1	+ 2.9	92	24	20	1	42	2.63	−0.84	0.51	0	10	13	6	12	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	50.4	+ 5.4	91	24	20	10	46	5.36	+1.77	1.80	0	9	5	11	15	w.	F. H. Lane
Salem (near)	Dent	1,173	24	49.6	+ 2.7	91	24	19	10	43	3.32	+0.02	1.98	0	10	12	7	12	s.	A. C. Leech
Seligman	Barry	1,542	26	52.0[b]	+ 5.8	92	24	22	1	36	2.19	−1.75	0.69	0	9	8[b]	11[b]	10[b]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,612	22	49.8	+ 4.6	90	24	11	10	40	3.33	−0.73	1.04	T.	6	9	10	12	s.	Ira H. Hailey
Springfield	Greene	1,324	40	49.4	+ 4.2	91	24	25	10	38	2.97	−0.42	0.76	T.	13	10	10	11	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	50.0	+ 3.4	94	24	11	10	51	3.00	−0.64	1.98	T.	8	13	7	11	s.	
Southwest Plain																				
Appleton City	St. Clair	853	34	49.4	+ 4.8	89	24†	23	9	45	2.82	−0.25	1.00	T.	9	8	17	6	sw.	W. G. Bigelow
Clinton	Henry	765	35	49.8	+ 5.5	91	24	24	10	34	2.97	+0.11	1.60	0	5	14	6	11	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	46.0	+ 5.1	88	24	18	9	44	3.36	+0.67	1.90	0	8	5	5	21	s.	John H. Patterson
Lamar	Barton	980	41	48.8	+ 2.6	92	24	26	1†	43	1.43	−1.47	0.56	0	9	11	6	14	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	48.6	+ 4.9	90	24	20	9	43	4.02	+1.42	1.80	T.	7	16	8	7	sw.	J. E. Wheeler
Marshall	Saline	779	39	49.8	+ 7.3	90	24	18	9	43	4.64	+1.93	2.80	T.	6	12	9	10	sw.	Dr. W. H. Black
Nevada	Vernon	862	35	50.2	+ 5.9	90	21	24	9	40	1.75	−1.24	0 85	0	4	12	10	9	s.	George A. Kaupp
Warrensburg	Johnson	878	41	51.4[e]	+ 7.8	90	24	20	9	42	5.15	+2.61	2.70	T	5	17[c]	2[c]	7[c]	sw.	E. A. Markey
Warsaw	Benton	687	28	50.3	+ 3.4	92	24	23	9	39	3.19	−0.04	1.34	T.	6	7	9	15	s.	Everett Martin
Section means and	extremes	.....	..	49.4	+ 5.3	92	24	18	9	45	3.26	+0.42	2.80	T.	7	12	8	11	sw.	
Northwest Plateau																				
Bethany	Harrison	916	36	44.5	+ 4.5	84	24	13	9	46	1.81	−0.49	1.37	T.	4	11	12	8	nw.	M. H. Moulton
Chillicothe	Livingston	779	19	44.8	+ 3.2	88	24	14	9	48	1.79	−0.99	0.98	T.	7	19	5	7	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	44.7	+ 5.2	84	24	12	9	46	1.74	−0.01	1.32	0.5	5	9	13	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	46.7[a]	.....	87	24	18	9	44	1.40	−1.35	0.71	T.	5	23	1	7	s.	Fred L. Stiff
Grant City	Worth	1,131	24	43.2	+ 1.9	81	24	12	9	44	0.47	−1.64	0.42	0.2	4	6	22	3	sw.	W. P. Spillman
Kansas City	Jackson	963	39	48.2	+ 5.5	87	24	19	9	39	3.28	+0.75	2.23	T.	4	11	11	9	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	42.0	+ 0.8	85	24	14	9†	47	1.41	−0.89	0.66	T.	6	13	5	13	s.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	1.78	.....	1.01	0	5	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	48.6	+ 5.7	88	24	19	9	42	3.96	+1.59	1.80	0	11	13	15	3	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	43.0	+ 5.8	81	24	13	9	44	1.05	−0.83	0.97	0.5	4	16	5	10	se.	J. R. Brink
Oregon	Holt	1,048	72	46.3	+ 7.0	84	24	17	9	43	1.74	−0.28	1.02	1.0	5	14	10	7	sw.	Mina Wright
St. Joseph	Buchanan	967	20	46.4	+ 3.9	86	24	17	9	43	1.98	−0.43	1.09	T.	7	14	7	10	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	25	42.0	+ 1.4	80	24	15	9	40	1.56	−0.14	0.85	8.0	4	9	12	10	sw.	Albert Volker
Trenton	Grundy	822	32	44.6	+ 3.4	86	24	15	9	46	1.93	−0.51	1.29	T.	6	10	13	8	s.	W. H. Estes
Section means and	extremes	.....	..	45.0	+ 4.0	88	24	12	9	48	1.85	−0.40	2.23	0.7	6	13	10	8	s.	
State means and	extremes	.....	..	48.6	+ 4.7	97	24	11	10	51	3.30	+0.28	3.30	T.	8	12	8	11	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for March, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain																																	
Boonville‖	Missouri		.01									.14	.52	.14		.15	.87			.02	.04					.04	.15				.03	.33	2.44
Brunswick‖	Grand	T.	.02									.14	.15	.02		.12	.68			.08				.05		.78						1.30	3.34
Clifton Hill	Chariton	T.										.35	.48	.03		.90	.27			.11						.36				T.		3.21	5.71
Columbia***	Missouri	T.										.23	.62	T.	.01	1.94				.03						.28				.05		.89	4.05
Downing	Mississippi	T.										.03	1.34	.04		.36										T.				.02		1.50	3.29
Fayette‖	Missouri											.22	.56	.03		.04	.78			.06						.05						.88	2.62
Fulton‖	....do		T.									.04	.33	.08		.36	1.15										.80			.03	.07		2.86
Gorin	Mississippi	T.										.07	.61	.06		.52								.02		.31						1.62	3.21
Hannibal***	....do	T.										.33	.68	.26	.05	1.95										.24				.01		1.59	5.11
Hermann‖	Missouri		T.		.03								.28	.54		.66	1.80				.16						1.40				.08		4.95
Jefferson City‖	....do												.35	.38		.48	1.22				.13						1.58			.09	.15		4.38
Kirksville	Mississippi												.97			.50										.67						1.87	4.01
Louisiana	....do											.03	.30	.03	.90	2.50				.05						.20	.15					.25	4.41
Lucerne‖	Grand	.12											.09	.08	.06	.10	.06													T.	.02	1.00	1.53
Macon ‖	Chariton	.04										.15	.12	.03		.04	.08									.30						1.83	2.59
Mexico ‖	Mississippi	T.										.05	.65	.30		.55	1.35				.08						.15			.05	.06	.17	3.41
Milan‖	Grand												.40			.15	.45									T.					.10	1.05	2.15
Monroe City	Mississippi											.54	.89	.11		2.09										.21						2.29	6.13
Pacific‖	Meramec				.20									.32		.49	.87				.18		.06				2.20			.04	.06		4.42
St. Charles	Missouri			.24										.53		1.30	.20			.02	.12	T.				2.38				.20			4.99
St. Louis (1)***	Mississippi	T.		.39									.03	.40		1.11	.01			.16		.04	T.	T.		1.55	.41			.19		1.04	5.33
St. Louis (2)*	....do	T.		.30									.06	.39		1.46	T			.15		.01	T.			1.50	.38			.12		.88	5.25
Shelbina ‖	....do	T.										.26	1.02	.12		.02	1.25									.18						1.60	4.45
Steffenville	....do	T.										.35	.55	.20		1.10	.05							T.		.35						3.30	5.90
Union‖	Meramec				.26								.15	.35		.40	1.32				.16		.02				1.75			.03	.13		4.57
Unionville	Chariton												.20			.30																1.40	
Warrenton	Mississippi	T.		.04									.27	.58		2.00	.22			.17						.75	.77			.08			4.88
Keokuk, Ia.***	....do	T.										.57	.57	.23	.01	.94				T.				.06		.34				.02		2.04	4.78
Southeast Lowlands																																	
Campbell‖	St. Francis				1.49	.10							.05	.31			.20				.18	.17	T.							1.30			3.80
Cape Girardeau‖	Mississippi				1.35	T.								.54		.28	.10	.02			.10	.08	.10				.09		.01	.17	.34		3.18
Caruthersville‖	.... do			.62		.56								.40		.71					.20	.03	.10	.05		60			.96	.55		.30	5.08
Dexter‖	St. Francis				1.45	.03								.42		.13					.15	.08	.03						T.	.25	.60	.42	3.56
Doniphan	Black			.45	1.03								.17	.60		.50				.53		.22						T.	T.	.58			4.08
Jackson	Mississippi			.60	1.16									.55		.42	.08			.03		.16								.55			3.55
Marble Hill	Mississippi			.20	1.60								.20	1.80		.80	.12					.26						.20		.50			5.68
Morehouse	....do			.26	1.10	.07							T	.29		.73					.13	.12						T.		1.04			3.74
New Madrid‖	....do				.90	.45								.40		.60	.03				.30	.10	.05	.10			.01		.01	.50	.80		4.25
Poplar Bluff‖	Black				1.69	.04								.72		1.80					.38	.06	T.							.43			5.12
Sikeston‖	Mississippi				1.30									.60		.32					.12									1.10			3.44
Cairo, Ill.***	. . do	T.		.40	.64	.07							.01	.43	.07	.22	.04			.17	.08	.08	T.	T.			T.	T.	T.	.80		.53	3.54
Ozark Plateau																																	
Arcadia ‖	St. Francis				.07									1.02		.35	.30					.12								.60	.03		2.49
Aurora	Neosho			.21	.12	.63						T.	.26			.43	.03				T.					.47	T.	.32	.38		.43	3.28
Birchtree (near)	Black			.15									.37			.55						.13							.38			1.58
Bolivar	Osage			.37					.02			.02	.25		.04	.68				.05					.72	.08		.40	.04		.50	3.20
Caplinger Mills	Osage			.03	.03	.38							.53			.80				.07						.60	.50			.08		.53	3.55
Dean	Neosho			.12	.25							T.	.70			.15	T.									T.	T.		.80	.30		.35	2.67
Eldon‖	Missouri		T.									T.	.38	.05		.36	1.10				.14						1.46				.07		3.56
Farmington	St. Francis			.11	.04								.21	.68		1.08	.29			.12		.05					.29		T.	.22			3.09
Fredericktown‖	.... do				.40									1.00		.84	.10					.16					.22		.15			.40	3.27
Galena‖	White				.15	.15							.55			.48											.10			.42			1.85
Goodland	Black												.32	.28		.58	.23			.10							.36		.10	.25			2.22
Greenville	St. Francis			.30	.88									1.25		1.40				T.		.35					T.	T.	T.	.93			5.11
Hailey	White											.70																			.50			1.20
Koshkonong	Black			.18	.12								.45	.08		.60				.05		.15						T.		.50			2.13
Lebanon ‖	Osage		T.	.31									.50	.08		.68	.45										1.20		.16		1.05		4.43
Leeper‖	Black				.37									.76	.09	.17			.21	.21	.33									.28	.09		2.51
Lockwood	Osage			.07	.05					T.			.27			.52				T						.73	.38		.28	.22		.25	2.77
Mountain Grove‖	White				.12								.45	.28	T.	1.28	.07	T.			.04	T.					.07		T.	.29	.02		2.62
Neosho	Neosho			.13	.06	.02		T.				T.	.48		T.	T.										.12	.44	.03	.44	.51		.40	2.63
Owensville ‖	Gasconade			T.	.25								.25	.15		.90	1.40				.15						2.00				.15		5.25
Ozark Beach‖	White												.25	.13		.84						.04					.04			.63			1.93
Rolla ‖	Meramec			.36									.42	.09		1.80	.14			.04							1.12			.19		1.20	5.36
Salem (near)	....do			.25									.20	.10		1.89	.09			.10							.47		.08	.12		.02	3.32
Seligman	Neosho			.13	.08	T.						T.	.48	.02		.45						.04				T.	T.	T.	.69	.18		.12	2.19
Seymour (near)	White	T.		.30	T.								1.02	T.		1.04				T.		T.				T.	.40	T.	.21	.36		T.	3.33
Springfield***	....do	T.		.37	.03				.01			.01	.21		.01	.68	T.			.03		T.				.69	.07	T.	.36	.01		.49	2.97
Steelville‖	Meramec				.25								.10	.08		.95	1.15										1.09			.12			3.74
Stover‖	Missouri											.10	.31	.09		.45	1.03				.10						1.16				.03		3.27
Tuscumbia ‖	Osage		T.		.17							T.	.45	.01		.70	1.11				.12						1.48			.08	.01		4.13
Williamsville‖	Black	.01			1.36	.01								1.15	.01	1.05	.01				.11	.22	.08				.05		.02	.26	.16		4.50
Willow Sprgs. ‖ (near)	White				.04								.30	.43		1.17	.01				.06	.02					.08			.41	.05		2.57
Southwest Plain																																	
Appleton City	Osage	T			.25							T.	.06			1.00	.02			.12						.98	.03		T.	.05		.31	2.82
Clinton	Osage													T.		1.60	.20			.09						.48						.60	2.97
Concordia‖	Missouri												.18			.33	1.54			.07						.24						2.55	4.91
Harrisonville‖	Osage											.08	.13	.16		.14	.63									.31						1.90	3.36
Joplin ‖	Neosho			.10	.03							T.		.32		.15				.02						.55	.03		.76	.10		.18	2.24
Lamar‖	....do	T.			10	.05							.12	.08		.12	.07				T.					T.	.56			.30	.03		1.43
Lamonte	Missouri	T.										.10	.15			1.80	.05			.15						.27						1.50	4.02
Marshall	.... do	T.									T.	.25	.25		T.	.57	.25									.52						2.80	4.64
Nevada	Osage				T.											.27				.25						.85			T.	T.		.38	1.75
Osceola‖	....do					.22							.13			.77	.38					.18					.80			.08			2.56
Warrensburg	Missouri								T.		T.	T.	.25			1.42				.25						.53				T.		2.70	5.15
Warsaw	Osage	T.		T.	T.							T.	.25			1.34	.15			.20						.55		T.	T.	T.		.70	3.19
Waverly ‖	Misouri	.04										.03	.24			.40	.92			.11	T.			.14		.66						1.30	3.84
Northwest Plateau																																	
Albany‖	Grand					.24		T.																								1.95	2.19
Bethany	....do	T.		T.								T.	.23	T.	T.	.15				T.				T.						.06		1.37	1.81
Chillicothe‖	....do	.07											.15	.04	T	.15	.33							T.		.07						.98	1.79
Conception	Missouri	T.			.04								.18			.15			T.											.05		1.32	1.74
Edgerton	....do	T.			.01								.20			.47	.01									T.						.71	1.40
Gallatin ‖	Grand	.16											.06	.08	.11	.09	.21													T			0.71
Grant City	.... do	.02			T.								T.			.02														.01		.42	0.47
Kansas City***	Missouri	T.			T.						T.	T.	.38		T.	.65				T.			T.		.02	T.				T.	T.	2.23	3.28
Kidder ‖	Grand	T.											.10	.10	.15	.05	.35													T.		.66	1.41
King City	Missouri				.01								.27		.05	.44				T.												1.01	1.78
Lexington	....do	.03				.10						.05	.14	.06			1.20			.05				.10		.40				.03		1.80	3.96
Maryville ‖	....do	T.				.05								.02			.01			T.										T.	.97		1.05	
Oregon	....do	T.			.17								.22			.31														.02		1.02	1.74
St. Joseph***	....do	T.			.05								.34	.02		.42			T.				T.							.06	.58	.51	1.98
Tarkio	....do				.42								.25				.04															.85	1.56
Trenton	Grand	T.										.01	.11	.04	.02	.46														T.		1.29	1.93

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for March, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick §§	Maximum	33	50	49	43	49	63	38	55	38	52	54	58	66	53	45	54	63	65	59	67	74	79	72	88	56	65	64	59	52	69	70	58.1
	Minimum	28	24	32	25	26	29	22	23	18	21	30	39	45	36	40	36	33	36	37	36	41	51	48	44	43	35	41	39	45	44	47	35.3
Columbia	Maximum	33	56	49	40	51	65	38	54	34	50	62	61	65	65	53	51	60	65	58	66	73	79	82	89	74	61	64	56	51	67	73	59.5
	Minimum	26	25	31	28	25	32	22	30	19	24	39	49	51	41	33	37	36	38	40	35	50	54	51	48	47	38	45	43	44	41	38	37.5
Fayette	Maximum	32	54	53	44	50	66	40	56	36	50	57	57	65	66	45	55	65	65	61	68	75	80	81	91	58	65	66	57	51	69	69	59.6
	Minimum	25	20	30	22	22	27	20	25	16	20	27	46	42	35	38	32	31	29	34	33	36	47	48	44	43	33	36	39	43	32	37	32.6
Hannibal	Maximum	35	52	51	36	49	65	35	49	31	48	59	61	65	65	53	43	57	64	58	65	73	78	72	87	76	62	66	59	51	63	69	58.0
	Minimum	29	27	34	30	28	30	20	30	19	22	38	48	50	45	41	35	34	40	38	36	48	55	49	46	46	41	45	45	47	44	39	38.0
Jefferson City §§	Maximum	37	60	50	50	55	76	45	58	39	52	66	61	68	70	50	52	66	68	57	70	76	88	94	97	59	62	66	60	57	71	82	63.3
	Minimum	26	24	26	28	25	25	25	24	21	21	28	40	44	43	43	33	34	38	43	34	36	42	53	47	52	39	41	46	44	41	47	35.9
Kirksville	Maximum	35	45	44	36	46	56	36	46	40	42	47	55	62	62	59	55	61	63	58	62	71	76	70	84	72	61	60	63	54	61	57	56.1
	Minimum	25	21	33	28	22	33	17	27	14	21	34	41	46	36	38	33	33	38	43	36	31	39	45	38	39	33	36	38	40	42	41	33.6
Louisiana	Maximum	40	50	55	45	50	65	45	52	50	48	63	63	70	70	70	55	60	65	65	65	74	80	85	90	85	65	65	65	60	60	60	62.4
	Minimum	29	24	35	28	27	43	20	24	20	20	39	49	52	45	40	38	30	35	48	32	50	51	48	48	52	39	40	46	46	43	33	37.9
Macon §§	Maximum	31	40	51	39	48	61	40	51	36	45	50	56	65	63	44	55	61	65	60	66	74	79	70	87	80	63	65	59	50	69	65	57.7
	Minimum	28	24	27	29	23	28	19	20	16	18	33	38	48	39	42	34	32	38	46	34	38	45	48	42	34	47	42	40	44	40	44	34.8
Mexico §§	Maximum	31	52	50	40	51	68	48	50	26	40	49	52	64	66	46	37	41	46	45	63	72	79	78	87	59	58	61	58	49	67	72	55.0
	Minimum	26	24	28	26	25	28	21	22	18	18	25	39	49	41	44	35	34	37	40	37	42	52	44	40	45	36	39	41	41	42	41	34.8
St. Louis(1)	Maximum	40	55	47	44	50	74	40	53	38	48	63	64	68	72	57	44	56	66	60	67	69	75	80	92	76	58	62	58	51	69	82	60.6
	Minimum	30	27	44	34	30	34	26	29	23	22	39	49	54	51	36	37	35	40	45	40	51	53	60	54	48	44	49	49	47	49	45	41.1
Unionville	Maximum	35	45	42	42	48	52	38	43	43	44	50	55	63	62	56	50	60	65	62	64	65	74	64	84	80	64	64	63	54	57	50	56.1
	Minimum	25	20	28	26	20	31	15	25	12	20	35	42	47	32	38	32	32	35	40	30	42	40	42	36	38	30	38	35	40	45	38	32.5
Warrenton	Maximum	42	55	49	44	51	72	46	57	52	52	66	63	69	73	71	57	59	67	63	69	70	78	87	92	87	59	63	62	55	69	76	63.7
	Minimum	28	24	40	28	26	38	22	26	19	18	39	47	52	45	43	34	33	37	44	37	47	50	57	50	47	39	41	43	45	42	55	38.6
Southeast Lowlands																																	
Campbell	Maximum	48	57	58	52	55	70	68	49	49	50	63	65	67	75	64	60	65	65	62	67	67	80	83	92	85	80	70	67	62	76	83	66.2
	Minimum	42	32	47	50	42	48	39	37	41	32	41	52	61	47	55	51	37	40	45	47	55	60	62	58	69	56	53	55	52	50	47	48.5
Caruthersville	Maximum	46	58	65	63	54	71	70	48	48	49	63	67	68	69	68	68	61	62	67	64	68	74	79	88	88	72	72	68	62	67	80	66.0
	Minimum	40	31	43	45	42	42	35	32	35	28	39	50	54	46	53	45	35	38	48	45	52	55	55	61	56	53	52	52	45	45	58	45.5
Doniphan	Maximum	47	58	52	50	55	76	67	50	46	50	65	63	63	71	63	50	63	62	67	65	69	74	84	92	85	76	57	63	70	70	70	64.3
	Minimum	31	20	27	41	32	38	29	27	30	20	33	47	53	37	50	40	27	30	33	41	50	57	57	52	65	50	49	48	40	38	40	39.7
Jackson	Maximum	50	51	54	47	50	68	67	52	46	49	57	58	61	67	67	52	57	57	53	63	66	71	75	86	77	77	60	59	58	66	77	61.2
	Minimum	27	22	36	39	30	36	26	25	26	15	35	46	52	37	46	38	23	27	35	31	49	54	57	50	63	46	38	42	44	38	48	38.1
Poplar Bluff	Maximum	49	57	53	50	57	72	56	50	47	52	63	58	65	73	66	51	68	64	67	64	69	78	85	92	82	75	60	65	57	72	82	64.5
	Minimum	29	20	42	43	33	40	30	27	32	20	31	38	49	38	45	32	32	35	40	30	42	40	42	36	38	30	38	35	40	45	38	32.5
Sikeston	Maximum	50	56	56	46	54	68	68	53	44	50	60	67	67	71	70	62	66	62	67	65	75	74	80	88	80	75	61	63	60	68	81	64.7
	Minimum	36	27	45	35	33	38	30	28	31	21	37	45	56	45	54	29	38	44	45	40	50	48	56	54	52	50	46	46	46	41	50	41.8
Cairo, Ill.	Maximum	46	54	56	50	52	67	44	45	42	48	60	66	67	70	59	46	60	60	63	63	65	72	79	88	79	62	58	60	55	66	79	60.7
	Minimum	31	29	41	37	34	42	32	31	29	26	41	52	56	49	46	39	37	45	47	46	53	58	61	63	62	51	51	52	48	50	58	45.1
Ozark Plateau																																	
Arcadia §§	Maximum	43	56	49	47	55	65	46	51	42	50	62	62	65	72	51	44	62	63	63	68	70	71	83	91	80	63	57	59	50	69	65	60.5
	Minimum	25	20	24	37	28	28	25	21	21	14	20	39	50	41	43	36	24	28	34	28	33	51	56	47	52	44	35	39	43	37	40	34.3
Aurora	Maximum	41	59	47	53	54	73	53	54	50	55	60	58	61	62	55	48	63	63	63	68	71	80	86	92	83	74	60	59	61	70	72	61.7
	Minimum	25	27	41	30	28	45	27	30	26	25	40	50	43	43	40	38	31	35	42	38	53	53	56	63	47	42	43	45	42	40	44	39.7
Birchtree	Maximum	44	58	49	46	55	79	61	51	46	58	57	56	62	68	60	58	64	62	61	67	72	76	86	91	83	74	60	59	61	67	72	63.4
	Minimum	27	20	40	31	30	39	27	26	27	18	38	45	52	54	42	38	30	31	33	35	52	55	56	54	64	46	45	48	44	56	56	40.6
Eldon §§	Maximum	26	53	43	41	53	72	45	58	33	51	63	51	65	66	46	51	63	63	52	67	65	74	83	89	56	61	60	65	56	70	76	58.6
	Minimum	23	22	24	28	25	25	25	26	26	22	22	25	39	50	41	41	33	35	36	37	35	37	50	51	49	49	38	38	41	45	42	35.4
Farmington	Maximum	47	54	48	46	53	79	55	53	46	48	62	61	68	76	60	42	60	64	64	71	70	74	85	94	82	61	60	58	52	73	80	62.8
	Minimum	27	21	42	36	28	42	25	23	24	15	38	44	52	42	38	36	28	32	38	33	47	52	58	62	55	43	37	45	44	41	50	38.6
Koshkonong	Maximum	45	58	50	47	55	80	48	52	45	58	60	59	66	72	60	47	64	62	68	68	69	74	86	92	80	75	58	56	58	72	77	63.0
	Minimum	29	24	40	41	30	37	28	27	30	19	35	49	52	40	46	39	35	40	41	41	51	56	58	62	66	48	49	50	44	42	54	42.1
Lebanon §§	Maximum	30	55	44	47	51	72	46	55	42	50	63	59	64	66	46	50	53	63	59	65	69	79	85	89	69	59	56	54	52	70	74	59 2
	Minimum	22	20	27	29	24	24	21	21	21	20	20	40	46	38	39	34	29	30	36	34	36	51	54	58	59	38	38	40	40	39	39	31.4
Mountain Grove §§	Maximum	42	56	47	49	52	77	47	51	46	50	62	53	62	67	48	47	64	62	61	67	69	76	86	89	77	63	55	53	54	68	76	60.5
	Minimum	24	20	20	35	26	26	24	25	22	18	22	36	46	40	42	35	30	35	38	37	39	50	54	55	63	42	41	45	40	38	42	42
Neosho	Maximum	42	57	55	55	55	74	62	56	54	61	62	60	64	63	57	51	63	64	65	70	74	81	84	92	86	58	58	57	51	75	74	64.0
	Minimum	20	23	41	33	31	44	27	28	27	27	43	51	40	35	41	38	25	29	23	48	46	54	57	54	45	42	42	45	43	35	48	38.2
Rolla	Maximum	43	56	53	54	49	75	57	54	50	51	65	59	66	71	65	50	61	65	65	68	69	77	87	92	89	60	58	56	51	71	78	63.4
	Minimum	21	24	35	33	26	37	25	26	23	20	34	45	49	40	35	35	31	35	37	37	50	55	57	52	43	41	39	40	44	40	53	37.5
Springfield	Maximum	32	54	47	50	52	72	43	52	42	51	60	56	59	62	49	49	59	61	60	65	69	78	83	91	75	58	56	51	52	69	71	59.0
	Minimum	25	27	40	32	27	34	27	33	26	25	40	49	46	45	38	36	32	38	42	41	53	54	58	64	46	42	47	44	43	44	37	39.8
Southwest Plain																																	
Appleton City	Maximum	37	55	49	50	50	69	45	56	50	53	62	62	65	61	54	53	64	63	55	67	72	80	83	89	89	61	59	55	52	71	70	61.3
	Minimum	24	25	36	27	26	41	27	32	23	25	39	51	43	35	38	36	33	35	41	32	47	52	49	51	44	38	43	46	42	39	40	37.4
Clinton	Maximum	32	50	52	46	50	55	48	44	55	46	53	61	60	65	62	54	64	65	58	68	72	80	83	91	70	60	60	59	55	71	70	60.0
	Minimum	27	26	36	26	36	42	36	32	32	24	35	40	45	45	40	40	35	38	43	35	52	53	56	57	40	40	40	48	44	41	45	39.6
Harrisonville §§	Maximum	37	55	52	45	54	68	40	55	35	51	60	58	66	59	40	56	65	66	63	70	75	80	86	88	53	66	60	55	51	68	66	59.1
	Minimum	24	24	28	25	23	24	23	24	18	20	26	40	41	33	35	33	30	35	37	34	37	46	47	46	40	34	37	43	40	36	41	33.0
Lamar §§	Maximum	37	57	48	52	53	74	45	56	42	58	63	59	66	61	49	54	63	65	60	69	73	81	83	92	50	59	57	50	52	72	73	60.4
	Minimum	26	26	32	29	29	31	26	27	26	27	30	46	44	42	42	39	29	30	37	32	36	53	51	56	47	42	42	45	45	39	43	37.1
Lamonte	Maximum	34	57	50	49	55	58	67	55	41	42	60	59	65	63	50	52	64	64	64	68	74	80	80	90	73	64	63	57	53	68	69	60.9
	Minimum	25	25	33	26	32	32	24	28	20	26	25	49	45	35	35	36	32	36	37	34	47	53	50	49	43	37	43	44	43	38	41	36.2
Marshall	Maximum	36	56	53	50	52	66	41	68	41	53	60	62	68	60	57	55	65	67	59	68	76	81	78	90	77	68	68	60	65	76	71	62.8
	Minimum	27	24	30	25	24	40	22	26	18	23	37	44	44	55	37	35	30	37	45	35	45	51	49	47	43	35	39	42	45	42	44	36.8
Nevada	Maximum	40	57	48	52	52	74	52	56	46	55	62	60	65	60	56	53	64	65	56	69	73	80	84	90	78	61	57	54	54	72	72	61.8
	Minimum	25	28	36	27	30	44	26	26	24	26	42	51	44	39	40	37	33	37	42	36	50	53	56	50	44	39	42	44	43	40	40	38.5
Warrensburg	Maximum	..	..	..	..	..	65	60	55	47	52	60	62	65	61	65	64	63	64	60	67	71	78	80	90	78	65	64	58	52	56	57	63 8
	Minimum	..	..	..	..	..	40	25	28	20	24	39	41	45	37	35	35	32	36	44	37	42	48	52	48	42	36	47	43	42	48	45	38.9
Warsaw	Maximum	31	57	53	54	55	70	48	57	52	54	63	61	65	63	60	58	63	65	61	68	73	81	84	92	88	63	60	58	54	72	74	63.0
	Minimum	26	24	39	25	25	45	25	29	23	24	40	51	43	39	36	37	31	30	42	31	45	56	53	53	47	38	36	45	44	38	47	37.6
Northwest Plateau																																	
Chillicothe §§	Maximum	32	48	45	42	47	60	39	52	36	48	56	57	64	62	42	54	65	67	60	67	75	77	64	88	54	65	65	65	62	66	62	57.6
	Minimum	25	23	30	23	22	24	18	20	14	16	28	39	43	35	36	33	22	37	39	35	36	45	46	40	38	31	35	38	40	36	39	32.1
Grant City	Maximum	33	40	39	38	42	52	31	42	38	45	54	54	60	57	51	53	62	63	55	66	61	69	59	81	73	64	66	60	51	55	46	53.5
	Minimum	21	22	30	22	19	31	16	27	12	24	37	45	44	32	37	31	35	41	40	34	43	43	38	37	36	31	38	38	43	38	34	32.9
Kansas City	Maximum	37	50	49	42	54	64	40	54	33	52	61	59	63	58	51	54	64	65	59	66	73	75	67	87	51	63	62	56	52	65	60	57.6
	Minimum	26	31	32	28	27	33	27	33	24	27	33	44	52	47	40	36	36	37	43	48	42	50	56	50	48	39	39	48	45	43	45	38.9
Kidder §§	Maximum	31	50	42	38	47	57	35	50	32	46	55	56	61	58	41	51	59	65	57	63	72	72	58	85	50	61	65	58	51	62	55	54.3
	Minimum	17	21	25	21	19	20	19	19	14	14	26	37	40	31	31	30	35	36	31	31	42	44	38	36	30	30	36	39	37	39	37	29.6
Lexington §§	Maximum	36	49	49	46	51	63	39	53	44	50	57	59	62	60	54	54	61	64	59	68	73	78	72	88	80	62	62	60	53	68	64	59.3
	Minimum	27	27	35	22	25	39	24	29	19	26	40	49	45	39	35	36	35	42	47	40	48	54	49	46	41	37	45	41	44	42	42	37.8
Maryville	Maximum	31	43	40	34	47	53	34	47	37	47	55	56	58	55	52	53	62	67	62	66	63	68	61	81	60	63	66	60	54	55	49	54.2
	Minimum	20	26	26	25	18	33	18	27	13	25	38	47	43	29	35	30	30	34	39	29	41	44	38	37	35	27	35	34	41	39	33	31.9
Oregon	Maximum	37	46	44	35	54	55	40	51	40	51	57	58	60	59	54	56	65	68	61	68	66	72	66	84	59	66	66	66	55	62	54	57.3
	Minimum	23	30	32	28	21	35	22	30	17	26	44	49	46	32	36	32	32	41	43	35	46	47	41	41	36	33	42	38	43	40	34	35.3
St. Joseph	Maximum	35	50	44	36	54	59	39	51	33	50	59	59	60	58	44	53	64	67	59	68	70	71	63	86	56	65	65	58	54	63	46	56.1
	Minimum	25	30	29	27	24	31	24	30	17	28	46	49	45	35	35	34	34	42	44	39	50	49	46	43	37	34	46	42	44	43	33	36.6
Trenton	Maximum	33	46	43	37	44	45	35	47	40	42	51	56	63	58	55	47	54	58	56	62	69	72	65	86	76	64	65	64	57	62	53	55.0
	Minimum	25	24	31	24	21	34	19	27	15	24	37	44	46	37	38	31	32	36	39	32	44	45	47	40	39	31	41	40	43	38	38	34.3

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-26-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., APRIL, 1929. No. 4.

GENERAL SUMMARY.

April, 1929, was mainly mild, except for short spells, and excessively wet, and this latter as well as the leading feature of the month was a near counterpart of April, 1927, that April being the wettest of record, covering 60 years.

The opening day was the coldest of the month, with freezing or near freezing values throughout the State. The 12th was next the coldest day, and about 30 stations experienced temperatures as low or almost as low as on the first day. There were no injurious frosts or freezing temperatures after the 12th. A six-day period, from the 2d to the 7th, inclusive, was an outstanding warm spell everywhere, the daily temperature excess ranging from 6° to 26°, while the afternoon maxima, especially on the 4th, approximated midsummer values. Beginning with the 8th, though, there followed 14 days somewhat colder than normal and 8 days warmer than the normal, departures not being very marked in either case. The accumulated deficiency, however, was not enough to overcome the accumulated excess gained in the preceding warm spell, and the month closed more than 2° warmer than the normal.

Rains were frequent, general, and heavy. The Missouri River and the Mississippi River, and most of their tributaries were bankful and running over, inundating much valuable low lands including considerable acreage sown to wheat. Highway work as well as most outdoor occupations were much handicapped. Farm operations made almost no progress. Wheat and all grasses apparently were favored by the wet weather; but some adverse effects were remarked about fruit. Thunderstorms, with attending squalls and hail, were quite frequent. Tornadoes occurred on two days. See Special Storm Notes on page 16a.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the means of 66 stations, was 57.4°, or 2.3° warmer than the normal, and nearly 6° warmer than the same month last year. The highest monthly mean was 65.2° at Campbell; the lowest monthly mean was 51.8° at Kidder. The highest temperature reported in the State was 96° at Jefferson City on the 14th; this value has been equaled or exceeded four times in the past 40 years. The lowest temperature reported in the State was 27° at several stations on the 1st, Goodland on the 2d, and Edgerton on the 12th. The minimum, though, reached 32° or lower only on two days as an average.

PRECIPITATION.

The average precipitation, 99 stations reporting, was 6.15 inches, or about 2 34 inches more than the 60 years' normal. The excess was large everywhere, though less marked in the southeastern lowlands. It was the fourth wettest April of record. The greatest local monthly total was 10.58 inches at Dean, McDonald County; the least monthly total was 3.51 inches at Goodland, Iron County. The greatest 24-hour fall was 4.35 inches at Lockwood, Dade County, on the 8th.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—None.
Frost light.—2d, 12th, 16th, 22d, 26th, and 29th.
Frost, heavy.—1st and 12th.
Frost, killing.—1st, and locally on 12th.
Hail.—1st, 2d, 6th, 7th, 8th, 9th, 10th, 19th, 29th, 21st, 24th, 25th, 28th, and 30th, generally small stones, without damage.
Halos, lunar.—18th, and 23d.
Halos, solar.—4th, 5th, 6th 7th, 13th, 15th, 18th, 19th, 22d, 23d, 27th, 29th, and 30th.
Thunderstorms.—Local, 3d, 4th, 5th, 12th, 14th, 17lh, 18th, 21st, and 25th. General, 7th, 10th, 19th, 20th, 24th, 27th, 28th, and 30th.

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	29.88	78	62	223	56	6,530	9.1	35	s.	24
Hannibal	29.88	76	..	....	..	7,702	10.7	31	w.	1
Kansas City	29.86	76	62	238	60	8,033	11.2	36	nw.	25
St. Joseph	29.85	80	57	200	50	6,954	9.7	36	sw.	30
St. Louis	29.90	77	62	215	54	10,012	13.9	44	w.	1
Springfield	29.89	78	61	216	55	8,248	11.5	34	se.	24
Cairo, Ill.	29.93	79	63	....	..	6,987	9.7	36	sw.	25
Keokuk, Iowa	29.90	73	58	198	50	6,110	8.5	31	nw.	1

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR APRIL.

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	57.9	+2.8	91	20	1.83	−1.89	....	....	5	..	..	..
1889	55.7	+0.6	90	26	2.52	−1.20	....	....	8	..	..	..
1890	56.2	+1.1	93	24	3.17	−0.55	....	....	8	..	..	..
1891	56.8	+1.7	93	15	3.90	+0.18	....	....	9	..	..	..
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	....	11	9	8	13
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	....	12	8	9	13
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	T.	8	12	10	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	T.	7	14	8	8
1896	61.9	+6.8	92	17	3.51	+0.21	3.00	0.0	9	11	12	7
1897	54 4	−0.7	88	21	4.55	+0.83	3.50	T.	10	10	11	9
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	T.	10	12	9	9
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	3.8	8	12	9	9
1900	56.7	+1.6	89	21	3.36	−0.36	3.82	0.7	9	11	10	9
1901	53.3	−1.8	94	24	2.85	−0.87	2.23	1.8	8	14	7	9
1902	53.9	−1.2	95	19	2.66	−1.06	4.35	T.	11	13	11	6
1903	55.9	+0.8	91	26	3.54	−0.18	4.06	1.2	9	11	10	9
1904	49 0	−6.1	84	19	5.75	+2.03	6.10	2.7	9	15	6	9
1905	54.9	−0.2	92	20	3.19	−0.53	4.00	0.3	6	14	8	8
1906	59.5	+4.1	93	22	2.24	−1.41	2.45	0.0	8	17	7	6
1907	48.7	−6.4	89	16	3.43	−0.29	2.75	T.	8	11	8	11
1908	56.6	+1.5	90	18	5.30	+1.58	3.30	T.	11	11	8	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	T.	8	13	9	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	0.9	11	12	7	11
1911	53.5	−1.6	89	20	4.99	+1 27	4.27	T.	10	12	8	10
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	0.7	10	13	7	10
1913	56.2	+1.2	94	25	3.33	−0.45	3.90	T.	7	16	5	9
1914	55.2	+0.1	91	18	3.14	−0.74	3.00	T.	8	12	7	11
1915	61.9	+6.5	96	18	2.03	−1.82	2.08	T.	7	16	8	6
1916	53.5	−1.8	93	21	3.23	−0.69	2.35	1.9	10	11	8	11
1917	53.2	−2.3	89	19	5.97	+2.02	4.80	1.2	12	12	6	12
1918	50.8	−4.4	93	19	5.10	+1 24	3.50	0.9	11	12	6	12
1919	55.3	+0.3	94	20	3.01	−0.64	3.25	T.	9	12	7	11
1920	50.2	−4.7	89	4	3.95	+0.15	2.98	4.8	11	11	7	12
1921	56.0	+0.9	91	19	5.37	+1.52	4.20	1.1	10	13	7	10
1922	57.3	+1.9	91	24	6.21	+2.42	5.49	T.	11	13	6	11
1923	54.2	−0.6	91	16	3.12	−0.74	2.50	0.4	8	14	8	8
1924	56.6	+1.5	95	11	2.07	−1.66	2.35	T.	6	14	8	8
1925	61.0	+5.9	92	24	4.11	+0.38	3.51	0.0	10	12	9	9
1926	49.9	−5.2	91	11	2.46	−1.27	3.19	2.4	8	14	6	10
1927	57.7	+2.6	94	18	8.46	+4.73	4.85	T.	14	10	7	13
1928	51.6	−3.5	88	16	4.79	+1.06	3.78	0.2	8	13	7	10
1929	57.4	+2.3	96	27	6.15	+2.34	4.35	0.0	12	11	8	11

Climatological Data for April, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Charlton	652	49	56.0	+ 1.9	85	4	32	1†	41	6.88	+3.40	1.27	0	15	16	1	13	se.	O. K. Benecke
Clifton Hill	Randolph	731	29	55.2	+ 1.7	85	4	29	12	38	5.55	+1.19	1.31	0	13	13	5	12	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	57.5	+ 2.6	88	4	33	1	32	5.74	+1.97	1.80	0	14	9	8	13	s.	U. S. Weather Bureau
Downing	Schuyler	876	7	54.2	.....	85	4	28	1	36	7.13	+3.38	1.85	T.	14	11	9	10	sw.	James Taylor
Fayette	Howard	661	48	55.2	+ 0.9	87	4	28	12	41	6.16	+2.62	1.19	0	13	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	56.4	+ 2.1	88	4	33	1†	45	4.75	+0.42	1.12	0	13	13	6	11	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	7.47	+3.47	2.74	0	12	8	8	14	sw.	J. W. Pulliam
Hannibal	Marion	534	36	56.3	+ 2.9	88	4	32	1	34	3.85	+0.66	1.04	0	17	10	8	12	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	58.4	+ 2.3	96	4	32	1	48	5.12	+1.58	1.20	0	12	12	10	8	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	53.8	+ 2.1	84	4	28	1	34	6.19	+2.55	1.50	0	11	15	4	11	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	34	56.8	+ 3.0	90	4†	33	1†	37	5.10	+1.72	1.20	0	11	14	4	12	s.	Stark Bros. Nurseries
Macon	Macon	875	29	54.6	+ 1.5	86	4	30	1	41	9.96	+6.77	2.80	0	13	12	7	11	se.	W. C. Brown
Mexico	Audrain	800	39	54.8	+ 1.1	83	5	32	1†	40	5.37	+1.70	1.11	0	15	21	0	9	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	4.89	.....	1.59	0	12	11	8	11	ne.	J. S. Conway
St. Charles	St. Charles	456	40	58.7	+ 3.3	88	4	33	1	40	4.30	+0.62	1.26	0	9	8	10	12	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	58.2	+ 2.1	87	4	36	1	30	6.99	+3.18	3.18	0	15	10	10	10	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	57.8	+ 2.6	90	4	34	1	31	6.72	+2.71	2.71	0	17	14	8	8	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	7.80	+4.27	1.94	0	14	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	54.5	+ 1.6	85	4†	29	1	34	7.20	+3.59	1.95	0	12	11	9	10	e.	Frank Hall
Unionville	Putnam	1,062	35	53.7	+ 3.0	86	4	28	1	37	6.60	+2.79	3.50	0	9	8	11	11	s.	Geo. W. Davis
Warrenton	Warren	816	46	58.4	+ 3.9	90	4	32	1	41	5.19	+0.88	1.32	0	13	11	8	11	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	54.4	+ 2.1	85	4	29	1	31	4.60	+1.61	1.73	0	15	6	9	15	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	56.0	+ 2.3	96	4	28	1†	45	6.07	+2.43	3.50	0	13	12	7	11	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	65.2	.....	83	4†	43	2†	34	5.05	.....	1.20	0	10	14	5	11	s.	Jeff. King
Caruthersville	Pemiscot	265	32	63.4	+ 3.2	81	4†	43	17	31	6.03	+1.91	2.23	0	9	6	14	10	s.	Sam Smith
Doniphan	Ripley	344	24	60.4	+ 2.4	84	4	34	2	38	7.39	+2.02	2.32	0	10	14	3	13	sw.	W. W. Martin
Jackson	Cape Girardeau	428	37	57.4	+ 0.5	80	5	31	12	40	6.22	+1.75	1.36	0	12	9	2	19	s.	John G. Putz
Marble Hill	Bollinger	470	33	59.6	+ 2.9	84	4	31	12	40	6.14	+1.70	2.05	0	10	9	7	14	w.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	4.80	+0.54	0.98	0	10	17	4	9	sw.	John A. Spence
Poplar Bluff	Butler	339	24	60.7	+ 1.5	85	4	34	2†	38	5.19	+0.72	1.60	0	11	15	7	8	s.	J. H. Wolpers
Sikeston	Scott	318	23	61.4	+ 3.5	83	4†	39	12†	34	4.46	+0.20	0.96	0	10	16	2	12	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	61.5	+ 3.4	80	4	43	16	24	2.97	−0.75	0.68	0	14	9	5	16	s.	U. S. Weather Bureau
Section means and	extremes	....	..	61.2	+ 2.5	85	4	31	12	40	5.36	+1.01	2.32	0	11	12	6	12	sw.	
Ozark Plateau																				
Arcadia	Iron	926	47	57.0	+ 1.7	86	4	29	12	42	6.10	+1.38	1.09	0	14	15	4	11	s.	Arcadia College
Aurora	Lawrence	1,370	38	60.6	+ 4.9	85	4	30	1	37	7.36	+3.01	3.14	0	13	9	8	13	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	59.3	+ 2.5	85	4	32	12	38	5.51	+0.79	1.70	0	10	13	5	12	se.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	6.84	+2.85	2.05	0	16	14	8	8	s.	Southwest Baptist College
Dean ††	McDonald	1,000	31	61.6	+ 4.3	87	4	30	1	42	10.58	+6.54	3.35	0	10	15	8	7	sw.	H. E. Dean
Eldon	Miller	934	32	57.2	+ 1.8	87	4	31	12	42	4.99	+0.53	1.43	0	12	3	17	10	w.	E. H. Shepherd
Farmington	St. Francois	918	17	58.0	+ 1.1	86	4	31	12	40	5.39	+1.43	1.44	0	12	11	13	6	ne.	Robert Forsyth
Goodland	Iron	1,000	34	57.8	+ 3.2	88	4	27	2†	44	3.51	−1.58	0.72	0	10	15	4	11	s.	F. M Adams
Greenville	Wayne	381	6	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	8.50	.....	2.15	0	12	15	9	6	w.	A. W. Madison
Koshkonong	Oregon	958	27	60.6[a]	+ 2.8	85	4	36	1	38	6.92	+1.95	2.00	0	14	12[a]	0[a]	17[a]	se.	R. M. Hitt
Lebanon	Laclede	1,265	40	56.0	+ 0.3	86	4	31	1†	41	5.25	+1.07	1.12	0	13	8	10	12	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	59.8	+ 3.8	85	4	30	1	40	9.76	+6.10	4.35	0	8	10	8	12	sw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	27	56.2	+ 2.0	86	4	30	1†	41	5 59	+0.81	1.33	0	13	12	10	8	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	60.7	+ 2.7	84	4	29	1	40	9.12	+5.00	2.49	0	12	14	9	7	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	58.8	+ 3.8	89	4	32	1	44	4.65	−0.01	1.55	0	17	8	11	11	s.	F. H. Lane
Salem (near)	Dent	1,173	24	57.7	+ 2.1	88	4	29	12	39	4.60	+0.05	1.90	0	12	13	8	9	nw.	A. C. Leech
Seligman	Barry	1,542	26	59.8[a]	+ 4.0	83	4	28	1	30	7.03	+3.10	1.75	0	11	8[a]	11[a]	10[a]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	58.5	+ 3.1	86	4	30	1	37	5.02	+1.06	2.06	0	11	12	9	9	s.	Ira H. Hailey
Springfield	Greene	1,324	40	58.9	+ 2.9	84	4	31	1	32	3.94	+0.08	2.04	0	16	12	12	6	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	58.7	+ 2.8	89	4	27	2†	44	6.32	+1.89	4.35	0	12	11	9	10	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	57.9	+ 2.1	82	4	31	1	39	7.44	+3.18	2.89	0	12	6	14	10	sw.	W. G. Bigelow
Clinton	Henry	765	35	58.9	+ 3.2	84	4	32	12	35	6.07	+2.03	3.20	0	8	9	10	11	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	55.0	+ 1.2	86	4	30	1†	41	4.52	+1.13	1.06	0	13	3	3	24	e.	John H. Patterson
Lamar	Barton	980	41	58.6	+ 2.0	84	4	31	1†	40	7.36	+3.21	2.35	0	11	13	6	11	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	56.9	+ 1.8	85	4	30	12	42	5.80	+2.03	1.48	0	12	12	8	10	se.	J. E. Wheeler
Marshall	Saline	779	39	58.3	+ 3.9	87	4	30	12	41	6.02	+2.33	1.45	0	14	9	6	15	sw.	Dr. W. H. Black
Nevada	Vernon	862	35	59.2	+ 4.1	83	4	30	1	34	6.86	+3.07	1.28	0	9	11	8	11	sw.	George A. Kaupp
Warrensburg	Johnson	878	41	57.1	+ 1.0	83	6	32	1	37	6.95	+3.75	1.50	0	11	10	10	10	sw.	E. A. Markey
Warsaw	Benton	687	28	59.6	+ 3.8	87	4	30	12	44	6.69	+2.47	1.55	0	9	9	7	14	s.	Everett Martin
Section means and	extremes	.....	..	57.9	+ 2.6	87	4	30	1†	44	6.41	+2.58	3.20	0	11	9	8	13	sw.	
Northwest Plateau																				
Bethany	Harrison	916	36	54.0	+ 2.8	86	4	29	1†	39	6.47	+3.25	2.97	T.	11	8	8	14	ne.	M. H. Moulton
Chillicothe	Livingston	779	19	54.1	+ 0.8	87	4	29	1†	47	6.85	+2.41	2.00	0	16	16	2	12	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	55.2	+ 3.3	88	4	28	1	38	7.55	+4.74	1.76	0	12	9	12	9	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	57.2[d]	.....	86	4	27	12	43	5.40	+1.86	2.03	0	15	15	3	12	e.	Fred L. Stiff
Grant City	Worth	1,134	24	54.2	+ 2.7	86	4	28	1	37	4.78	+1.72	1.25	0	12	6	18	6	e.	W. P. Spillman
Kansas City	Jackson	963	39	57.0	+ 2.2	86	4	32	1	31	4.78	+1.64	1.18	T.	12	10	8	12	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	51.8	− 0.6	86	4	27	1†	45	7.29	+4.25	2.52	0	14	11	8	11	se.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	7.78	.....	2.26	0	12	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	57.4	+ 3.3	86	4	32	1	37	6.08	+2.72	0.88	0	15	12	7	11	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	54.2	+ 4.1	88	4	28	1†	40	8.98	+6.07	1.73	0	16	10	10	10	se.	J. R. Brink
Oregon	Holt	1,048	72	57.3	+ 3.4	89	4	29	1	40	6.28	+2.99	2.19	T.	10	14	8	8	sw.	Mina Wright
St. Joseph	Buchanan	967	20	56.4	+ 2.6	88	4	31	1	38	6.93	+3.92	2.20	0	14	12	6	12	ne.	U. S. Weather Bureau
Tarkio	Atchison	916	25	52.8	+ 0.6	90	4	28	1	36	5.82	+2.65	1.07	0	10	6	11	13	nw.	Albert Volker
Trenton	Grundy	822	32	54.6	+ 2.0	87	4	29	1	36	8.30	+5.03	2.74	0	10	13	7	10	se.	W. H. Estes
Section means and	extremes	.....	..	55.1	+ 2.4	90	4	27	1†	43	6.66	+3.33	2.97	T.	13	11	8	11	se.	
State means and	extremes	.....	..	57.4	+ 2.3	96	4	27	1†	45	6.15	+2.34	4.35	0	12	11	8	11	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for April, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Total.
Northeast Plain																																	
Boonville‖	Missouri	.88							1.20	.70	.58	T.	.02		.08	.07					.53	.12	.10		.47	1.26	.02		.19		.02		6.24
Brunswick‖	Grand	1.10							.57	.88	.72	.07			.08	.14				.02	1.12	.34	.13		.10	1.27			.30		.04		6.88
Clifton Hill	Chariton							.70	.68	.66	.26	.09		T.	.09					.25	.52	.25			1.31	.38		.14	.22		T.		5.55
Columbia***	Missouri					T.		1.33	.21	.63	.44	.05		.10	.07					24	.54	.06			1.79	.03		T.	.24		.01		5.74
Downing	Mississippi	.06						.52	T.	.07	.27	.05			.27			.04		1.85	1.03	.62		T.	1.28	.27			.65		.15		7.13
Fayette‖	Missouri	.70							1.10	.75	.65	T.			.20	.08					.60	.28	.17		.11	1.19	T.		.28		.05		6.16
Fulton‖	....do	.35							.65	.95	.61	T.			.03	.02					.07	.65	.04		.10	1.12	.05		.11				4.75
Gorin	Mississippi							.47	.07		.19				.23		.05			1.50	.44	1.11			2.74	.05			.51		.11		7.47
Hannibal***	....do					T.		.32	.03	.35	.13	.02		.05	.37		.01	.01		.10	.30	.82			.83	.22		.01	.24		.04		3.85
Hermann‖	Missouri	.42					.01		.60	.38	.31	.78			.10	.07					.53	.53	.13			.40	.02		.06				4.34
Jefferson City‖	....do	.48							.46	1.00	.83	.03			.05							.75	.14		.04	1.20	.03		.11				5.12
Kirksville	Mississippi							.53	T.	.23	.33				.38					1.50	.48	.86			.95	.28			.32		.33		6.19
Louisiana	....do							.75		.80	.20	.30			.15						.30	1.20			.75	.15		.20			.30		5.10
Lucerne‖	Grand	.40								.30	.48	.14			.14	.05		T.		1.04	2.42	.50	.09		.42	.33			.51		.06		6.88
Macon ‖	Chariton	1.20							.80	.30	.75	.03			.10	.02					1.20	2.80	.04		.84	1.60			.28				9.96
Mexico ‖	Mississippi	.65			.04				1.05	.25	.88	.10	.05		.12	.03					.32	.43	.16			1.11	.02		.16				5.37
Milan‖	Grand	.40						T.		.32	.70				.20	.32				.35	2.50	.20			.35	.75			.37				6.46
Monroe City	Mississippi							.24	.41	.26	.14			T.	.29			.09		.60		.68			1.59	.22		T.	.29		.08		4.89
Pacific‖	Meramec	1.62							2.10	.44	.28	.14			.31	.20					.09	1.96	.02			.14	.01		.06				7.37
St. Charles	Missouri	.56		.05				.35	1.26	.80	T.				.39	T.					T.	.52			T.	.30			.07		T.		4.30
St. Louis (1)***	Mississippi			.01	T.			2.86	.32	.69	T.	T.		.03	.80	.08		.02		.01	1.60	.09			.12	.06		T.	.02		.28		6.99
St. Louis (2)*	....do			.01	T.			2.71	.28	.76	.02	T.		.03	.61	.06		.03		.02	1.70	.12			.11	.05		.01	.04		.16		6.72
Shelbina ‖	....do	1.42							1.00	.13	.56	T.	.02		.14	.06		.03			.61	.60	.64		.38	1.94			.27				7.80
Steffenville	....do	.50						.45	T.	.45		.20			.55					.80	.50	1.40			1.95	.10		T.	.25		.05		7.20
Union‖	Meramec	.90							1.60	.40	.42	.12			.11	.28					.13	.90	.05			.05	.03		.06				5.05
Unionville	Chariton									.10	.45				.55					2.50	1.00	.60		T.	.60	.35			.45		T.		6.60
Warrenton	Mississippi	.38		.02		T.		.11	.80	.58	.36	T.		T.	.33						.63	1.32			.30	.26			.05		.05		5.19
Keokuk, Ia.***	....do					T.		.22	.01	.01	.04	.01			.29		.15			1.14	.43	.18		T.	1.72	.01		.27	.10		.02		4.60
Southeast Lowlands																																	
Campbell‖	St. Francis	.85			.52				.33	.77	.06	.47			1.20	.10						.50			.25								5.05
Cape Girardeau‖	Mississippi	.38			.21				.39	1.51	.50	.64			.88	.30	.02	T.				.32	.64			.13			.10				6.02
Caruthersville ‖	.... do			.51				.05	.72	.23		1.25									.06				.30			2.23		.68		6.03
Dexter‖	St. Francis				.35				.20	.85		.95			.63	.28					T.	.82				.27			.21				4.60
Doniphan	Black	.75		2.32					1.20	.40	.45			T.	1.10	.18					.48				.30				.25				7.39
Jackson	Mississippi	.53		.72					.94	1.36		.10			.80						.27	.80			.13	.02			.09		.46		6.22
Marble Hill	Mississippi	.85	.42						.80	2.05					.82	.40					.40	.10			.20				.10				6.14
Morehouse	....do	.57		.29					.61	.39		.76			.74						.24	.98			.10	T.			.12		T.		4.80
New Madrid‖	....do	.72			.72				.20	.65	.13	.40			.53	.35	.03				.02	.95				.15			.75				5.60
Poplar Bluff‖	Black	.47			.44				.26	1.60	.07	.37			.93	.25	T.				T.	.45				.25			.10				5.19
Sikeston‖	Mississippi	.40		.30					.23	.57	.07	.96			.80							.90			.08				.15				4.46
Cairo, Ill.***	.. .do			.18					.62	.25	.67	.01		.03	.51	.07		T			.47	.01			.01	T.		.06	.01		.07		2.97
Ozark Plateau																																	
Arcadia ‖	St. Francis	.67		.81					.72	.82	.40	.34			.72	1.09	.02	T.			.04	T.	.08			.24	.04		.11				6.10
Aurora	Neosho			.11		T.			3.14	.43		.02		.38	.42	.32				.52	.03	1.66	T		.18	T.			.05		.10		7.36
Birchtree (near)	Black	.50		.28					1.70	.70					.77							.92		.15	.38		.06			.05		5.51
Bolivar	Osage	.80		.01		T.		1.10	2.05	.24	T.		.03	.01	.24	.01		.21	.01		1.60	.15	.01		.35	T.		T.	T.		.02		6.84
Caplinger Mills	Osage								2.30		T.				T.	.35			T.	.09	1.50	.05			.63	T.							4.92
Dean	Neosho			T.		T.		.25	.98	.15				2.00	1.15	T.			1.75	.25	3.35	T.			T.	T.		.25			.45		10.58
Eldon‖	Missouri	.47							.83	1.43	.34	.10			.03	.02					.53	.11	.10			.98	.05							4.99
Farmington	St. Francis	.29		.65					1.22	1.44	T.	.24		T.	.73	.34	T.				.03	T.	.06		.08	.14		.17					5.39
Fredericktown‖	.... do	.45			.10				.40	.97	.40				.78	.10							.25		.45								3.90
Galena‖	White								1.95	1.55					1.17	.30			.58		1.25					.65			.22				7.67
Goodland	Black	.36		.41					.52	.72					.70	.43					.16	.03				.10		.08					3.51
Greenville	St. Francis							.80	2.14					.80	.81			1.00	.20	.28	2.15	.04			.25			.15			.38		8.50
Hailey	White								2.00	.64	.55			.10	1.00	.30					.25	.08			.32			.05	.09		.08		6.92
Koshkonong	Black	.51		.95					2.00	.64	.55			.10	1.00	.30					.25	.08			.32			.05	.09		.08		6.92
Lebanon ‖	Osage	.66					.04		1.08	1.12	.23	.08			T.	.70	T.			T.	.43	.30	.27				.26	.05			.03		5.25
Leeper‖	Black	.82			1.39				.73	1.84	.37	.18			.97	.56	.10				.12	.19				.13			.09				7.49
Lockwood	Osage			T.				.10	4.35					T.	1.40	.36			.30		2.65	T.			.35	T.			.25				9.76
Mountain Grove‖	White	.42		.11	.01				1.25	1.33	.16	.08			.80	.90				T.	.16	.26	T.			.08	T.		T.	.05		.26		5.59
Neosho	Neosho			.45		T.		.05	2.49					97	.80	.10	T.	T.	1.43	.17	2.27	T.			.08	T.		T.	.05				9.12
Owensville ‖	Gasconade								.94	.38	.31	.12				.42					.15	.71	.28			.15	.12							3.58
Ozark Beach‖	White	.30			.08				1.45	1.86				.94		.20		.48			.44	.47				.20			.21				6.63
Rolla ‖	Meramec	.32						.23	1.55	.70	.08	.02		.09	.40	.16	T.				.30	.44	.10		.10	.07	T.	.03	.02		.04		4.65
Salem (near)	....do	.45							1.90	.62		.27		.05	.68	.18					.21	.11	.04		T.	.06		.03					4.60
Seligman	Neosho			.20				.07	1.68	.64				.98		T.	T.		1.35	.14	1.40	T.			.18	T.		T.	.18		.21		7.03
Seymour (near)	White	.50		.11				.23	2.06	.47	.04			.13	.45	T.		T.	T.	.71	T.			.21	T.		T.			.11		5.02
Springfield **	....do			.01		T.	T.	.91	1.30	.20	T.		.02	.02	.20	.01		.19	.01	.10	.52	.03	.02		.39	T.		T.	T.		.01		3.94
Steelville‖	Meramec	.80							1.50	.80	.34	.06			.33	.63					T.	.63	.13			.04	.05		.21				5.52
Stover‖	Missouri	.49							1.75	1.25	.42					.03				.10	.70	.52	.04			1.96	.04				.08		7.38
Tuscumbia ‖	Osage	.31					T.		.76	1.43	.66	.04				T.					.84	1.23	.05		T.	.40	.01		.02				5.75
Williamsville	Black	.65			.58				.42	1.67	.40	.03			.97	.36					.04	.72	.06			.31			.05				6.26
Willow Sprgs. ‖ (near)	White	.08		.11					1.07	1.35	.10	.05		.03	.91	.61					.25	.21	T.			.17			.06				5.00
Southwest Plain																																	
Appleton City	Osage								2.89	1.49	.06	.41	.02		T.	.16	.02			T.	.09	1.15	T	T.		.96	.09			.10		T.		7.44
Clinton	Osage								3.20			.55	.05			.03					.02	1.10	.02			1.10	T.							6.07
Concordia‖	Missouri									.82	1.07	.68										.61	.53											4.65
Harrisonville‖	Osage	.48								1.00	.37	.33	.03			.04	.06					1.06	.09	.03		.18	.78					.32		4.52
Joplin ‖	Neosho				.05				1.48	1.35		.04		.06	1.22	.42	T.		.09	1.72	1.10	1.42	T.			.15	.05					.07		9.25
Lamar ‖	....do	.45								2.08	.71		T.			.34	.64			.33		2.35	.05			.25	.14			.02		.10		7.36
Lamonte	Missouri								.90	.88	1.48	.26	.03			T.					.17	.95	.15			.84	.04		T	.07		.03		5.80
Marshall	.... do	T.							.75	.80	1.45	.40	.05		.15	.10	T.				.30	.50	.25	T.		.60	.32			.25		.10		6.02
Nevada	Osage								1.28	1.10			.09			.55	.30			.19	1.12	1.21				.85								6.86
Osceola‖	....do	.54								1.78	.54	.45	.05				.18					1.43	.82			1.02	.80							6.64
Warrensburg	Missouri							.75	1.50	1.50	.32				T.						.40	.53	.81			.05	.20		T.	.04		.05		6.95
Warsaw	Osage					T.			1.55	1.10	.53	.13							T.		.10	1.05	.28			.85	.20					T.		6.69
Waverly ‖	Missouri	.35							.72	.73	.62	T.			.12	T.					T.	.63	.20	.15	1.00	.95					T.		5.01
Northwest Plateau																										1.05	T.		.44		T.		
Albany‖	Grand									.25	.38	1.41									1.31	1.29				.55					.16		5.35
Bethany	....do	T.				T.		T.	T.	.65	.50	T.			.40						2.97	.19	1.10		.06	.32	.05		T.	.15		.08		6.47
Chillicothe ‖	....do	.24			.02				.01	.42	.88	T.			.08	.11					.18	2.00	1.57	.19		.08	.39	.04		.62		.02		6.85
Conception	Missouri									.26	.76	T.			1.04	.25				T.	1.76	.55	1.32		.08	.08	1.18			.21		.06		7.55
Edgerton	....do	.01						T.	.02	.24	.30	.01			.10	.30				T.	1.44	.72	2.03		.01	.08	.02			.11		.01		5.40
Gallatin ‖	Grand	1.04								.06	1.28	.09	T		T.	.53					.12	3	89	1.49	.11		.09	.18	T.		.14				9.02
Grant City	.... do	T.				T.				.22	.67	.04			.40	.35				1.25		.22	.63		.04	.20	.27			.49		T.		4.78
Kansas City***	Missouri					T		.08	.27	.17	.81	.03		T.	.34				T.	T.	.96	.50	.76			.66	T.		.19	T.		.01		4.78
Kidder ‖	Grand	.26			T.					.33	.80	.23			.18	.20					.27	2.52	1.64	.25			.33	.02		.25		.01		7.29
King City	Missouri									.60	.79	T.			.96	.34					2.26	.49	1.53		.02	.33	.18			.23		.05		7.78
Lexington	....do	.80			.02				.68	.67	.88	.06			.03						.06	.67	.62	.36			.83	.03		.30		.07		6.08
Maryville ‖	....do									.38	.90	.08	.02		.38	1.16	.03				1.45	.66	1.73	.11		.06	1.49	.07		.42		.04		8.98
Oregon	....do									.22	.85				.62	.06				T.	2.19	.86	.68		T.	.04	.21		T.	.55				6.28
St. Joseph***	....do					T.		T.	.06	.19	.65	.02		T.	1.48		.01		.04	2.17	1.20	.67		T.	.14	.04		.24			.02		6.93
Tarkio	....do										.51				.84						1.07	.33	.76		.11	.70	.45			.27				5.82
Trenton	Grand					T.			T.	.26	.79	.15			.21				T.	2.74	2.07	1.28		T.	.07	.28			.45				8.30

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for April, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick §§	Maximum	53	70	80	85	80	83	75	51	50	55	44	70	60	50	61	67	65	71	72	70	51	65	70	64	55	69	70	67	78	79	..	66.0
	Minimum	32	33	39	54	68	66	67	48	45	43	41	32	38	45	39	40	43	44	49	57	47	40	43	50	48	43	48	48	42	48	..	46.0
Columbia	Maximum	51	72	80	88	83	83	77	57	53	54	51	68	56	52	58	61	65	70	78	73	53	62	71	65	58	67	73	67	76	77	..	66.6
	Minimum	33	40	57	66	70	68	57	48	45	44	38	36	46	45	42	40	43	45	56	53	47	41	47	55	45	41	52	49	44	59	..	48.4
Fayette	Maximum	54	72	80	87	83	84	75	72	53	54	44	68	57	50	60	65	67	72	75	75	57	64	71	63	59	69	71	59	75	78	..	67.1
	Minimum	29	34	39	55	68	65	61	46	44	40	39	28	42	42	36	34	40	37	47	54	46	37	38	45	44	37	43	44	35	53	..	43.4
Hannibal	Maximum	50	70	79	88	85	85	78	55	53	53	53	62	59	51	57	61	63	66	77	61	52	62	66	62	61	66	73	64	72	74	..	65.3
	Minimum	32	41	55	64	68	67	55	48	41	43	40	36	44	46	42	37	44	43	54	48	47	41	44	52	47	42	51	50	38	60	..	47.3
Jefferson City §§	Maximum	55	77	87	96	90	87	86	60	57	58	50	71	66	52	61	66	67	73	88	77	51	66	78	66	57	70	76	70	77	86	..	70.7
	Minimum	32	33	39	50	59	67	69	52	50	43	42	34	40	47	43	38	40	43	50	56	47	40	43	48	46	41	46	48	43	50	..	46.0
Kirksville	Maximum	50	67	79	84	79	80	75	55	50	49	51	62	62	59	59	64	65	66	62	59	53	60	63	62	58	66	68	64	72	76	..	64.0
	Minimum	28	33	50	64	68	65	54	41	42	41	38	30	37	43	34	37	37	38	47	46	41	35	42	49	46	39	48	46	38	53	..	43.7
Louisiana	Maximum	50	72	80	90	85	90	85	65	55	50	45	63	60	52	60	60	62	62	70	65	60	65	70	70	62	75	65	62	70	70	..	66.3
	Minimum	33	35	52	63	68	69	70	50	46	43	42	35	40	43	45	33	44	36	54	58	48	38	37	54	50	44	45	48	35	58	..	47.2
Macon §§	Maximum	51	70	81	86	82	85	76	50	51	52	42	65	64	48	60	64	67	70	69	60	50	66	69	59	54	69	71	65	74	78	..	64.9
	Minimum	30	31	40	55	68	67	69	45	43	42	40	31	35	43	36	37	39	40	43	50	43	34	41	48	47	48	47	46	39	49	..	44.2
Mexico §§	Maximum	51	72	79	81	83	82	75	56	51	50	43	58	55	49	60	61	62	69	70	74	50	64	72	63	57	70	74	69	75	78	..	65.1
	Minimum	32	32	53	56	63	63	61	48	47	43	42	34	37	42	41	36	42	41	46	53	43	38	41	41	48	41	44	44	40	46	..	44.6
St. Louis(1)	Maximum	53	72	75	87	85	83	80	62	57	55	55	67	64	52	55	60	60	67	79	74	52	62	68	71	61	70	71	70	70	74	..	67.0
	Minimum	36	42	56	60	69	70	61	55	46	46	43	38	46	44	42	40	46	47	51	49	48	43	47	54	49	46	53	54	49	55	..	49.5
Unionville	Maximum	50	67	80	86	82	82	75	55	56	50	50	63	62	60	57	63	66	65	60	56	54	63	62	62	60	66	70	65	72	75	..	64.5
	Minimum	28	30	52	60	66	62	55	40	40	37	30	34	43	33	34	37	35	46	44	40	34	42	46	45	40	40	46	45	46	56	..	42.9
Warrenton	Maximum	73	73	79	90	87	85	80	71	58	50	54	66	65	56	57	59	64	68	79	76	74	64	72	68	63	69	72	69	73	74	..	69.6
	Minimum	32	38	54	60	68	67	68	51	44	43	40	33	43	44	42	36	44	42	52	57	48	39	42	52	47	41	49	48	41	55	..	47.3
Southeast Lowlands																																	
Campbell	Maximum	81	74	72	83	83	82	83	80	77	75	75	70	69	68	67	65	70	70	80	78	79	77	75	74	70	71	70	81	73	74	..	74.9
	Minimum	47	43	52	62	70	70	68	63	63	55	55	43	55	58	44	47	44	51	57	65	60	55	49	56	65	53	51	62	49	54	..	55.5
Caruthersville	Maximum	75	75	68	81	80	74	81	74	74	76	71	71	67	62	57	65	68	68	80	73	80	71	73	70	66	72	68	80	72	73	..	72.0
	Minimum	44	48	52	58	64	66	66	60	61	52	55	45	54	54	51	45	43	51	56	62	58	52	52	58	58	51	54	59	54	58	..	54.7
Doniphan	Maximum	62	72	65	84	81	83	81	74	73	73	63	71	67	65	59	65	68	70	79	76	77	82	72	74	65	74	73	83	80	72	..	72.8
	Minimum	38	34	46	51	62	65	62	58	48	45	45	35	50	54	47	38	40	42	56	54	55	50	41	51	42	42	42	54	45	47	..	48.0
Jackson	Maximum	77	65	65	79	80	78	78	75	63	62	63	68	69	64	56	57	63	66	73	74	64	65	67	64	60	69	68	74	75	67	..	68.3
	Minimum	37	34	45	50	62	64	63	55	51	43	48	31	45	48	43	37	34	38	50	58	55	43	36	49	54	44	41	55	40	45	..	46.6
Poplar Bluff	Maximum	62	72	65	85	80	83	82	73	71	65	65	70	68	83	60	69	73	69	80	71	78	68	73	69	64	74	69	83	75	70	..	72.3
	Minimum	40	34	45	51	65	69	61	58	58	49	46	34	49	53	49	39	37	43	52	59	57	49	40	50	52	43	43	58	44	47	..	49.1
Sikeston	Maximum	59	68	65	83	80	83	83	82	70	72	68	69	72	71	61	61	65	69	79	76	77	65	71	71	66	72	72	81	78	74	..	72.1
	Minimum	40	40	52	54	62	62	68	58	57	48	50	39	51	53	47	40	39	44	51	61	58	47	44	53	59	47	48	47	48	51	..	50.6
Cairo, Ill.	Maximum	64	68	64	80	77	79	79	72	68	74	61	67	70	61	57	60	61	69	77	70	74	64	71	69	66	69	67	77	68	74	..	69.2
	Minimum	43	49	56	62	68	68	67	59	50	50	49	45	56	54	49	43	47	50	55	60	53	50	50	58	52	51	53	58	52	56	..	53.8
Ozark Plateau																																	
Arcadia §§	Maximum	59	70	63	86	81	82	80	59	56	65	51	71	74	52	57	63	70	69	78	73	72	65	72	68	60	72	70	76	74	71	..	68.6
	Minimum	35	44	53	55	60	65	65	55	52	42	43	29	36	49	41	37	33	35	41	51	53	43	33	41	54	41	42	52	38	47	..	45.5
Aurora	Maximum	58	73	73	85	80	81	77	73	71	77	64	75	71	64	61	63	68	67	72	76	74	64	71	70	67	70	68	76	80	75	..	71.6
	Minimum	30	36	53	65	65	66	65	55	56	53	36	40	50	52	43	28	48	50	54	53	49	45	43	55	46	40	48	52	49	55	..	49.7
Birchtree	Maximum	60	70	66	85	80	81	78	74	63	60	63	70	69	59	57	62	69	70	76	76	69	70	69	65	61	71	68	78	75	79	..	69.8
	Minimum	35	33	51	55	64	66	64	55	55	46	43	32	49	51	43	36	39	45	53	55	56	39	55	51	49	41	54	55	43	51	..	48.8
Eldon §§	Maximum	56	72	81	87	84	81	75	60	55	61	47	71	65	54	60	65	67	72	78	76	59	64	72	66	55	69	73	71	79	78	..	68.4
	Minimum	33	34	39	50	68	67	68	53	51	44	42	31	34	45	44	39	40	46	47	56	55	40	40	46	47	42	42	47	43	43	..	45.9
Farmington	Maximum	56	73	76	86	84	85	82	74	62	62	52	71	65	62	54	61	67	73	80	75	66	62	73	66	60	66	62	74	77	75	..	69.4
	Minimum	34	34	41	55	63	64	66	56	48	44	44	31	51	47	42	36	36	39	48	59	52	42	38	53	51	42	45	50	39	49	..	46.6
Koshkonong	Maximum	74	72	66	85	81	82	..	79	66	63	65	72	65	64	61	64	71	71	74	70	69	68	73	65	65	70	69	79	78	68	..	a70.7
	Minimum	36	41	50	56	67	66	..	56	59	48	46	40	50	52	45	40	44	47	54	56	55	49	44	53	50	44	49	55	57	54	..	a50.4
Lebanon §§	Maximum	55	70	79	86	84	80	75	60	59	70	50	70	72	55	58	63	65	70	78	75	57	64	71	64	55	68	73	68	77	75	..	68.2
	Minimum	31	31	38	52	64	61	63	53	53	45	38	31	32	48	40	32	33	40	44	54	51	41	40	43	45	37	37	43	45	45	..	43.7
Mountain Grove §§	Maximum	58	71	73	86	80	78	74	58	66	63	51	71	69	61	59	64	68	70	75	72	59	75	68	61	53	70	67	75	75	71	..	68.0
	Minimum	30	30	41	49	59	61	63	54	53	46	38	35	39	49	40	35	38	38	42	52	53	44	44	45	46	38	39	45	42	48	..	44.5
Neosho	Maximum	58	72	74	84	82	82	80	73	69	77	69	75	72	65	62	66	70	68	71	83	80	67	75	73	71	70	70	78	82	80	..	73.3
	Minimum	29	32	54	66	66	65	66	54	54	53	35	36	45	50	44	35	43	50	55	51	49	45	40	57	46	33	41	48	45	57	..	48.1
Rolla	Maximum	60	72	75	89	85	83	79	67	60	58	58	71	70	59	57	63	67	69	88	77	74	64	71	69	61	70	71	73	78	74	..	70.4
	Minimum	32	37	52	57	66	67	57	56	42	42	36	33	51	49	40	38	43	46	44	56	53	42	41	52	46	37	52	49	44	56	..	47.2
Springfield	Maximum	53	70	74	84	82	79	72	60	67	76	51	72	69	62	57	62	65	65	74	71	61	63	70	63	60	65	68	72	76	74	..	67.9
	Minimum	31	43	54	64	67	66	56	55	53	51	36	40	53	47	43	41	47	50	54	54	45	45	48	56	46	40	50	55	49	58	..	49.9
Southwest Plain																																	
Appleton City	Maximum	55	69	75	82	78	81	74	74	58	74	57	71	64	56	60	68	67	70	71	64	63	64	73	66	57	67	67	72	78	76	..	68.4
	Minimum	31	36	53	64	66	66	56	46	48	46	37	32	46	48	41	42	43	45	57	53	45	40	45	53	47	39	47	47	46	57	..	47.4
Clinton	Maximum	56	70	77	84	80	83	80	65	56	74	61	60	65	59	65	68	69	72	72	74	65	68	75	68	62	68	70	73	80	81	..	70.0
	Minimum	33	38	56	67	68	66	65	48	48	47	40	32	33	50	40	40	45	42	52	55	45	41	48	45	48	40	47	50	45	59	..	47.8
Harrisonville §§	Maximum	56	71	78	86	78	79	73	52	52	50	48	72	58	51	61	70	68	68	70	69	49	62	71	66	52	69	68	73	81	78	..	66 0
	Minimum	30	30	39	53	66	64	66	45	44	42	35	33	35	45	40	41	40	43	47	52	47	38	42	47	44	36	38	43	46	50	..	44.0
Lamar §§	Maximum	55	71	77	84	82	81	75	62	70	75	54	74	65	62	59	66	68	67	72	79	54	64	75	71	55	67	69	76	80	75	..	69.5
	Minimum	31	31	38	56	68	68	68	56	53	54	36	36	40	53	45	40	45	46	51	55	52	46	45	48	48	38	38	49	47	50	..	47.7
Lamonte	Maximum	56	71	78	85	81	82	73	55	53	67	52	72	59	60	60	66	66	71	72	74	56	64	73	66	63	69	70	67	80	78	..	68.0
	Minimum	32	36	53	66	67	65	53	45	45	43	33	30	45	41	41	39	43	44	55	54	45	39	44	55	44	39	47	45	43	43	..	45.8
Marshall	Maximum	55	75	80	87	82	83	78	59	55	59	55	71	72	67	66	69	69	74	74	75	59	67	75	68	60	71	73	69	81	81	..	70.3
	Minimum	32	37	52	66	68	65	53	45	44	42	39	30	44	47	39	39	45	42	54	54	45	39	41	56	47	37	47	45	40	55	..	46.3
Nevada	Maximum	56	70	75	83	79	81	78	59	66	74	62	72	70	59	60	66	66	69	72	73	65	64	73	70	59	66	64	73	79	77	..	69.3
	Minimum	30	36	53	66	67	67	57	47	51	50	37	36	50	51	44	40	45	48	57	54	45	43	47	52	49	41	49	55	48	58	..	49.1
Warrensburg	Maximum	52	69	72	76	78	83	76	72	52	65	55	70	65	70	58	67	65	65	72	72	66	62	73	68	57	67	68	68	78	77	..	67.9
	Minimum	32	38	56	54	55	56	54	52	42	45	37	33	42	47	38	41	46	47	56	55	44	39	46	52	45	39	47	52	45	53	..	46.3
Warsaw	Maximum	56	71	79	87	83	82	78	60	58	75	64	74	68	60	63	65	66	70	74	76	72	66	74	72	66	69	72	70	81	78	..	71.0
	Minimum	33	33	56	68	68	68	57	57	52	44	36	30	48	44	42	40	44	44	55	50	48	41	45	60	49	40	45	47	40	59	..	48.1
Northwest Plateau																																	
Chillicothe §§	Maximum	52	71	82	87	79	82	77	50	50	53	42	70	65	48	61	68	69	71	69	55	62	64	68	63	53	67	69	66	77	79	..	65.6
	Minimum	29	32	35	55	67	63	67	43	41	40	38	29	35	43	35	37	38	38	41	49	43	34	44	50	45	38	42	44	39	45	..	42.6
Grant City	Maximum	46	68	79	86	81	76	72	60	53	48	48	62	66	54	58	65	64	66	62	53	56	62	62	65	62	65	67	63	74	78	..	64.0
	Minimum	28	31	47	64	68	64	51	37	42	40	36	30	37	44	39	39	38	40	50	45	42	40	44	50	45	49	49	41	46	57	..	44.4
Kansas City	Maximum	53	70	77	86	75	78	74	53	49	67	47	70	55	50	58	67	64	67	69	62	50	60	69	65	55	66	66	66	79	78	..	64.8
	Minimum	32	46	55	68	70	68	52	43	44	44	37	39	46	45	43	48	45	50	58	48	43	42	48	55	48	42	53	49	50	63	..	49.1
Kidder §§	Maximum	50	68	80	86	78	80	76	52	49	54	43	67	60	47	52	59	62	67	68	54	52	59	65	62	52	65	66	64	75	76	..	62.9
	Minimum	27	27	35	49	64	63	65	40	40	39	35	27	29	37	38	38	37	40	41	46	42	35	39	44	44	36	40	43	40	44	..	40.8
Lexington §§	Maximum	52	70	80	86	80	80	80	51	50	67	56	70	65	55	60	66	65	69	71	68	57	64	72	69	58	65	64	68	79	76	..	67.2
	Minimum	32	40	52	62	69	63	54	43	47	44	39	33	44	47	40	43	43	45	56	56	45	39	47	59	46	41	49	47	45	60	..	47.7
Maryville	Maximum	49	69	81	88	84	78	73	60	58	49	48	63	62	58	58	66	61	67	64	56	57	61	64	66	62	66	69	62	75	78	..	65.1
	Minimum	28	29	51	65	51	62	50	37	41	40	35	28	38	44	40	40	37	41	50	45	43	34	45	54	45	37	50	42	42	57	..	43.4
Oregon	Maximum	54	72	84	89	83	80	74	68	58	51	48	71	68	59	66	69	68	67	63	58	61	67	70	72	67	68	71	67	80	80	..	68.4
	Minimum	29	36	54	66	70	63	52	40	43	42	36	31	39	45	43	43	40	43	53	47	44	37	46	57	47	39	52	45	46	57	..	46.2
St. Joseph	Maximum	54	71	81	88	76	78	73	60	51	55	44	71	64	51	60	67	65	67	66	55	57	62	68	69	55	68	68	66	80	78	..	65.6
	Minimum	31	37	55	68	71	68	50	42	44	43	38	33	41	46	44	43	41	46	52	47	43	41	46	55	47	42	51	46	49	60	..	47.3
Trenton	Maximum	54	61	79	87	78	80	75	58	56	55	50	68	61	56	61	66	62	68	63	60	52	60	66	62	57	63	70	65	76	80	..	65.0
	Minimum	29	32	40	62	66	65	58	42	40	42	39	32	38	40	38	40	39	39	50	49	43	38	40	46	49	41	46	49	39	58	..	44.3

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 5-23-29—955.

SPECIAL STORM NOTES.

High winds, in most cases associated squalls of thunderstorms, occurred on the 1st, 3d, 4th, 5th, 6th, 7th, 11th, 19th, 20th, 24th, 25th, 28th, 29th, and 30th. The highest reported velocity was 44 miles from the west on the 1st, at St. Louis. On the 5th, and 6th, strong winds were reported from most stations, being general straight-line winds, though, and apparently doing little damage.

On April 10, heavy hail fell for a few minutes at Louisiana, and at Arcadia; stones as large as marbles; no damage. On the 21st, in the afternoon, large hail fell for about a minute at Warrensburg; stones as large as hulled black walnuts; damage to truck crops, fruit, about $500. During that same afternoon small hail fell locally over Scott, and Mississippi Counties, being a part of a more general and heavy hailstorm over adjacent or nearby territory in Illinois and Kentucky. Heavy hail fell for a few minutes the afternoon of the 24th at Nevada; and on the 25th at Eldon, and Lexington; damage immaterial. On the 27th, at 6.30 p. m., for about one minute, hail fell at Doniphan, stones varying in size from quail eggs to small hen eggs; very little damage because of the short time the storm continued; a roaring noise accompanied the passage.

TORNADOES OF APRIL, 1929, IN MISSOURI.

On April 7, about 9 p. m., there was a vigorous storm, probably a tornado, in McDonald County, in the extreme southwestern portion. Sweeping a narrow path of about 3 miles long and a little north of the station Dean, which point is about 3 miles east of Anderson, the county post office. The advance seemingly was toward the east-northeast; three outhouses and one dwelling were partly wrecked; no person injured or killed; damage about $600.

On April 20 at least five tornadoes occurred between 4.30 and 6.30 p. m., numbered in the following from 1 to 5.

1.—Seemingly originated near Altoona, Kansas, 65 miles southwest of the point west of Amos, Mo., where it crossed the line; the tornado swept a path about one-fourth mile wide for about 10 miles in Missouri. It died out when about 3 miles south of Foster. If it left the ground at all in its 10 mile track, it was not reported. Four persons were injured but none killed; property damage and loss $75,000, many improved farms being swept clean of buildings and improvements. The path apparently was from southwest to northeast as it crossed the northwest corner of Vernon County, then northeast-north into Bates. Time 4.30 to 5 p. m.

2.—About the same time in the afternoon a second tornado started almost on the Kansas line west of Oskaloosa, in the northwest corner of Barton County; the storm traveled about 15 miles toward the northeast to a point 7 miles northwest of Sheldon, Vernon County. The path was about 100 feet wide at Oskaloosa but soon widened to one-fourth mile wide where it passed through the Hannon community and northeastward; six persons were injured, none seriously; property damage about $84,000. Time 4 to 5 p. m.

3.—Within the same period of time as the foregoing, a whirl of wind, probably a tornado, swept a very narrow path of about 2 miles long a little west of Collins, St. Clair County, from southwest to northeast; no person killed; none injured. Three buildings on two farms were wrecked; damage estimate at $1,500.

4.—A path about 14 miles long and from 300 yards to one-half mile wide was cut by a fourth tornado of this series, in northern Polk County and southern Hickory between 5.30 and 6 p. m. Beginning near Snells Switch, three and one-half miles south and a little east of Flemington, Polk County, thence northeast to Pittsburg, Hickory County, 20 to 30 persons were injured, a few seriously, and about $15,000 worth of buildings, household effects, etc., were destroyed.

5.—The fifth and last of this series was the most severe tornado of the day. Four well authenticated witnesses watched the storm develop and descend to the ground a few miles west of Bolivar, Polk County at or just before 6 p. m., this being the second tornado for that county on the same day. It traveled 24 miles almost due east. although at times a little north of east, to and beyond Buffalo, Dallas County. In its short path before reaching Bolivar it seemingly left the earth at least once, as buildings directly in its path were undamaged. It swept a path 200 yards wide and one-half mile long through the residence district of Bolivar, while in the rural communities of Halfway and Buffalo the path varies from 100 to 300 yards wide. There were 29 persons injured, three of the number seriously; the estimated property damage has been put at $171,000. It passed through or over Buffalo at 6.30 p. m., doing little damage after passing that point, though the path could be traced for several miles farther east. In the 20 miles from Bolivar to Buffalo the storm diverged only two miles north of its west to east direction. If it left the ground in this distance it was not noted.

On this same day, the 20th, severe hail fell at Humansville, sometime after 4 p. m. This place is about 5 miles north of the track of No. 4 tornado and might have been an incident storm that did not touch the ground. There seemingly was a tendency of the April tornadoes to develop secondaries that traveled parallel paths with the main storm.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., MAY, 1929. No. 5.

GENERAL SUMMARY.

May, as a whole, was characterized by rather persistently cloudy, wet weather in all Missouri, although there were some variations from this tendency in some counties in the northwestern, northern and northeastern parts. A short spell of three or four days beginning with the 20th was the only time favored with a general cessation of the almost daily rains everywhere, save possibly the 10th. It was the wettest May since 1915, for the State as a whole, but not as wet as the same months in 1892, 1896, 1898, and 1915. It was, however, the seventh May starting in the year 1867 that had more than 7 inches as a State total; and for many of the southwestern and central counties it probably was the wetest on record. Lamonte, Pettis County, with 13.68 inches, stands at the top; and 15 other stations had more than 10 inches. At about 18 stations along the northern border, and in the northwest and northeast sections this May's totals were less than the normal.

An unusual feature was a heavy snowstorm of the morning of the second, reaching from the Ozarks northeast to St. Louis City; the depths varied from more than 6 inches at Springfield to 4 and 3 inches at St. Louis. It melted quite rapidly of course but did not all disappear until 9 a. m., and in some favored sheltered spots not until noon. Owing to the additional snow weight with the already excess foliage and blossom many fruit and decorative trees broke badly under the burden. This is a record snowfall for May south of the Missouri River, and there are only two instances of greater amounts anywhere in the State, namely, at Fairport 8 inches fell on May 3, and 6 inches fell at Gallatin, seven days later, on May 10, 1907.

The month was mainly cool, the coolest of its name since 1925. During the coolest spell and the time of the snow, temperatures ranged from 32° to 28°, on the 2d or 3d. Although ice formed in some low spots, there was surprisingly small damage done anywhere. It is quite true cold snaps like this adversely affect tree fruits at a later stage sometimes, bringing about an excessive June drop. The concluding days of the month were the warmest, when afternoon temperatures approximated mid-summer values generally.

There was too much rain for wheat, catching the crop in the blooming stage, doubtless having unfavorable results. At the end of the month not more than half the corn had been planted, and much ground had not even been plowed, because of the soaking wet condition. Considerable damage was done by washing away field soil along with planted grain, and by flooded streams and rivers. But, fortunately, there were few severe wind and hailstorms. The rather adverse effects of this seasons' weather on general crops and farming operations corresponds closely with the season of 1927, and that of 1896.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 66 stations was 61.7°, or 2.9° below the normal. The highest local monthly mean was 68.9°, at Campbell; and the lowest was 57.0°, at Tarkio. The highest temperature reported was 95°, at Clinton on 29th and Campbell on the 30th; and the lowest was 28°, at Goodland on the 3d. These values are well within the limits of other years. Temperatures of 32° or lower occurred at fourteen stations on the 2d or 3d; and 90° or higher at nineteen stations on the 30th and 31st.

ERRATA: In the report for January, 1929, page 1, under Temperature, in second line reading "or 5.4° above normal," should be below normal.

PRECIPITATION.

The average precipitation for the State, 100 stations reporting, was 7.52 inches, or 2.82 inches more than the 60 years' normal. The greatest local monthly amount was 13.68 inches, at Lamonte; and the least local monthly amount was 1.45 inches, at Grant City. The largest amount in any 24 consecutive hours was 6.00 inches, at Clinton on the 11-12th; and the next heaviest was 4.45 inches, at Dean on the 12th.

A real snowstorm prevailed the morning of the second from the Ozarks, about Springfield, east to St. Francois County and northeast as far as St. Louis City; amounts varied from 6.1 inches at Springfield to 4 inches; the greatest amount on the ground at any one time at St. Louis was 3 inches. At many points the snow melted almost as fast as it fell, and was all gone before noon. This is the record May snow south of the Missouri River.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—6th, and 7th.
Frost, light.—Locally on the 5th.
Hail.—Light, small stones, at scattered points on 1st, 2d, 6th, 15th, 16th, and 30th. On the 16th, heavy hail fell for a short time at Macon; no damage, doubtless because of the short time in which it fell. Also see special storm notes.
Halos, lunar.—15th, 16th, 18th, and 22d.
Halos, solar.—3d, 4th, 5th, 8th, 9th, 15th, 17th, 22d, and 23d.
Thunderstorms.—Local on 2d, 3d, 4th, 5th, 8th, 13th, 14th, 17th, 24th, 26th, 27th, 28th, and 29th. More or less general.—1st, 6th, 11th, 12th, 15th, 18th, 25th, 30th, and 31st.

SPECIAL STORM NOTES.

On May 1, at about 2 p. m., a thunderstorm attended by rain, high wind, and severe hail, swept, across the northern part of Perry County, Mo. It started in the northwest and traveled southeast reaching almost to Wittenberg, being approximately 20 miles long; and averaged about 3 miles wide but was at least 5 or 6 miles wide when it passed the villages of Brewer and McBride. The stones were as large "as a thumb" and a few as "large as goose egg." Two barns and one dwelling were unroofed by the wind. Many windows were broken, and automobiles damaged by having their tops punctured by hail; wheat, oats, and fruit were severely damaged. Livestock and persons working in the fields were sorely bruised by the stones but there were no fatalities. The estimated damage is put as high as $100,000, the largest part going to crop damage. It was the most severe hail in that section for many years.

On this same date, the first, severe hail fell in the afternoon at Seligman, Barry County, covering about 15 square miles, beat down vegetation and damaged roofs with north and west exposures. The stones were large and irregular in shape, some one inch in diameter. Damage estimated at $15,000.

On the 11th, at about 6 p. m., damaging hail fell in a relatively narrow strip about one-half mile wide and four miles long from near Huntsdale to the Bethel community in the southern part of Boone County. Roof and window panes comprised the items of property damage while wheat, oats, orchards, and gardens were the chief crops affected. The estimate is $12,000, most of this to fruit and other crop damage.

TORNADO: A very small tornado struck Springfield, Mo., at 8.55 a. m., May 18, moving northeastward in a path less than 100 feet wide and approximately three-fourths of a mile long, causing property damage of about $1,200. Except at the point of inception the damage was of minor extent. Nobody was injured. The funnel-shaped column was observed from the east windows of the Weather Bureau Office, and appeared like a column of smoke from the ground to the base of the cloud.(O. I. C. Springfield).

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.03	83	68	245	55	5,055	6.8	26	n.	2
Hannibal	30.04	79	..	...	..	5,920	8.0	35	w.	15
Kansas City	30.02	80	63	255	58	6,628	8.9	37	n.	1
St. Joseph	30.02	80	61	196	44	5,470	7.4	34	nw.	15
St. Louis	30.05	79	68	221	50	7,988	10.7	38	n.	2
Springfield	30.03	84	69	221	50	7,060	9.5	30	nw.	2
Cairo, Ill.	30.05	83	66	...	..	6,234	8.4	37	nw.	2
Keokuk, Iowa	30.06	73	59	225	50	4,643	6.2	25	sw.	11

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR MAY.

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	62.1	−2.3	93	30	5.35	+0.58	....	0	5	..	..	..
1889	63.5	−0.9	96	28	6.56	+1.79	....	0	5	..	..	..
1890	62.8	−1.6	96	32	3.47	−1.30	....	0	6	..	..	..
1891	61.5	−2.9	97	28	4.26	−0.51	....	0	8	..	..	..
1892	60.7	−3.7	91	28	7.80	+3.03	3.90	0	17	5	9	17
1893	66.8	−2.6	94	30	5.89	+1.12	5.83	0	10	11	11	9
1894	63.7	−0.7	95	22	3.99	−0.78	4.20	0	8	13	11	7
1895	61.6	+0.2	103	28	4.08	−0.69	3.43	0	9	13	12	6
1896	70.1	+5.7	96	32	9.09	+4.32	4.66	0	12	12	12	7
1897	62.4	−2.0	93	28	2.56	−2.21	3.82	0	7	16	11	4
1898	65.2	+0.8	97	31	7.90	+3.13	5.50	0	14	12	10	9
1899	66.9	+2.5	96	34	6.26	+1.49	5.28	0	2	10	13	8
1900	66.3	+1.9	97	29	3.69	−1.06	4.00	0	10	14	11	6
1901	63.8	−0.6	98	30	1.47	−3.30	3.04	0	6	15	10	6
1902	69.4	+5.0	98	39	5.03	+0.25	4.35	0	11	13	11	7
1903	65.1	+0.7	92	23	7.10	+2.33	3.10	0	15	9	10	12
1904	63.1	−1.3	95	32	5.03	+0.26	4.33	0	12	13	10	8
1905	64.9	+0.5	94	34	4.87	+0.10	4.55	0	10	12	11	8
1906	66.3	+1.9	98	27	2.16	−2.61	3.83	0	7	15	10	6
1907	59.5	−4.9	91	17	5.56	+0.79	4.33	0	10	14	6	11
1908	66.1	+1.7	96	24	6.92	+2.15	5.65	0	12	12	10	9
1909	63.3	−1.1	96	23	5.34	+0.57	5.26	0	9	15	9	7
1910	60.1	−4.3	94	32	6.62	+1.85	4.30	0	13	11	8	12
1911	68.8	+4 4	101	27	1.55	−3.22	2.06	0	5	19	7	5
1912	67.6	+3.2	97	30	3.86	−0.91	4.90	0	7	18	8	5
1913	65.8	+1.3	101	33	3.05	−1.93	2.95	0	8	16	7	8
1914	66.6	+2.0	98	31	1.47	−3.40	3.00	0	5	17	9	5
1915	63.7	−1.4	97	30	7.86	+3.04	7.10	0	12	12	7	12
1916	65.6	+0.7	96	33	5.61	+0.89	4.10	0	11	15	8	8
1917	58.7	−6.2	91	30	4.33	−0.47	2.60	0	10	15	7	9
1918	68.3	+3.8	100	28	5.49	+0.68	5.25	0	10	16	8	7
1919	62.0	−2.5	93	35	5.80	+0.87	4.50	0	13	10	10	11
1920	63.8	−0.8	97	32	4.85	+0.04	3.70	0	12	9	9	13
1921	66.4	+2.0	102	28	3.69	−1.20	4.12	0	7	17	8	6
1922	67.2	+2.3	97	38	3.17	−1.77	2.50	0	10	14	10	7
1923	62.7	−1.9	97	25	4.59	−0.49	3.48	T.	12	11	10	10
1924	58.6	−6.0	96	31	4.67	−0.03	3.90	0	10	13	8	10
1925	61.2	−3.4	98	24	2.14	−2.56	2.86	0	7	14	9	8
1926	67.0	+2.4	100	32	2.73	−1.97	5.80	0	7	16	9	6
1927	64.6	0.0	94	34	6.98	+2.28	4.62	0	12	11	10	10
1928	65.8	+1.2	95	29	2.84	−1.86	2.80	0	8	16	9	6
1929	61.7	−2.9	95	28	7.52	+2.82	6.00	0.3	13	9	10	12

Climatological Data for May, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	61.6	− 2.7	88	28	36	5	36	6.76	+1.87	1.91	0	14	9	1	21	sc.	O. K. Benecke
Clifton Hill	Randolph	731	29	60.4	− 3.8	85	15†	35	5	33	6.57	+1.43	1.26	0	14	9	10	12	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	61.0	− 3.3	88	15	36	5	46	11.98	+7.52	3.16	0	18	6	8	17	e.	U. S. Weather Bureau
Downing	Schuyler	876	7	60.3	.....	89	28	33	16	41	2.87	−1.54	1.06	0	13	7	15	9	sw.	James Taylor
Fayette	Howard	661	48	59.6	− 4.7	87	28	33	5†	35	10.03	+5.41	2.00	0	14	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	61.0	− 4.0	88	30	34	5	39	11.69	+6.92	2.70	0	17	9	14	8	.....	Chamber of Commerce
Gorin	Scotland	700	41	...	.....	..	..	....	..	..	2.26	−2.35	0.54	0	14	5	12	14	se.	J. W. Pulliam
Hannibal	Marion	534	36	60.8	− 2.8	88	29	38	16	42	4.92	+0.57	1.43	0	16	4	12	15	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	62.4	− 2.5	94	30	35	2	44	10.10	+5.55	1.56	0	19	13	7	11	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	59.9	− 2.6	88	28	35	3†	30	2.93	−2.28	1.35	0	10	4	11	16	se.	Prof. J. S. Stokes
Louisiana	Pike	469	34	61.3	− 2.5	90	29†	37	21	35	8.80	+4.24	2.85	0	11	18	4	9	s.	Stark Bros. Nurseries
Macon	Macon	875	29	60.6	− 3.3	88	28	34	3	38	5.72	+1.15	1.30	0	16	5	11	15	ne.	W. C. Brown
Mexico	Audrain	800	39	60.5	− 3.8	88	30	36	2	35	8.91	+4.15	1.33	0	16	13	2	16	s.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	...	.....	..	..	....	..	..	6.67	.....	2.20	0	13	8	12	11	ne.	J. S. Conway
St. Charles	St. Charles	456	40	62.0	− 1.0	90	30	35	2	42	11.81	+7.63	2.45	1.0	13	11	8	12	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	62.2	− 4.8	90	30	32	2	32	10.09	+5.75	3.36	4.0	15	9	10	12	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	61.7	− 4.4	89	30	32	2	34	8.44	+4.20	2.22	3.9	16	11	10	10	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	6.96	+1.98	1.12	0	16	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	59.8[b]	− 4.3	87	28	35	5†	36	5.00	+0.05	1.00	0	14	7[a]	15[a]	8[a]	e.	Frank Hall
Unionville	Putnam	1,062	35	59.4	− 3.0	88	28	33	5†	33	2.61	−2.35	0.50	0	10	5	14	12	n.	Geo. W. Davis
Warrenton	Warren	816	46	62.6	− 2.4	91	30	35	2	37	8.79	+4.00	2.10	0	12	7	13	11	ne.	Prof. A. W. Ebelling
Keokuk, Iowa	Lee, Ia.	614	56	60.4	− 3.4	87	28	37	16	42	2.97	−0.96	0.84	0	15	3	12	16	s.	U. S Weather Bureau
Section means and	extremes	.....	..	60.9	− 3.3	94	30	32	2	44	7.13	+2.52	3.36	0.5	14	8	10	13	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	8	68.9	.....	95	30	45	3	30	7.87	.....	1.45	0	15	19	5	7	s.	Jeff. King
Caruthersville	Pemiscot	265	32	67.5	− 2.0	92	31	42	3	28	6.25	+1.99	1.15	0	13	11	11	9	s.	Sam Smith
Doniphan	Ripley	344	24	63.8	− 3.1	93	30†	35	3	44	6.89	+2.73	1.35	0	10	13	6	12	sw.	W.W. Martin
Jackson	Cape Girardeau	428	37	61.8	− 4.0	90	31	34	5	34	6.84	+2.48	1.30	0	14	3	9	19	s.	John G. Putz
Marble Hill	Bollinger	470	33	64.0	− 1.7	93	30	35	3†	39	10.08	+5.85	2.10	0	13	9	11	11	w.	R.A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	7.74	+3.58	1.99	0	13	17	8	6	sw.	John A. Spence
Poplar Bluff	Butler	329	24	65.0	− 3.0	93	31	36	3	38	8.16	+3.13	1.75	0	14	19	8	4	s.	J. H. Wolpers
Sikeston	Scott.	318	23	66.2	− 2.4	92	30	39	3	33	8.73	+4.57	1.76	0	12	12	5	14	s.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	65.5	− 2.9	90	30	39	2	25	5.19	+1.48	1.39	0	13	4	8	19	s.	U. S. Weather Bureau
Section means and	extremes	....	..	65 3	− 2.7	95	30	34	5	44	7.53	+2.87	2.10	0	13	12	8	11	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	59.6	− 5.0	88	30	32	3†	39	9.56	+4.78	2.16	T.	13	19	5	7	nw.	Arcadia College
Aurora	Lawrence	1,370	38	63.9[c]	− 2.0	86	31	35	2	36	8.06	+2.60	2.85	0	12	6[c]	7[c]	11[c]	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	62.4	− 2.8	89	31	34	3	38	7.80	+3.49	1.43	T.	11	17	4	10	s.	V. H. Kirkendall
Bolivar††	Polk	1,071	34	...	.....	..	..	....	..	..	9.26	+3.84	2.11	0	8	13	13	5	.....	Southwest Baptist College
Dean ‡‡	McDonald	1,000	31	64.7	− 1.1	88	11†	36	3	40	12.33	+6.37	4.45	0	10	7	14	10	s.	H. E. Dean
Eldon	Miller	934	32	60.5[b]	− 4.0	87	30	33	2†	40	9.70	+4.84	1.62	T.	15	1[b]	18[b]	10[b]	sw.	E. H. Shepherd
Farmington	St. Francois	918	17	61.8	− 2.0	94	30	32	2	39	12.12	+6.62	2.16	0.8	14	10	13	8	ne.	Robert Forsyth
Goodland	Iron	1,000	34	60.1	− 4.4	90	30	28	3	43	9.32	+4.70	1.68	0	14	13	8	10	s.	F. M. Adams
Greenville	Wayne	381	6	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	7.79	.....	2.00	0	13	12	10	9	w.	A. W. Madison
Koshkonong	Oregon	958	27	64.4	− 2.4	90	31	36	2	32	6.44	+1.60	1.48	0	13	9	9	13	se.	R. M. Hitt
Lebanon	Laclede	1,265	40	59.2	− 6.4	87	30	30	2†	41	12.91	+7.30	3.85	2.0	13	9	11	11	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	62.8	− 1.8	87	31	36	5	33	9.81	+4.73	2.43	0	13	12	8	11	se.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	60.1	− 3.8	85	30†	31	2	39	7.02	+2.17	1.52	0.1	17	10	12	9	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	63.4	− 2.8	88	31	36	3	39	8.65	+2.58	3.15	0	11	19	8	4	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	60.6	− 3.9	86	30	33	2	34	8.65	+3.64	1.80	2.0	17	4	11	16	s.	F. H. Lane
Salem(near)	Dent	1,173	24	61.0	− 4.3	87	30	32	2	34	8.21	+3.67	2.18	0.7	14	14	7	10	se.	A. C. Leech
Seligman	Barry	1,542	26	62.4[a]	− 2.5	86	30†	36	2	36	9.95	+4.36	3.20	0	12	9	14	8	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	61.4	− 2.7	87	31	31	2	38	9.40	+3.70	2.11	1.0	12	9	11	11	se.	Ira H. Hailey
Springfield	Greene	1,324	40	61.1	− 3.4	85	31	32	2	32	9.77	+4.58	2.70	6.1	15	13	9	9	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	61.7	− 3.2	94	30	28	3	43	9.50	+4.22	4.45	0.7	13	11	10	10	se.	
Southwest Plain																				
Appleton City	St. Clair	853	34	61.6	− 3.5	86	31	35	5	34	8.00	+2.46	2.19	0	12	4	18	9	ne.	W. G. Bigelow
Clinton	Henry	765	35	64.0	− 1.2	95	29	38	2	37	12.32	+6.88	6.00	0	11	11	13	7	s.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	59.4	− 4.6	85	29	35	2†	34	6.56	+1.75	2.04	0	14	2	3	26	ne.	John H. Patterson
Lamar	Barton	980	41	61.8	− 4.1	92	31	38	5	37	11.89	+6.43	2.40	0	15	8	15	8	ne.	Jesse A. Mann
Lamonte	Pettis	867	27	61.6	− 3.1	90	30†	36	5	34	13.68	+8.73	3.80	0	15	13	10	8	se.	J. E. Wheeler
Marshall	Saline	779	39	64.2	+ 0.1	90	15†	37	3†	35	7.85	+2.99	1.80	0	12	8	9	14	sw.	Dr. W. H. Black
Nevada	Vernon	862	35	62.5	− 2.1	85	15	37	5	33	12.09	+6.37	3.68	0	14	13	7	11	sw.	George A. Knapp
Warrensburg	Johnson	878	41	61.0	− 4.3	86	29	36	2	30	10.53	+5.87	3.69	0	13	8	14	9	se.	E. A. Markey
Warsaw	Benton	687	28	62.9	− 2.9	89	31	33	5	36	10.30	+5.07	4.00	0	15	11	10	10	e.	Everett Martin
Section means and	extremes	.....	..	62.1	− 2.9	95	29	33	5	37	10.36	+5.17	6.00	0	13	9	11	11	ne.	
Northwest Plateau																				
Bethany	Harrison	916	36	60.5	− 2.1	87	28	32	5	32	2.64	−2.34	0.96	0	10	4	8	19	se.	M. H. Moulton
Chillicothe	Livingston	779	19	59.8	− 7.3	86	30	35	2†	39	4.67	−0 04	1.12	0	13	10	13	8	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	61.2	− 0.8	88	28	33	2	35	1.71	−3.06	0.62	0	7	6	15	10	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	60.4[a]	.....	84	24	34	5	30	5.05	−0.40	1.72	0	11	14	3	14	s.	Fred L. Stiff
Grant City	Worth	1,134	24	59.6	− 2.5	87	28	33	2	29	1.45	−3.28	0.59	0	9	2	25	4	se.	W. P. Spillman
Kansas City	Jackson	963	39	61.2	− 3.6	84	28	36	2	37	6.91	+2.26	2.65	0	14	4	14	13	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	57.5	− 5.6	83	28	33	2†	40	4.34	−0.87	1.43	0	12	5	12	14	se.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	2.17	.....	0.41	0	12	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	62.6	− 1.8	88	29	38	2†	34	5.94	+0.88	2.30	0	17	11	15	5	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	60 0	− 1.1	88	28	32	2	30	1.46	−4.29	0.61	0	10	7	17	7	e.	J. R. Brink
Oregon	Holt	1,018	72	62.3	− 0.9	88	24†	32	2	31	5.63	+0.77	1.92	0	9	6	13	12	ne.	Mina Wright
St. Joseph	Buchanan	987	20	61.4	− 2.8	86	28	36	2	34	3.72	−0.41	2.23	0	12	5	12	14	se.	U. S. Weather Bureau
Tarkio	Atchison	916	25	57.0	− 6.3	85	28	32	2	32	4.82	+0.16	1.70	0	9	4	10	17	ne.	Albert Volker
Trenton	Grundy	822	32	60.2	− 3.6	88	28	36	2	30	2.96	−2.38	1.02	0	12	9	16	6	se.	W. H. Estes
Section means and	extremes	.....	..	60.3	− 3.0	88	28†	32	2	40	3.82	−1.00	2.65	0	11	7	12	12	se.	
State means and	extremes	.....	..	61.7	− 2.9	95	29†	28	3	44	7.52	+2.82	6.00	0.3	13	9	10	12	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for May, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain																																	
Boonville‖	Missouri		2.18		.17	.03	.70	.02					1.60	1.38	.30				2.58	.72							.03	.06	.52		.02	1.00	11.31
Brunswick‖	Grand	.05	.35		.06		.20						1.91	.52	.30		.20		.90	.25						.02	.20	.12				1.68	6.76
Clifton Hill	Chariton	.10	.79	T.	.10	T.	.23					.95	1.23	.44		.13			1.26								.08	.36		.33	.12	.45	6.57
Columbia***	Missouri	.75	.83	.12	.32	.14	.28	T.				2.04	.85	.94		.54		.06	3.10							.11	.01	.79		.04	.12	.94	11.98
Downing	Mississippi						.20					1.06	.10	.13	.31	T.		.02	.03					.25			.22	.03		.29	.14	.09	2.87
Fayette‖	Missouri		2.00	T.	.07	.17	.12		.03				1.15	1.08	.35	.35		1.56	.52								T.	.70			1.73	.20	10.03
Fulton‖	....do	T.	1.65		.20	.30	.28	.02	.01				2.14	.55	.70		.19		2.70	1.10							.81	.16	.40		.35	.13	11.69
Gorin	Mississippi	.01					.19					.54	.06	.14	.29	.17		.15	.08					.09			.16	.04		.05	.29		2.26
Hannibal***	....do	.42	.44			.07	.21	T.				.46	.49	.73	T.	.18			1.43		.07				.04		.10	.07		.08	.11	.02	4.92
Hermann‖	Missouri	.34	1.43	.06	.05	.68	.63	.06	T.	T.			.81	.97	.18		.35		.51	1.65							T.	.28	.03				.15	8.18
Jefferson City‖	....do	.14	1.40	03	.18	.53	.80	.05	.03				1.25	.50	.72		.20		1.52	1.56							.02	.03	.80		.12	.22	10.10
Kirksville	Mississippi						.32					1.35	.19	.24					.12			.04				.26	.06			.17	.18	2.93
Louisiana	....do	.50	2.00		.20		.40						.95	.65	.70	.10			2.85									.35			.10		8.80
Lucerne‖	Grand						.25	.05				.47	.37		.56				.04					.08		.08	.02	.05		.31	.24	2.52
Macon ‖	Chariton	.08	.62				.30	.06					1.30	.38	.50		.40		.50	.05					.55	.03	.12	.30		.21	.32	5.72
Mexico ‖	Mississippi	.04	1.21		.16		.66	.02					1.10	1.25	1.06		.12		1.33	1.11						.18	.10	.28		.06	.23	8.91
Milan‖	Grand	.25				.35		.15				.10	1.05	.12	.48				.15						.30	.25		.20			1.25	4.65
Monroe City	Mississippi	.07	1.05				.32						.98	.44		.68			2.20		.04				.09		.15	.28		.29	.08	6.67
Pacific‖	Meramec	.12	2.10	.28	.05	.60	.87	.12		.07			.57	1.10	1.10		.22		.37	2.49							.04	.14	.05				10.29
St. Charles	Missouri	.25	2.15	.04	.88	.10	.69						.80	1.70	.93	.80			2.45							T.		.20				.82	11.81
St. Louis (1)***	Mississippi	.40	2.96	.08	.67	.22	.43	T.	.05			T.	1.12	1.06	.09	.25			2.25							T.	T.	.28			.03	.20	10.09
St. Louis (2)*	....do	.41	1.27	.11	.64	.23	.42		.04				1.30	1.03	.09	.20			2.22							.01	T.	.15	T.		.13	.19	8.44
Shelbina ‖	....do	.05	1.02				.22	.03	T.				1.12	.40	.60		.17		.82	.90	.05	T.				.22	.01	.36			.64	.35	6.96
Steffenville	....do	T.		.43			.30				.10		.50	.30	.55	.10			1.00		T.			.05			.15	.15		.65	.70	.02	5.00
Union‖	Meramec	.33	2.00	.08	.02	.59	.87	.05				.50	.15	.12	.20				.27	2.20						.10	.45	.05			.40		8.07
Unionville	Chariton						.44						.49	.42	.33		.12											.16	.09			.05	2.61
Warrenton	Mississippi	1.03	1.18		.71		.63						.76	.71	.27	T.	.14		2.10		T.							.24			.94	.08	8.79
Keokuk, Ia.***	....do	.05	T.				.14					.31	T.	.79	.05	.21		.05	.45		.05			.05			.02	.04		.21	.54	.01	2.97
Southeast Lowlands																																	
Campbell‖	St. Francis	.20	.79			.98	.18	.23	.51	.65				.55	1.45	1.40	.49		.04	.08							.29	.03					7.87
Cape Girardeau‖	Mississippi	T.	1.02	.10		.40	.75	.16	.60	.27			.18	1.17	1.20		.18		.04	.22						.90	.56	.05	.17				7.97
Caruthersville ‖	.... do	.40			.62	.70	.26	.25	1.15				.35	.65		.15			.90							.53		.02	.27				6.25
Dexter‖	St. Francis		1.55			.50	.88	.38	.04	1.18				1.26	.41	.50											.15	.02		.01			6.88
Doniphan	Black		.90		.25		1.13		1.35					.96	.90		.22			.70						.40		.08					6.89
Jackson	Mississippi		1.30		.30	.02	1.19		.55				.97	.65	.45		.13		.07	.02						1.02	.02	.15					6.84
Marble Hill	Mississippi		1.20		.40	.10	1.40		.80				.55	1.05	1.12		.20									2.10		.52	.12			.52	10.08
Morehouse	....do		1.69		.27	.18	1.66		.72				T.	1.99	.56		.13		.09	.18						.13		.08				.06	7.74
New Madrid‖	....do	.10	.25			.50	.64	.47	.04	.95			.03	.25	1.90		.10		.03	.32						.10	.12	.02	.26				6.08
Poplar Bluff‖	Black		1.75			.30	.85	.44	.45	.31			1.07	.58	.14	.53	.33		T.	.37							.88	.16	T.				8.16
Sikeston‖	Mississippi		1.53				1.72	.32	.40	.22				1.50	.80		.18		.06	.15						1.76	.09					8.73
Cairo, Ill.***	.. . do	.98	.03		.32	T	1.35		.40			T.	.02	1.05	.37	.07		T.	.14	.04						.41	T.	.01					5.19
Ozark Plateau																																	
Arcadia ‖	St. Francis		1.63	.47		.19	1.69	.25	.35	.28			2.16	1.42	.57	.07	.16		T.							T.			.32	T.			9.56
Aurora	Neosho	.23	1.00		T.	.10			.88	.72			2.85	.07		.06		T	1.32								.21	.47	.15	T.	T.	T.	8.06
Birchtree (near)	Black	.22	1.43		.30		.73		1.05				.75	1.07	.61		.15									.42		1.07					7.80
Bolivar	Osage		.45		.20	2.02							2.00	2.00		.14			2.11												.34	9.26
Caplinger Mills	Osage	.45	.97		.10	.03	2.07		.70				1.75	.25		.19			.25							T.	.05	.15	.10	.20	T.	T.	7.26
Dean	Neosho	.78	.85			T.	.68		2.08				4.45	.15		.45			2.12							T.	T	.32	.45				7.24
Eldon‖	Missouri	.02	1.62			.40	1.02						.97	.48	1.04		.16	1.24		1.09								.02	.14	.18		.30	1.02	12.33
Farmington	St. Francis	.88	1.91		.42	.04	1.27		.44				2.16	1.46	.67		.21		.81							.35	T.	.05				1.45	9.70
Fredericktown‖	.... do	.35	.95	.65	.10	.28					.75				1.05					.25							.68						12.12
Galena‖	White	.18	1.45				.55		2.00	.10			2.00	.38	.36		.10		.52							.75	1.09			1.67		5.06
Goodland	Black	.80	.94		.40	.05	1.50		.63				1.34	1.68	.60		.28		.30							.17	.30	.33					11.06
Greenville	St. Francis																																9.32
Hailey	White	.20	1.00			.57			2.00			1.47	.23	.13	.04	.27		.75	.25							.68		.20					7.79
Koshkonong	Black	.20	.50		.20		.52		1.48				.20	.75	.17		.42		.54		.05					.76		.65					6.44
Lebanon ‖	Osage		1.00			.40	3.00		.68	.10			.45	.60	.77		.25		.45	3.85							T.	.36	1.00				12.91
Leeper‖	Black		1.80	.17		.18	.22	1.21	.62	.25				1.58	.86		.12			.10							.65		.28				8.04
Lockwood	Osage	1.40	.21			.15	1.80	1.03					2.43	.05		.07		.10	1.75							T.	.40	.20	.22				9.81
Mountain Grove‖	White	.09	1.52	.03		.08	.69	.09	.62	.26			.84	1.14	.25		.14		.16	.26							.04	.08	.73		T.	T.	7.02
Neosho	Neosho	.40	.79		T.	T.	.38		1.42	.05			3.15	T.		.44			1.40					T.	T.	.18		.13	.31				8.65
Owensville ‖	Gasconade		1.95	.10		.50	1.00	.70		.20			.40	1.10	.10		.20		.22	1.71							.16	.15				.50	8.99
Ozark Beach‖	White	.10	1.25				.48		1.55	.66			.75	.45	.97	.11		.38	.33								.44	2.10	.31	.15			10.03
Rolla ‖	Meramec	.55	1.45	.01	.28	.05	1.80		.22				.62	1.10	.30		.36		.30	.45							.02	.23	.78			.13	8.65
Salem (near)	....do	.35	.92		.35	.05	2.18		.58				1.11	.84	.16	.60	.13		.29									.50					8.21
Seligman	Neosho	.28	.37			T.	1.58		1.63	T.			3.20	.12			.36		1.11							.15							9.95
Seymour (near)	White	.48	.98		T.	T.	1.10		1.03				1.71	.03	.40		.28		1.07							.34	.70	.15	.11	T.	T.		9.40
Springfield **‡	....do	1.46	1.24		.02	.36	.93		1.06			.22	1.23	.32		.38		T.	1.41						T.	.12		2 11	T.	T		.09	9.77
Steelville‖	Meramec	.10	2.90	.09		.47	1.22	.57	.08				.76	.75	.34		.33		.10	1.05						.14	.08	.90	T.	T.	.02	T.	9.65
Stover ‖	Missouri		2.70		.04	.39	.89		.06	.06			1.51	.51	.28		.41	..	3.87	.87							.05	.28	.56					9.65
Tuscumbia ‖	Osage	.04	1.93			.30	1.10		.05	.09			.63	.62	.20		.25		.58	1.17								.58			.12	.13	12.42
Williamsville‖	Black		1.57	.02		.22	.52	.38	.55	.38				.76	.68	.02	.12	.01	.01	.40						.09	.33	.18	.25		.10	.02	7.84
Willow Sprgs. ‖ (near)	White	.06	1.38	.05		.20	.48	.06	.90	.54			.31	.52	1.70		.50		.35	.27							1.25	.05	.17				7.20
																										T.	.68	.15	.37			.02	7.94
Southwest Plain																																	
Appleton City	Osage	.19	.65		.20	.38	.34		T.			1.16	1.84	.31		.15			2.19							T.	T.	T.	.22	.37	T.	T	8.00
Clinton	Osage	1.00			.22	.82						2.50	3.20	.65		.25			2.45										.21	.15		.87	12.32
Concordia‖	Missouri		.86	.12			.32						1.68	.56	.10				1.10	.10										1.46	.25	6.55
Harrisonville‖	Osage		.77		.23		.29					.01	2.04	.35	.11		.02		1.20	.21							.27	.04		.09		.93	6.56
Joplin‖	Neosho																																
Lamar‖	....do	.08	1.47			.03	1.78		.70	.25			1.42	2.40			.16		1.15	1.18							.35	.10		.77	.05	T.	11.89
Lamonte	Missouri	.40	1.00		.42	.05	.30					1.60	1.00	.65		3.30			3.80							T.	.02		.37	.02	.05	.70	13.68
Marshall	.... do	.25	.90	T.	.15		.15	T.				.40	1.25	T.	.05	.70			1.80		.25										.40	1.55	7.85
Nevada	Osage	.20	.72			.20	2.05		.62				2.58	.26		.25			3.68								.22		.63	.20	.44	.04	12.09
Osceola‖	....do		1.61			.29	1.24		.48				1.23	1.41			.13		3.63	.24							.26	.18		.30	.15	.03	11.13
Warrensburg	Missouri	.19			.40	.44	.16	T.				1.50	1.52	.80	.04	.28			3.69							T.	T.	.11	T.	.62		.78	10.53
Warsaw	Osage	.21	1.25		.40	.03	.80		.09				1.70	1.00	.05	.14			4.00								.05	.14	T.	.40		.04	10.30
Waverly ‖	Misouri		.61		T.		.31	T					1.89	.44	.25		.64		.72	.25							T.	.17		T.	T.	1.01	6.29
Northwest Plateau																																	
Albany‖	Grand																																
Bethany	....do					T.	.43	T.				T.	.36	.10	.16	.12			T.							T.	.05	T.	.10	.30	T.	T.	.96	.06	2.64
Chillicothe‖	....do		.01				.34	.04					.02	1.12	.24	.32			.34	T.						.86	.11	.23	T	.05		.99	4.67
Conception	Missouri					T.	.55	T.					.62		.04	.16								T.	T.		.16		T.	.05	T.	.13	1.71
Edgerton	....do	T.			T.	T.	.30		T.		T.	T.	1.18	.25	.04	.05		.06	.74					T.		.02	T	.07	T.			1.72	.62	5.05
Gallatin ‖	Grand						.11						.12	1.20	T.	.45			.21						T.		.05	.50	.19				.81	3.64
Grant City	.... do					T.	.25						.59		.16									T.		.14	T.	.04	.02	.04	.02	T.	.19	1.45
Kansas City***	Missouri	.56	.01	T.	.04	.07	.13		T.				2.60	.25	.25		.09		T.	.30		T.				T.	T.	.05	.02	T.	T.	.74	1.80	6.91
Kidder ‖	Grand						.28	.03					.26	1.43	.02	.28				.43							.18	.24	.40		.05		.74	4.34
King City	Missouri					.04	.35						.41	.05	.07	.06			T.							.38	.17		.01	.12	.20	.31	2.17
Lexington	....do		.60		.02		.28	.04					.12	2.30	.45	.16		.08		.17	.14						.01	.12	.02	.35	.02	1.06	5.94
Maryville ‖	....do						.27	.05					.61	.21		.15						.02			.04	.04	.02	.05					1.46
Oregon	....do					.05	.32						.81		.15	.04			T.		T.			T.		1.92				.88	.06	1.40	5.63
St. Joseph***	....do	T.		T.	T.	.10	.15		T.		T.	.55	T.	.19				.04	.05	T.			T.	T.	.01	T.	.06	T.	.14	.03	.58	1.82	3.72
Tarkio	....do					.07	.20						1.70		.42	.03				.22				T.		.42				.34		1.42	4.82
Trenton	Grand						.34					T.	1.02	.34	.12	.12			T.	.11					.01		.04	.24		.04	.40	.18	2.96

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for May, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§§	Maximum	56	56	60	52	61	55	68	71	71	77	74	60	60	76	87	63	78	66	65	68	72	77	82	85	82	84	79	88	84	80	81	71.5
	Minimum	54	39	39	42	36	46	38	45	47	51	48	56	52	54	59	39	42	51	45	49	43	50	54	60	62	65	67	66	70	69	66	51.7
Columbia	Maximum	64	54	61	48	58	53	66	61	68	77	80	61	62	74	88	59	76	68	60	64	66	74	79	83	78	80	74	85	85	87	85	70.3
	Minimum	41	36	41	40	36	43	38	47	43	56	60	55	56	59	48	40	46	51	43	47	43	49	58	62	61	66	66	68	70	68	66	51.7
Fayette	Maximum	65	54	60	50	61	55	67	67	70	78	68	68	61	74	86	60	76	63	64	67	70	75	79	85	83	81	75	87	84	85	85	71.1
	Minimum	48	38	34	41	33	37	33	36	42	47	57	54	50	53	56	36	41	46	40	44	38	41	50	56	57	61	63	63	66	65	62	48.0
Hannibal	Maximum	65	54	54	54	60	54	68	66	68	72	80	65	59	73	87	58	75	66	58	61	67	73	78	76	80	82	76	86	88	84	81	69.9
	Minimum	43	41	41	43	40	44	41	50	48	52	61	55	53	59	45	38	46	48	42	45	40	44	58	62	58	66	68	67	72	70	67	51.8
Jefferson City§§§	Maximum	70	57	67	50	61	57	67	57	72	88	88	68	66	76	90	61	68	67	63	70	70	76	88	89	90	89	76	88	86	94	88	74.1
	Minimum	55	35	39	44	36	40	36	43	41	44	56	58	56	58	58	40	42	48	43	42	44	45	55	57	61	64	65	64	67	67	66	50.6
Kirksville	Maximum	71	65	58	61	60	57	67	66	66	69	71	61	58	74	81	62	73	71	68	61	69	73	76	76	77	78	75	88	81	79	79	70.1
	Minimum	41	38	35	36	35	42	40	50	42	49	59	53	53	55	53	35	43	57	39	45	40	46	56	54	55	63	65	61	66	67	65	49.7
Louisiana	Maximum	65	50	53	60	63	55	70	67	66	70	70	60	60	65	85	60	75	75	60	63	70	75	83	85	85	80	85	89	90	90	85	71.3
	Minimum	50	38	40	44	45	47	47	48	40	50	50	54	54	58	55	40	40	60	42	40	37	40	53	62	60	62	65	65	68	70	66	51.3
Macon§§§	Maximum	56	55	57	58	62	56	69	72	71	71	74	64	59	74	86	62	77	63	64	66	71	76	79	78	82	81	75	88	86	84	85	71.1
	Minimum	49	40	34	40	35	45	38	49	44	49	53	52	50	53	56	37	39	51	43	46	41	46	54	58	59	61	65	65	67	68	65	50.1
Mexico§§§	Maximum	62	54	59	54	61	52	63	68	70	76	80	60	61	73	68	74	78	64	59	63	62	75	80	82	83	83	74	87	86	88	85	70.5
	Minimum	52	36	37	42	37	45	39	47	43	49	52	55	54	54	58	39	43	49	41	43	40	45	54	58	60	64	66	63	68	67	65	50.5
St. Louis(1)	Maximum	70	52	57	50	60	54	65	58	68	74	84	73	64	77	86	58	73	64	55	60	66	73	80	84	77	81	80	85	88	90	86	70.7
	Minimum	46	32	43	42	41	46	46	52	49	52	65	59	58	64	54	41	46	46	41	44	48	53	59	63	66	65	69	68	70	71	69	53.8
Unionville	Maximum	70	50	57	58	60	60	66	68	66	70	70	60	75	78	62	75	72	64	65	70	72	77	76	72	78	76	88	81	85	84	85	70.3
	Minimum	43	36	34	36	33	44	37	48	40	50	50	52	51	55	51	33	44	56	35	45	37	45	57	52	54	62	65	65	68	65	64	48.6
Warrenton	Maximum	74	53	62	55	62	57	67	64	69	75	85	81	63	75	88	77	76	74	60	63	67	75	80	84	82	82	79	86	89	91	87	73.6
	Minimum	51	35	40	40	38	45	40	51	42	50	63	57	56	59	57	40	41	59	43	40	41	46	52	59	61	64	66	64	68	68	67	51.7
Southeast Lowlands																																	
Campbell	Maximum	83	79	71	70	64	64	68	63	69	79	84	84	80	80	83	79	75	78	74	69	68	76	81	89	83	82	84	89	91	95	94	78.3
	Minimum	58	52	45	56	46	63	50	55	53	58	68	63	67	68	68	58	46	68	54	49	49	50	54	59	67	70	70	71	69	67	68	59.5
Caruthersville	Maximum	75	68	70	72	66	65	70	60	70	78	85	83	81	81	85	76	74	81	68	70	70	75	81	84	80	80	85	88	87	89	92	77.1
	Minimum	57	44	42	53	47	51	47	52	51	55	60	65	65	65	68	54	49	57	54	48	51	53	60	65	67	65	70	70	70	69	70	57.9
Doniphan	Maximum	80	80	74	71	61	59	68	60	67	75	84	85	79	80	84	81	78	80	78	74	71	76	82	84	86	86	83	88	90	93	93	78.4
	Minimum	40	36	35	50	37	48	38	48	50	51	42	66	42	46	51	50	39	36	51	40	43	40	47	50	54	62	67	67	68	63	65	49.1
Jackson	Maximum	67	66	68	65	58	59	65	66	67	75	80	77	69	76	80	77	71	67	67	67	66	71	77	80	77	76	80	83	86	87	90	72.9
	Minimum	55	35	35	42	34	45	35	47	42	45	61	62	68	61	61	43	37	60	44	38	39	37	47	50	61	62	67	66	67	63	65	50.8
Poplar Bluff	Maximum	78	67	71	70	65	58	69	65	69	78	83	88	78	78	83	64	73	78	70	74	73	76	80	81	80	80	82	85	88	91	93	76.5
	Minimum	55	40	36	49	39	49	40	50	48	53	63	65	63	60	60	53	40	63	50	41	43	41	42	51	64	63	68	68	67	65	68	53.5
Sikeston	Maximum	80	75	69	72	67	61	65	66	68	77	80	81	80	84	80	79	83	81	73	79	78	67	69	77	83	86	81	83	85	87	89	77.4
	Minimum	56	40	39	48	40	48	41	48	46	53	52	65	63	64	64	51	42	63	48	42	43	44	54	65	67	65	69	67	69	67	75	54.8
Cairo, Ill	Maximum	76	63	68	69	60	59	65	57	67	76	81	82	76	78	81	64	71	78	62	64	66	73	79	82	75	80	83	85	87	90	88	73.7
	Minimum	59	39	43	47	44	48	47	51	51	54	66	68	64	65	64	48	50	62	47	49	48	54	60	62	64	66	72	70	72	71	71	57.3
Ozark Plateau																																	
Arcadia§§§	Maximum	71	49	70	60	57	54	65	55	66	77	81	74	69	76	82	58	74	72	63	66	66	74	78	82	76	78	78	81	84	88	85	71.3
	Minimum	54	33	32	39	32	39	36	44	41	44	54	60	60	60	57	43	35	45	42	36	37	35	41	51	59	61	64	64	63	61	61	47.9
Aurora	Maximum	71	55	75	70	..	..	..	..	..	..	..	79	70	78	83	61	77	70	66	72	68	69	78	77	80	73	73	78	83	81	86	[g]74.0
	Minimum	47	35	39	50	..	..	..	..	..	..	..	58	60	55	59	40	48	57	49	44	46	48	52	58	58	63	63	65	65	67	66	[g]53.8
Birchtree	Maximum	78	57	72	63	60	58	68	65	68	77	82	77	71	78	81	76	74	74	66	70	70	72	77	84	74	77	78	83	84	88	89	73.9
	Minimum	54	35	34	47	38	46	35	48	50	52	64	62	61	63	60	45	39	50	47	38	42	39	50	50	52	52	63	65	67	60	66	50.8
Eldon§§§	Maximum	69	55	67	46	58	52	67	..	..	79	81	61	66	75	86	62	75	61	63	67	68	75	78	82	79	81	74	83	85	87	86	[b]71.3
	Minimum	56	33	39	42	33	40	39	41	..	..	41	61	58	58	58	39	39	46	43	41	44	44	46	54	57	59	66	65	66	67	65	[b]49.7
Farmington	Maximum	75	53	67	56	53	52	71	58	74	80	82	73	71	80	84	72	75	66	60	61	65	76	80	86	78	81	79	84	88	94	85	72.9
	Minimum	53	32	38	41	34	45	40	47	45	47	62	61	61	61	59	41	36	57	42	39	40	37	49	55	60	65	67	64	65	61	64	50.7
Koshkonong	Maximum	75	65	70	64	61	60	70	61	67	79	82	80	73	78	82	76	73	78	67	71	71	73	80	83	78	77	75	83	86	89	90	74.7
	Minimum	60	36	38	50	40	48	43	49	51	50	63	64	62	62	63	48	43	63	50	42	44	46	52	55	61	64	63	65	67	65	69	54.1
Lebanon§§§	Maximum	69	54	70	51	54	52	69	55	69	78	80	69	70	73	84	62	77	64	64	69	68	75	77	81	80	78	72	80	84	87	85	71.0
	Minimum	55	30	31	42	30	37	33	35	43	42	54	58	58	55	55	36	36	44	45	39	41	42	46	52	52	60	63	63	65	65	63	47.4
Mountain Grove§§§	Maximum	75	52	71	59	56	61	67	57	61	75	79	74	69	76	82	65	74	71	68	72	69	72	76	79	76	76	68	80	82	85	85	71.4
	Minimum	52	31	32	40	40	43	34	41	47	48	53	58	58	58	58	38	38	42	45	37	42	44	49	51	58	61	62	60	65	63	64	48.8
Neosho	Maximum	73	58	75	75	59	60	71	72	66	80	83	82	70	78	87	66	80	77	67	73	72	73	79	82	77	76	80	82	87	87	88	75.3
	Minimum	48	39	36	47	39	47	38	53	52	53	61	58	57	53	61	40	46	59	45	40	43	45	50	51	57	59	64	63	64	64	64	51.5
Rolla	Maximum	75	51	68	58	56	51	67	67	70	76	82	79	68	74	85	63	76	76	62	66	66	72	78	81	79	79	75	81	85	86	84	72.1
	Minimum	41	33	37	35	35	37	37	44	44	53	65	50	50	58	53	39	43	49	46	41	43	42	51	55	57	64	58	58	68	66	66	49.1
Springfield	Maximum	68	52	71	58	55	54	66	58	65	78	80	67	69	75	82	61	72	65	64	68	66	68	75	78	75	73	71	80	83	82	85	69.8
	Minimum	40	32	39	42	37	45	42	50	51	54	60	59	61	56	52	40	47	54	49	45	49	51	54	57	63	64	62	67	67	68	67	52.4
Southwest Plain																																	
Appleton City	Maximum	67	57	74	60	47	54	67	59	70	78	77	65	65	74	83	62	76	70	61	69	68	74	72	82	78	79	78	83	84	84	86	71.2
	Minimum	42	38	40	45	35	44	38	51	41	57	63	57	54	54	55	38	46	58	44	46	47	49	57	56	57	64	65	67	66	66	65	51.9
Clinton	Maximum	75	58	72	61	56	55	70	65	73	78	80	64	67	77	85	65	77	72	68	72	72	76	80	85	80	80	80	87	95	88	89	74.3
	Minimum	43	38	41	45	45	45	40	52	45	58	60	58	55	55	57	38	40	60	45	47	48	50	58	58	63	75	76	70	67	70	65	53.8
Harrisonville§§§	Maximum	51	58	69	53	54	57	63	62	67	74	71	59	63	75	83	60	75	63	65	70	67	75	80	82	76	76	77	82	85	81	82	69.6
	Minimum	50	35	35	42	36	40	38	42	44	47	56	52	50	51	54	36	41	50	41	45	45	49	53	55	58	60	62	64	65	67	63	49.2
Lamar§§§	Maximum	63	56	71	57	54	53	67	59	67	78	80	63	66	74	84	63	78	64	65	71	70	74	76	80	76	77	77	82	84	85	92	71.2
	Minimum	57	40	40	46	38	44	42	45	50	50	57	60	57	56	58	40	41	50	47	47	48	49	52	55	61	62	65	67	62	68	67	52.3
Lamonte	Maximum	58	55	65	53	58	54	66	67	69	76	77	64	64	77	85	64	78	69	65	68	71	76	81	86	81	81	78	83	86	90	90	72.2
	Minimum	43	38	39	43	36	44	38	38	44	56	62	54	54	56	51	38	45	56	43	45	44	48	57	57	60	60	66	67	67	64	65	50.9
Marshall	Maximum	73	56	60	66	63	68	70	70	75	78	77	67	69	79	90	65	68	72	85	82	85	88	89	90	88	90	78	90	88	88	90	77.0
	Minimum	42	38	37	39	38	45	37	49	43	45	67	55	45	55	55	38	51	50	50	65	42	62	57	67	60	63	45	65	51	67	61	51.3
Nevada	Maximum	71	56	74	70	52	53	67	65	68	78	78	63	65	75	85	61	77	73	61	69	71	70	77	80	76	77	79	82	81	82	84	72.0
	Minimum	43	39	41	46	37	45	38	52	47	56	60	59	56	56	56	40	48	59	45	47	53	50	59	59	61	62	65	65	67	66	65	53.0
Warrensburg	Maximum	63	52	60	54	58	57	67	62	69	75	72	60	61	75	84	62	74	72	65	66	70	74	79	85	80	80	77	82	82	86	85	70.6
	Minimum	42	36	38	43	40	38	38	51	42	55	60	55	53	55	54	37	45	58	52	42	45	49	57	55	60	63	65	68	66	71	64	51 5
Warsaw	Maximum	74	57	71	67	56	54	73	67	71	79	81	67	67	76	86	66	77	75	65	70	71	75	79	83	80	82	77	84	86	87	89	73.9
	Minimum	42	38	41	46	33	44	37	50	41	57	67	61	56	57	57	39	44	59	43	44	43	47	54	55	59	62	66	66	67	69	61	51.9
Northwest Plateau																																	
Chillicothe§§§	Maximum	52	56	58	60	61	59	67	70	71	75	68	60	58	77	83	63	77	70	66	67	70	76	80	81	81	80	79	89	85	86	82	71.2
	Minimum	49	35	35	35	35	44	35	47	45	49	54	51	50	51	55	35	38	53	42	38	39	45	51	55	56	61	63	63	65	67	63	48.5
Grant City	Maximum	68	55	58	59	55	57	64	64	66	68	67	68	64	74	69	62	73	69	66	62	66	71	80	77	79	80	79	87	82	83	77	69.3
	Minimum	44	33	35	41	35	44	37	50	40	52	57	53	49	55	51	35	41	58	38	47	43	53	60	55	58	62	66	68	57	67	64	50.0
Kansas City	Maximum	63	56	56	57	56	54	61	66	66	72	70	58	58	75	81	61	76	66	65	66	68	77	81	82	76	76	77	84	84	81	83	69.4
	Minimum	43	36	45	45	42	45	46	51	49	59	52	51	50	54	44	41	49	53	45	52	50	54	60	64	61	64	66	69	68	66	66	53.0
Kidder§§§	Maximum	50	52	50	57	57	55	62	67	67	69	66	59	56	74	80	60	78	63	63	63	67	71	78	80	77	78	77	83	82	80	80	67.9
	Minimum	47	33	33	37	35	42	37	42	45	45	53	49	49	51	53	35	38	44	37	44	40	44	49	55	57	60	62	62	54	65	62	47.1
Lexington§§§	Maximum	74	56	59	58	60	60	65	68	70	75	73	63	59	76	84	60	79	73	65	68	70	76	80	87	80	80	79	85	88	83	83	72.1
	Minimum	43	38	42	43	39	45	42	51	47	57	63	51	52	54	59	38	45	60	42	48	45	51	59	61	62	64	66	67	67	71	67	53.0
Maryville	Maximum	69	56	58	57	54	57	64	59	68	68	67	68	65	75	76	63	74	69	68	65	71	74	79	81	81	81	80	88	80	85	78	70.3
	Minimum	44	32	36	41	36	43	35	49	41	52	57	52	47	54	50	35	45	58	40	45	41	54	51	56	56	62	65	69	66	64	64	49.7
Oregon	Maximum	74	59	64	59	56	59	66	66	73	68	69	69	61	78	75	68	78	70	72	71	74	78	82	88	81	81	82	88	81	84	82	72.8
	Minimum	46	32	41	42	38	44	39	50	43	55	58	54	51	54	52	37	47	59	42	47	45	53	62	58	59	62	66	70	65	68	67	51.8
St. Joseph	Maximum	60	58	58	58	56	56	63	70	69	69	70	65	59	77	77	63	76	67	67	67	70	77	83	82	79	81	80	86	82	81	82	70.6
	Minimum	44	36	41	42	38	45	40	53	46	57	53	51	53	54	43	40	47	51	43	50	45	55	62	61	62	63	68	70	69	67	66	52.2
Trenton	Maximum	76	58	60	62	59	57	64	68	68	70	68	63	60	77	75	64	74	68	67	64	70	72	79	76	82	80	79	88	86	86	81	71.0
	Minimum	46	36	37	40	37	40	37	42	48	52	51	53	54	57	52	37	46	50	39	48	40	45	52	58	57	58	58	65	64	65	66	49.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 6-20-29 – 955.

551.03
UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., JUNE, 1929. NO. 6

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GENERAL SUMMARY.

June, 1929, was nearly 2 degrees cooler than normal in all Missouri, and wetter than normal everywhere except the southeastern lowlands and the eastern part of the Ozark Plateau. Rains were frequent running in spells of two to four days with only a day or two of fair weather in between; the last week of the month was the fairest. There were some days with excessive down-pours of from more than 2 inches to over 6 inches, particularly in the southwestern plains and northwest plateau. There were no outstanding cool or hot spells. Except on the 1st, 10th, 11th, 16th to 19th, and the last day or two of the month temperatures, as a rule, were persistently below the seasonal average, especially outside the extreme southeast.

On the farm conditions were rather discouraging. Planting of corn, forage and truck crops was the most delayed of any season of record. Rains were too frequent to permit plowing all land first outlined for corn, and much has been put to forage crops of left idle because of the wet weather of April to and including June; especially does this apply to the frequently overflowed river bottom lands, and very prime soil. There was too much rain for wheat in the blooming stage, and some rather hot days following suddenly right on the heels of the rains caused marked deterioration of the grains. Pastures, alfalfa and clover are rated good to excellent. Oats, fruit, and most minor crops have been unfavorably affected by the wet weather.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the reports of 65 stations, was 71.3°, or 1.9° below the normal. The highest local monthly mean was 77.8°, at Caruthersville; and the lowest 67.8°, at Kidder. The highest temperature reported was 99°, at Caruthersville on the 30th; and the lowest 39°, at Goodland on the 4th. The values are well within the extremes of other years. There were only 10 days in the southeast with 90° or higher and four or five in other parts of the State.

PRECIPITATION.

The average precipitation for the State, 97 stations reporting, was 5.77 inches, or 0.90 inch more than the 60 years' normal, and 5.40 inches less than last June a year ago. The greatest local monthly amount was 11.42 inches, at Maryville; and the least local monthly amount was 2.66 inches, at Leeper. The largest amount that fell in any twenty-four consecutive hours was 6.25 inches, at Maryville on the 1st, and the next largest amount was 4.83 inches, at Seligman on the 2d.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—8th, 15th, and 23d.

Hail, light without damage.—2d, 3d, 11th, 12th, 13th, 19th, 21st, 22d. Heavy, some slight damage, two miles south of Lamonte on the 12th, and four miles south of Aurora on the 22d.

Halos, lunar.—14th, 15th, 16th, and 17th.

Halos, solar.—3d, 4th, 5th, 6th, 10th, 11th, 13th, 15th, 16th, 17th, 19th, 20th, 21st, 22d, 23d, and 26th.

Thunderstorms.—1st, 2d, 3d, 7th, 11th, 12th, 13th, 14th, 15th, 18th, 19th, 20th, 22d, 24th, 27th, 28th, and 29th.

SPECIAL STORM NOTES.

June 12.—Thunderstorms attended by rather severe local squalls occurred about daylight in portions of Marion, Ralls and Monroe Counties. Some slight damage was reported in the vicinity of Paris in Monroe County; at Center in the vicinity of New London and Saverton and at the Atlas Portland Cement Company plant, a few miles south of Hannibal. In Marion County the damage was somewhat more pronounced. There was no certain evidence that the damage was caused by a tornado. The loss in money value was not given.

In the late afternoon of this date, June 12, a strip of territory about five miles wide in the Halltown and Paris Springs communities, near the Greene-Lawrence county line, was visited with damaging hail. Roofs were damaged, window panes broken, and crops on a number of farms totally ruined. Some stones were as large as hen eggs, falling thick and fast. Damage to crops about $2,000; other property, $200.

On the same date and about the same time heavy hail damage occurred at Carl Junction, Jasper County, about 45 miles west. Large slugs of ice weighing from one-half to one pound and from 6 to 15 inches in circumference fell over a strip from one to two miles in width. Plate glass windows and all kinds of roofs were damaged. In a few instances the hailstones crashed through shingled roofs, through lath and plaster ceilings and landed on the floor. The reports state further, "had the hail been heavy and continuous it would have annihilated almost everything." Damage to crops about $[illegible]0; other damage $3,000.

June 19.—What probably was a severe squall-wind from the northwest caused damage over a narrow strip of territory from north of Stewartsville to Kingston, in Dekalb, Clinton, and Caldwell Counties, in the late afternoon or early night. North of Stewartsville there was some evidence of tornado action, a 100-foot gap being torn through a hedge row, a house lifted from its foundation and set again with edge in basement, a truck loaded with hogs traveling on the highway lifted and deposited in a ditch. There was damage around Osborn and Cameron, and as far southeast as Kingston. Small trees were broken and windmills wrecked. Damage estimated at $2000.

June 20.—Hail and excessive rain in Buchanan County caused heavy loss to crops, bridges, etc. Around Dekalb the hail stripped young fruit trees, and ruined considerable wheat, oats, and corn; 100 homes in South St. Joseph were flooded. A number of bridges were washed out or undermined. Hail damage about $2,000; flood about $2,000.

Lightning.—During a thunderstorm at 10 p. m. of the 19th, lightning burned out one of the generators at the Columbia, Mo., power house, resulting $20,000 damage. A horse was killed in a pasture near Riggs, Boone County; loss $50.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	29.93	85	69	326	73	4,214	5.9	27	nw.	20
Hannibal	29.93	79	..	....	..	5,227	7.3	37	sw.	20
Kansas City	29.92	78	59	324	73	5,943	8.3	39	nw.	19
St. Joseph	29.91	82	58	278	62	5,000	6.9	35	nw.	19
St. Louis	29.95	75	60	288	64	6,992	9.7	32	sw.	11
Springfield	29.96	88	65	314	71	5,729	8.0	28	w.	1
Cairo, Ill.	29.96	79	63	....	..	4,928	6.8	38	nw.	12
Keokuk, Iowa	29.95	76	58	311	69	4,472	6.2	20	s.	17

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JUNE.

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	72.6	−0.5	103	37	6.20	+1.26	....	0	7	..	..	..
1889	70.7	−2.4	100	38	4.66	−0.28	....	0	6	..	..	..
1890	77.2	+4.1	105	50	2.59	−2.35	....	0	5	..	..	..
1891	73.3	+0.2	103	46	6.94	+2.00	....	0	13	..	..	..
1892	74.5	+1.4	100	38	3.18	−1.76	4.25	0	7	15	9	6
1893	72.6	−0.5	98	42	4.61	−0.31	3.60	0	9	12	12	6
1894	74.5	+1.4	105	30	3.92	−1.02	3.48	0	7	16	11	3
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	0	10	12	11	7
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	0	9	12	11	7
1897	73.6	+0.5	102	38	6.18	+1.24	6.40	0	12	9	14	7
1898	75.3	+2.2	100	42	5.88	+0.94	6.05	0	9	13	12	5
1899	74.3	+1.2	101	42	3.87	−1.07	4.48	0	9	15	10	5
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	0	10	12	12	6
1901	77.9	+4.8	110	40	2.13	−2.81	2.99	0	5	18	10	2
1902	70.9	−2.2	100	37	6.57	+1.63	6.08	0	12	11	10	9
1903	67.3	−4.2	95	36	3.25	−1.69	4.90	0	9	15	9	6
1904	70.5	−2.6	93	45	6.42	+1.58	5.41	0	11	12	12	6
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	0	7	15	10	5
1906	72.7	−0.4	101	40	4.95	+0.01	4.07	0	10	15	9	6
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	0	11	14	10	6
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	0	11	13	10	7
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	0	11	11	13	6
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	0	8	16	7	7
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	0	6	18	8	4
1912	69.5	−3.6	100	42	4.78	−0.16	5.60	0	9	14	8	8
1913	75.4	+2.6	107	33	2.57	−2.22	3.05	0	6	18	8	4
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	0	5	18	7	5
1915	70.8	−2.5	98	38	6.51	+1.87	4.86	0	12	11	10	9
1916	70.0	−3.2	100	42	6.99	+1.17	6.75	0	10	14	9	7
1917	71.0	−2.3	103	35	3.78	−0.59	4.19	0	8	19	7	4
1918	77.2	+3.9	110	48	3.15	−1.36	4.28	0	7	17	8	5
1919	75.0	+1.9	104	44	5.59	+1.11	4.21	0	11	14	10	6
1920	72.7	−0.5	104	41	2.35	−2.16	3.74	0	6	18	7	5
1921	76.6	+3.4	105	44	5.71	+1.15	4.14	0	12	12	10	8
1922	76.5	+3.1	108	43	1.66	−2.89	2.30	0	5	19	8	3
1923	73.5	+0.2	103	45	5.48	+1.02	4.42	0	11	14	9	7
1924	72.5	−1.0	101	38	7.39	+2.72	4.39	0	14	12	12	6
1925	76.5	+3.0	103	46	6.10	+1.43	8.14	0	9	15	10	5
1926	70.9	−2.6	101	37	3.62	−1.05	2.94	0	8	15	9	6
1927	70.3	−3.2	99	41	5.77	+1.10	5.23	0	10	15	7	8
1928	67.7	−5.8	91	40	11.17	+6.50	7.34	0	15	8	11	11
1929	71.3	−1.9	99	39	5.77	+0.90	6.25	0	10	16	8	6

Climatological Data for June, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	71.2	− 2.0	95	30	47	3†	31	6.22	+1.03	1.47	0	14	18	1	11	se.	O. K. Benecke
Clifton Hill	Randolph	731	29	69.6	− 3.4	94	30	43	3	29	4.01	−0.33	1.28	0	10	18	8	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	71.2	− 1.6	92	30	48	3	27	7.49	+2.73	1.75	0	14	11	10	9	s.	U. S. Weather Bureau
Downing	Schuyler	876	7	69.6	.....	97	30	40	3	35	5.99	+1.61	2.66	0	11	18	8	4	s.	James Taylor
Fayette	Howard	661	48	69.8	− 3.5	93	11†	42	4	35	4.03	−0.51	0.90	0	12	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	71.2	− 2.4	93	30	44	4	29	8.78	+4.58	3.40	0	15	17	9	4	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	4.83	+0.92	1.47	0	9	17	3	10	se.	J. W. Pulliam
Hannibal	Marion	534	36	70.6	− 1.9	93	30	46	4	27	4.80	+0.90	1.70	0	11	13	7	10	s.	U. S. Weather Bureau
Jefferson City	Cole	557	40	73.4	− 0.6	98	10	47	3†	41	5.94	+1.92	2.50	0	13	14	10	6	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	69.8	− 2.4	93	11	44	4	31	5.34	+1.07	2.00	0	9	16	7	7	w.	Prof. J. S. Stokes
Louisiana	Pike	469	34	71.4	− 0.7	95	30	42	4	33	6.55	+2.60	2.00	0	10	21	5	4	s.	Stark Bros. Nurseries
Macon	Macon	875	29	70.4	− 2.6	95	11†	44	3	31	4.95	+0.54	1.55	0	12	14	9	7	se.	W. C. Brown
Mexico	Audrain	800	39	70.6	− 3.1	96	30	44	4	34	8.60	+3.82	1.81	0	12	26	0	4	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	4.60	.....	1.70	0	8	16	8	6	ne.	J. S. Conway
St. Charles	St. Charles	456	40	72.4	− 1.8	95	30	47	3†	28	4.33	+0.37	1.32	0	6	12	12	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	72.8	− 2.2	93	30	47	3	26	3.65	−0.17	1.28	0	10	15	7	8	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	72.0	− 2.9	93	30	48	3	26	2.98	−0.78	1.01	0	9	20	6	4	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	4.86	+0.15	1.12	0	14	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	70.2	− 3.0	94	30	42	3†	34	5.13	+1.03	1.75	0	11	15	11	4	s.	Frank Hall
Unionville	Putnam	1,062	35	70.0	− 1.8	95	17†	42	3†	38	4.93	+0.25	3.15	0	7	17	7	6	sw.	Geo. W. Davis
Warrenton	Warren	816	46	71.6	− 2.0	93	18†	46	3†	29	3.14	−0.82	0.72	0	8	14	9	7	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	70.0	− 2.5	94	30	43	3	28	3.91	−0.22	1.43	0	11	9	7	14	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	70.9	− 2.2	98	10	40	3	41	5.23	+0.98	3.40	0	11	16	7	7	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	74.8	.....	94	1†	52	4	32	5.09	.....	2.00	0	6	18	8	4	s.	Jeff. King
Caruthersville	Pemiscot	265	32	77.8	0.0	99	30	57	3	25	3.04	−0.94	0.79	0	7	17	8	5	s.	Sam Smith
Doniphan	Ripley	344	24	73.0	− 1.8	96	30	44	4	35	2.84	−1.54	1.35	0	7	10	12	8	sw.	W.W. Martin
Jackson	Cape Girardeau	428	37	69.5	− 4.6	94	30	43	4†	33	5.81	+1.52	2.74	0	9	9	7	14	s.	John G. Putz
Marble Hill	Bollinger	470	33	71.6	− 2.3	95	30	44	4	36	6.94	+2.77	2.60	0	9	17	10	3	w.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	3.40	−0.48	2.04	0	4	17	10	3	sw.	John A. Spence
Poplar Bluff	Butler	339	24	73.3	− 2.1	96	22	46	4	34	2.68	−2.34	1.32	0	7	23	6	1	s.	J. H. Wolpers
Sikeston	Scott.	318	23	75.5	+ 1.0	98	30	48	4	34	3.47	−0.41	1.17	0	5	18	5	7	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	74.4	− 1.9	94	30	53	3	24	3.76	−0.07	1.60	0	7	8	10	12	s.	U. S. Weather Bureau
Section means and	extremes	....	..	73.7	− 1.7	99	30	43	4†	36	4.11	−0.19	2.74	0	7	15	9	6	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	68.2	− 3.8	92	30	40	4	34	5.16	+0.58	1.85	0	8	27	1	2	sw.	Arcadia College
Aurora	Lawrence	1,370	38	71.6	− 2.2	90	11†	47	4	26	4.54	−0.44	1.00	0	12	15	8	7	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	71.9	− 0.8	94	30	45	4	31	4.29	−0.24	2.14	0	5	16	10	4	n.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	73.4	+ 0.4	93	18†	49	4	33	7.65	+2.38	2.05	0	10	16	10	4	s.	H. E. Dean
Eldon	Miller	934	32	70.3°	− 2.9	94	30	41	3	36	5.58	+1.27	1.43	0	8	8°	16°	3°	sw.	E. H. Shepherd
Farmington	St. Francois	918	17	70.6	− 2.0	93	29†	43	4	39	4.58	−0.05	1.16	0	9	13	14	3	sw.	Robert Forsyth
Goodland	Iron	1,000	34	68.8	− 3.3	94	30	39	4	41	5.99	+1.89	1.86	0	8	22	3	5	s.	F. M. Adams
Greenville	Wayne	381	6	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	6.14	.....	1.95	0	10	17	8	5	w.	A. W. Madison
Koshkonong	Oregon	958	27	73.2[b]	− 1.1	93	30	48	4	27	5.12	+0.64	1.10	0	9	14[b]	7[b]	7[b]	se.	R. M. Hitt
Lebanon	Laclede	1,265	40	69 2	− 3.9	92	29†	40	4	35	3.73	−1.20	0.96	0	10	17	6	7	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	72.2	− 1.8	91	18†	48	3	28	5.28	+0.48	1.80	0	8	19	6	5	sw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	70.4°	− 1.2	91	28†	42	4	31	4.48	−0.08	1.50	0	7	16	9	5	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	72.5	− 1.4	91	11†	46	4	32	8.50	+3.07	2.73	0	12	19	7	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	70.4	− 2.4	91	30	45	4	31	6.89	+2.76	1.95	0	10	7	12	11	s.	F. H. Lane
Salem(near)	Dent	1,173	24	69.4	− 3.4	91	30	41	4	36	6.73	+2.43	3.27	0	8	16	8	6	sw.	A. C. Leech
Seligman	Barry	1,542	26	71.8	− 0.7	90	28	46	4	29	9.81	+6.28	4.83	0	13	15	11	4	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	70.7	− 1.3	92	29	40	4	35	5.00	+0.37	1.90	0	6	17	10	3	s.	Ira H. Hailey
Springfield	Greene	1,324	40	71.0	− 1.5	89	11	48	4	25	4.78	+0.10	1.53	0	11	20	7	3	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	70.9	− 2.0	94	30	39	4	41	5.79	+1.19	4.83	0	9	16	9	5	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	71.7	− 3.1	92	11†	47	4	30	5.70	+0.71	1.89	0	9	13	14	3	sw.	W. G. Bigelow
Clinton	Henry	765	35	74.2	+ 0.8	96	29	49	4	30	7.46	+2.73	1.92	0	7	19	5	6	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	70.2	− 3.2	92	30	47	3	34	9.19	+4.73	1.82	0	10	4	8	18	s.	John H. Patterson
Lamar	Barton	980	41	72.4	− 2.0	90	11†	50	4	26	5.63	+0.67	2.48	0	11	15	10	5	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	72.4	− 1.9	95	30	46	4	32	7.49	+3.00	2.15	0	11	23	4	3	s.	J. E. Wheeler
Marshall	Saline	779	39	.. ..	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Dr. W. H. Black
Nevada	Vernon	862	35	72.0	− 1.6	90	30	48	4	27	4.82	−0.29	1.80	0	9	17	5	8	s.	George A. Kaupp
Warrensburg	Johnson	878	41	70.0°	− 4.2	[92	30	47	4	32	8.09	+3.33	2.28	0	10	12°	11°	4°	se.	E. A. Markey
Warsaw	Benton	687	28	72.0	− 1.7	93	29†	44	4	35	5.57	+0.40	1.27	0	10	13	13	4	s.	Everett Martin
Section means and	extremes	.....	..	71.9	− 2.1	96	29	44	4	35	6.74	+1.91	2.48	0	10	15	9	6	s.	
Northwest Plateau																				
Bethany	Harrison	916	36	69.8	− 2.6	94	11	43	4	37	9.48	+5.00	5.86	0	12	13	11	6	s.	M. H. Moulton
Chillicothe	Livingston	779	19	69.8	− 4.4	95	11	42	3†	35	6 92	+1.85	1.57	0	14	19	6	5	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	71.4	− 0.2	94	11†	45	3	31	9.05	+4.50	3.86	0	11	14	9	7	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	71.0[b]	.....	93	20	45	4	40	8.13	+3.02	3.27	0	13	19	2	9	s.	Fred L Stiff
Grant City	Worth	1,134	24	69.8	− 1.5	93	30	45	3	31	5.08	+0.53	2.20	0	9	14	13	3	sw.	W. P. Spillman
Kansas City	Jackson	963	39	72.4	− 1.2	93	30	47	2	23	8.09	+3.10	3.92	0	11	13	11	6	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	67.8	− 4.6	92	11†	43	3†	30	10.26	+5.90	4.00	0	13	18	3	9	sw.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	11.27	.....	4.65	0	13	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	72.8	0.0	97	16	48	3†	27	6.24	+1.47	1.10	0	14	17	9	4	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	69.4	− 0.2	96	30	45	3†	34	11.42	+6.79	6.25	0	15	14	10	6	se.	J. R. Brink
Oregon	Holt	1,048	72	72.8	+ 0.5	96	15	45	3	31	9.67	+4.94	3.52	0	10	18	5	7	sw.	Mina Wright
St. Joseph	Buchanan	967	20	71.4	− 2.3	95	15	46	2	30	6.71	+1.70	2.16	0	12	17	8	5	se.	U. S. Weather Bureau
Tarkio	Atchison	916	25	68.5	− 4.2	95	30	45	3	33	5.87	+1.06	1.93	0	10	16	7	7	se.	Albert Volker
Trenton	Grundy	822	32	71.0	− 1.6	95	11†	45	3†	33	6.08	+1.78	2.73	0	13	22	4	4	s.	W. H. Estes
Section means and	extremes	.....	..	70.6	− 1.9	97	16	42	3†	40	8.16	+3.20	6.25	0	12	16	8	6	sw.	
State means and	extremes	.....	..	71.3	− 1.9	99	30	39	4	41	5.77	+0.90	6.25	0	10	16	8	6	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for June, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Total.
Northeast Plain																																	
Boonville‖	Missouri	....	.59	.40	....	....	....	.02	.38	....	....	....	....	2.70	T.	.12	....	....	....	.37	.38	....	.42	.38	.06	....	....	T.	T.	....	....	....	5.82
Brunswick‖	Grand	.24	1.47	.47	....	....	....	....	.15	....	....	....	.07	.15	.10	....	....	....	....	1.40	.84	....	.40	.38	.40	....	....	.08	.07	....	....	....	6.22
Clifton Hill	Chariton	....	....	....	....	....	....	....	....	....	....	....	.25	.04	T.	....	....	....	.06	.23	1.28	....	.43	....	....	....	....	....	.30	....	....	....	4.61
Columbia***	Missouri	1.15	....	.25	....	....	....	.02	....	....	....	T.	1.74	.01	.07	....	....	....	.94	....	.60	....	.11	....	1.26	....	....	T.	.08	....	....	....	7.49
Downing	Mississippi	.67	.35	.06	....	....	.65	.91	.04	....	....	....	.02	.03	....	.03	....	....	....	.51	.05	....	.07	....	.11	....	.06	....	....	....	....	....	5.99
Fayette‖‖	Missouri	2.66	.90	....	....	....	....	1.55	....	....	....	....	.76	....	....	.05	....	....	.84	.60	....	....	.27	.17	.02	....	....	.02	T	....	....	....	4.03
Fulton‖‖	do	.90	.36	....	....	....	....	.02	.02	....	....	....	.03	3.40	.03	.04	....	....	....	.41	.14	....	.07	....	.15	.03	....	.03	.28	....	....	....	8.78
Gorin	Mississippi	.18	3.13	T.	....	....	....	.75	.11	....	....	....	.69	.01	....	T.	....	....	1.47	....	.06	....	.08	....	.26	....	....	.05	....	....	....	....	4.83
Hannibal***	do	1.16	.60	....	....	....	1.01	....	....	....	....	....	.14	....	....	....	....	....	1.15	.55	.08	....	.18	....	.37	....	....	.10	....	....	....	....	4.80
Hermann‖‖	do	1.13	.22	....	....	T.	T.	.32	....	....	....	....	.69	.01	....	T.	....	....	....	1.11	.01	....	....	....	.04	.68	....	....	.14	....	....	....	5.20
Jefferson City‖‖	Missouri	.25	.70	.10	....	....	....	.83	.05	....	....	....	.02	1.27	....	....	T.	....	....	1.42	.15	.03	....	.04	.03	.06	....	....	....	....	....	....	5.94
Kirksville	do	.35	.33	.42	....	....	....	.43	.15	....	.03	....	....	2.50	....	....	....	....	....	1.42	.15	.03	....	.04	.03	.06	....	....	....	....	....	....	5.34
Louisiana	Mississippi	2.00	.67	....	....	....	....	.23	....	....	....	....	....	.15	....	....	....	....	.84	.67	.10	....	.50	....	....	....	.18	....	....	....	....	....	6.55
Lucerne‖‖	do	2.00	.35	....	....	....	.60	....	....	....	....	....	.70	.50	....	....	....	....	.60	....	.50	....	....	....	.90	.20	....	.20	....	....	....	....	6.65
Macon ‖	Grand	1.61	.94	.22	....	....	....	.12	T.	....	....	....	....	....	....	....	.14	....	....	.08	.10	....	.63	.20	.69	....	....	.11	.25	....	....	....	5.09
Mexico ‖	Chariton	.15	1.55	.05	....	....	....	....	....	....	....	....	.42	.13	....	....	....	....	....	.25	.26	....	.51	.12	.20	....	....	.26	1.05	....	....	....	4.95
Milan‖	Mississippi	1.27	.83	.05	....	....	....	.23	.50	....	....	....	.06	1.07	....	....	....	....	....	1.55	.62	....	.18	....	1.81	....	....	....	.43	....	....	....	8.60
Monroe City	Grand	2.00	2.05	.33	....	....	....	....	.36	....	....	....	.12	....	....	....	....	....	....	.60	.12	....	....	.43	.22	....	....	.20	.10	....	....	....	6.53
Pacific‖	Mississippi	.68	.67	....	....	....	....	.19	....	....	....	....	.29	.52	....	....	....	....	....	1.70	.29	....	....	T.	....	....	....	.26	....	....	....	....	4.60
St. Charles	Meramec	1.69	.69	....	....	....	....	1.55	.80	....	....	....	.01	.73	....	.15	....	....	....	.17	....	....	....	....	....	.70	....	....	....	....	....	....	6.49
St. Louis (1)***	Missouri	.56	....	....	....	....	....	.65	....	....	....	....	.24	.49	T.	....	....	....	....	1.32	....	....	....	....	1.07	....	....	....	....	....	....	....	4.33
St. Louis (2)*	Mississippi	.24	.23	....	....	....	T.	1.28	.03	....	....	....	.77	.01	.17	.10	....	....	....	.01	....	....	....	....	.81	....	....	T.	....	....	....	....	3.65
Shelbina ‖‖	do	.20	.05	....	....	....	....	.71	.03	....	....	....	1.01	....	.25	.07	....	....	....	.03	....	....	....	....	.63	....	....	....	....	....	....	....	2.98
Steffenville	do	.36	1.12	.02	....	....	....	.20	.68	....	....	....	.20	.16	....	....	.02	....	....	.92	.18	....	.63	....	.11	....	....	.20	.06	....	....	....	4.86
Union‖	do	.20	.45	....	....	....	....	.25	....	....	....	....	.18	.80	....	....	....	....	....	.65	.05	....	.30	....	.55	....	....	.65	.10	....	....	....	5.13
Unionville	Meramec	1.75	.45	....	....	....	....	....	....	....	....	....	.01	.82	....	....	....	....	....	.28	....	....	....	....	.70	.82	....	....	....	....	....	....	5.67
Warrenton	Chariton	1.28	.45	.15	....	....	....	1.12	.04	....	....	....	....	....	....	....	....	....	....	.20	.10	....	.23	....	T.	....	....	.20	1.05	....	....	....	4.93
Keokuk, Ia.***	Mississippi	2.70	.45	....	....	....	....	....	....	....	....	....	.51	.46	....	....	....	....	....	.24	T.	....	....	....	.72	....	....	....	....	....	....	....	3.14
	do	.33	.14	....	....	....	....	.58	.16	....	....	....	.50	.06	....	T.	....	....	1.31	.12	T.	....	.01	....	.24	....	.03	.01	....	....	....	....	3.91
	do	1.24	.21	....	T.	....	....	.18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Southeast Lowlands																																	
Campbell‖‖	St. Francis	....	....	.15	....	....	....	....	.67	....	....	....	.24	1.65	.38	....	....	....	....	....	....	....	....	....	....	2.00	....	....	....	....	....	....	5.09
Cape Girardeau‖	Mississippi	....	.74	....	....	....	....	....	.33	.12	....	....	....	2.07	.14	.01	....	....	....	....	....	....	....	....	....	.35	....	....	....	....	....	....	3.76
Caruthersville ‖	do	T.	.60	.30	....	....	....	.47	....	....	....	....	.36	.50	....	....	....	....	....	.02	....	....	....	....	.79	....	....	....	....	....	....	....	3.04
Dexter‖	St. Francis	....	.10	....	....	....	....	....	.26	.05	....	....	....	1.75	.30	....	....	....	....	....	....	....	....	.07	....	.38	....	....	....	.30	....	....	3.21
Doniphan	Black	T.	.32	.12	....	....	....	.70	....	....	.10	....	....	1.35	T.	....	....	....	....	....	....	....	....	.05	....	.20	....	....	....	....	....	....	2.84
Jackson	Mississippi	.03	.17	....	....	....	....	.10	.58	....	....	....	1.49	2.74	....	.06	....	....	....	.03	....	....	....	....	.61	....	....	....	....	....	....	....	5.81
Marble Hill	Mississippi	.08	.54	....	....	....	....	.12	.40	....	....	....	2.60	2.20	.08	....	....	....	....	....	.10	....	....	....	.82	....	....	....	....	....	....	....	6.94
Morehouse	do	T.	.64	....	....	....	....	.05	.67	....	....	T.	....	2.04	....	....	....	....	....	....	T	....	....	....	T.	....	....	....	T.	....	....	....	3.40
New Madrid‖	do	....	.10	....	....	....	....	....	.36	....	....	....	.02	1.10	.50	.02	....	....	....	....	.37	.03	....	....	....	.30	....	....	....	.06	....	....	2.86
Poplar Bluff‖‖	Black	....	....	.27	....	....	....	....	.60	....	....	....	.03	1.32	.15	....	....	....	....	....	....	....	....	....	....	.09	....	....	....	.22	....	....	2.68
Sikeston‖	Mississippi	.84	.30	....	....	....	....	....	.27	....	....	....	....	1.17	.89	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.47
Cairo, Ill.***	do	1.16	.22	....	....	....	....	.11	.45	....	....	T	T.	1.60	....	T.	....	....	....	T.	.11	....	T.	....	.11	....	....	....	....	....	....	....	3.76
Ozark Plateau																																	
Arcadia ‖	St. Francis	T.	1.34	T.	....	....	....	.47	1.15	.01	....	....	T.	1.85	.20	.12	.02	....	....	T.	....	....	....	....	T.	....	....	....	....	....	....	....	5.16
Aurora	Neosho	.04	.59	.62	....	....	.07	1.00	....	....	.15	.37	.37	....	....	....	....	....	....	.55	.25	....	.22	..	.31	....	....	....	....	....	....	....	4.54
Birchtree (near)	Black	....	.70	....	....	....	....	.35	.45	....	....	....	....	2.14	.65	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.29
Bolivar	Osage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Caplinger Mills	Osage	....	.10	.55	....	....	....	.70	.02	....	....	....	.05	.65	....	....	....	....	....	T.	.63	....	3.10	....	.12	....	....	....	....	....	....	....	5.32
Dean	Neosho	.12	1.42	1.14	....	.64	T.	2.05	....	....	....	T.	T.	.28	.22	....	....	....	....	.48	.68	.62	T.	....	T.	....	....	....	....	....	....	....	7.65
Eldon‖‖	Missouri	.59	1.43	1.10	....	....	....	.76	.16	....	....	....	.25	.90	.02	.04	....	....	....	T.	....	....	....	....	.67	....	....	....	....	....	....	....	5.58
Farmington	St. Francis	.62	1.16	....	....	....	....	.26	.10	....	....	....	....	2.50	.12	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.58
Fredericktown‖‖	do	....	.58	....	....	....	....	.15	.10	....	....	....	....	1.12	....	....	....	....	....	.10	.05	....	....	....	....	....	....	....	....	....	....	....	3.50
Galena‖‖	White	....	.89	.62	....	....	.10	.53	1.32	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.12	....	....	....	....	....	....	....	4.73
Goodland	Black	.50	.50	....	....	....	....	.45	.78	....	....	....	.88	.90	1.86	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5.99
Greenville	St. Francis	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hailey	White	1.95	.48	.68	....	.44	.18	.75	....	....	....	....	....	.65	....	....	....	....	....	.55	.11	....	....	.35	....	....	....	....	....	....	....	....	6.14
Koshkonong	Black	.53	.24	.35	....	....	....	1.10	.65	....	.17	....	.79	.43	....	....	....	....	....	....	....	....	....	.86	....	....	....	....	....	....	....	....	5.12
Lebanon ‖‖	Osage	.96	T.	.30	....	....	....	.02	.80	....	....	....	....	.22	....	.19	....	....	....	.20	T.	....	....	.20	.18	.66	....	....	T.	....	....	....	3.73
Leeper‖‖	Black	....	.08	.17	....	....	....	....	.51	....	....	....	....	1.90	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.66
Lockwood	Osage	....	.25	....	....	....	T.	1.80	....	....	....	....	.24	.44	....	....	....	....	....	.53	.92	....	.30	....	.80	....	....	....	....	....	....	....	5.28
Mountain Grove‖	White	T.	T.	.03	....	....	....	....	1.23	....	....	....	....	1.50	....	1.25	....	....	....	.03	....	....	....	.42	T.	.02	....	....	....	....	....	....	4.48
Neosho	Neosho	....	1.30	2.73	....	.35	.03	.67	....	....	....	T	.05	T.	.25	....	....	....	....	2.28	.52	.24	.05	T.	.03	....	....	....	....	....	....	....	8.50
Owensville ‖	Gasconade	.40	....	....	....	....	....	.90	.80	....	....	....	....	1.14	....	....	....	....	....	.21	....	....	....	....	.75	.27	....	....	....	....	....	....	4.47
Ozark Beach‖‖	White	....	.95	.54	....	....	.12	.36	1.74	....	....	....	....	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.91
Rolla ‖	Meramec	.13	1.95	.38	....	....	....	1.20	.35	....	....	....	....	.80	....	.08	....	....	....	.17	....	....	....	.92	.17	....	....	....	....	....	....	....	6.89
Salem (near)	do	....	3.27	1.62	....	....	....	....	.40	....	....	....	.13	.79	....	....	....	....	....	.17	....	....	....	....	.50	1.33	....	....	....	....	....	....	6.73
Seligman	Neosho	....	4.83	.55	....	.53	....	1.69	....	....	....	....	.04	.19	.07	....	....	....	....	1.56	.96	....	.08	....	1.52	....	....	....	....	....	....	....	9.81
Seymour (near)	White	....	....	.18	....	....	T.	.73	.70	....	....	T.	.24	1.90	....	....	....	....	....	....	T.	....	1.25	....	T.	....	....	....	....	....	....	....	5.00
Springfield***	do	.11	.02	.28	....	....	.01	1.52	.01	....	....	T.	.88	....	....	....	....	....	....	.20	.22	....	1.07	T.	.46	....	....	....	....	....	....	....	4.78
Steelville‖	Meramec	.24	.69	....	....	....	....	1.65	.50	....	....	....	....	1.16	....	....	....	....	....	.19	....	....	....	....	....	.88	.71	....	....	....	....	....	6.02
Stover ‖	Missouri	....	.94	1.56	....	....	....	.10	....	....	....	....	.34	1.16	....	.04	....	....	....	.78	.88	....	....	....	.38	....	....	....	....	....	....	....	6.18
Tuscumbia ‖ ‖	Osage	.17	.77	1.39	....	....	....	.28	.08	....	....	....	.06	.31	....	.05	....	....	....	.19	.09	....	....	....	.05	....	.05	....	....	....	....	....	3.49
Williamsville‖‖	Black	....	....	.41	....	....	....	....	.90	....	....	....	.23	1.79	.05	.02	....	....	....	....	....	....	....	....	....	....	....	....	.05	....	....	....	3.45
Willow Sprgs. ‖ (near)	White	.06	.03	.03	....	....	....	....	1.95	....	....	....	....	2.28	....	.32	....	....	....	....	....	....	....	....	.60	.34	.02	....	....	....	....	....	5.63
Southwest Plain																																	
Appleton City	Osage	T.	.05	.69	....	....	.01	.01	T.	....	....	....	.74	.88	....	....	....	....	....	1.89	.68	....	.75	....	T.	....	....	....	....	....	....	....	5.70
Clinton	Osage	.68	....	1.00	....	....	.10	....	....	....	....	....	1.86	....	....	....	....	....	....	.82	1.08	....	1.92	....	....	....	....	....	....	....	....	....	7.46
Concordia‖	Missouri	....	1.29	1.09	....	....	....	....	....	....	....	....	....	.90	....	....	....	....	....	.74	.68	....	....	2.18	....	....	....	....	....	....	....	....	6.88
Harrisonville‖	Osage	.13	1.00	1.29	....	....	....	....	.28	....	....	....	.57	1.82	....	....	....	....	....	1.67	1.01	....	....	1.40	....	....	....	.02	....	....	....	....	9.19
Joplin ‖	Neosho	.42	.41	.90	....	.18	.03	.70	....	....	....	....	.95	....	....	....	....	....	....	1.56	.96	....	.08	....	1.52	....	....	....	....	....	....	....	7.71
Lamar‖	do	T.	.17	.65	....	....	....	.65	.48	....	....	....	....	.27	....	....	....	....	....	2.48	.34	.30	....	.08	.19	.02	....	....	....	....	....	....	5.63
Lamonte	Missouri	1.00	.60	1.50	....	....	.03	.02	....	....	....	....	2.15	.04	....	....	....	....	....	.25	1.05	....	.75	....	....	.10	....	....	....	....	....	....	7.49
Marshall	do	.20	.55	.60	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nevada	Osage	....	.42	.60	....	....	T.	.27	....	....	....	....	.46	.39	....	....	....	....	....	1.80	.68	....	.11	....	.09	....	....	....	....	....	....	....	4.82
Osceola‖	do	....	.06	.80	....	....	....	.06	.20	....	....	....	.19	.36	....	....	....	....	....	.88	.79	....	.15	1.22	.01	....	....	....	....	....	....	....	4.72
Warrensburg	Missouri	....	1.28	1.19	....	....	T.	.03	....	....	....	....	2.28	....	....	.03	....	....	....	.25	1.98	....	.92	....	.04	....	.09	....	....	....	....	....	8.09
Warsaw	Osage	....	.58	.95	....	....	.08	.11	.42	....	....	....	1.27	.67	....	....	....	....	....	.42	.60	....	.47	....	....	....	....	....	....	....	....	....	5.57
Waverly ‖	Missouri	.31	.97	1.14	....	....	....	....	T.	....	....	....	T.	.16	T.	....	T.	....	....	1.14	.65	....	.32	.31	.10	....	....	T.	T.	....	....	....	5.10
Northwest Plateau																																	
Albany‖	Grand	2.49	....	.85	....	....	....	....	....	....	.42	....	....	.05	....	T.	....	....	....	.12	.82	....	....	.37	.78	....	T.	....	.40	....	....	....	6.13
Bethany	do	5.86	.04	.83	T.	T.	.10	.11	.08	....	....	....	....	.34	.01	.03	....	T.	....	....	.12	....	1.52	....	.05	....	T	.60	....	....	....	....	9.48
Chillicothe‖	do	.15	1.57	.86	....	....	....	.06	.03	....	....	....	....	.20	....	....	....	....	....	1.57	1.02	....	.37	.55	.09	....	....	.27	....	....	....	....	6.92
Conception	Missouri	3.86	.16	.91	....	....	.06	.10	....	....	....	....	....	.06	....	....	....	....	.05	....	.87	....	2.16	....	.10	....	....	.58	....	....	....	....	9.05
Edgerton	do	3.27	.13	.98	.01	....	.10	1.09	T.	....	....	....	....	.07	....	T.	....	....	.10	....	.40	....	1.65	.01	.15	....	....	.18	....	....	....	....	8.13
Gallatin ‖	Grand	4.93	.74	.85	....	....	....	.26	....	....	....	....	.07	....	T.	....	....	....	....	....	.14	.38	....	.39	.81	.63	....	....	.33	....	....	....	9.53
Grant City	do	2.20	.38	.52	T.	T.	.04	.05	....	....	....	....	T.	....	.05	....	....	....	T.	....	.26	....	1.07	....	T.	....	....	.51	....	....	....	....	5.08
Kansas City***	Missouri	1.36	.90	....	....	....	.04	.03	T.	....	....	T.	.16	....	T.	....	....	....	.16	....	1.42	....	3.92	.01	.02	....	....	.07	....	....	....	....	8.09
Kidder ‖	Grand	4.00	.55	1.15	....	....	....	.11	.05	....	....	....	T.	.04	.14	....	....	....	....	.54	1.85	....	.58	.80	.15	....	....	.30	....	....	....	....	10.26
King City	Missouri	4.65	.73	1.05	....	....	.10	.07	....	....	....	....	.22	....	.09	.02	....	....	.09	....	1.26	....	2.66	....	.04	....	....	.29	....	....	....	....	11.27
Lexington	do	.80	.75	1.00	....	....	....	.05	.11	....	....	....	.15	.14	.05	....	....	....	....	....	.25	1.05	....	.59	1.10	.05	....	....	.15	....	....	....	6.24
Maryville ‖	do	6.25	.08	1.24	....	....	....	.11	.47	....	....	....	.17	.03	.13	....	....	....	....	.12	.02	.61	....	.89	.81	.21	....	....	.28	....	....	....	11.42
Oregon	do	2.36	T.	1.17	....	....	.31	.03	....	....	....	....	.13	....	....	....	....	....	....	1.64	....	.18	....	3.52	....	.21	....	....	.12	....	....	....	9.67
St. Joseph***	do	.48	1.30	....	T.	....	.37	1.28	....	....	....	T.	.04	....	....	T.	....	....	....	T	.02	.45	T.	2.16	.02	.52	....	.06	.01	....	....	....	6.71
Tarkio	do	1.93	.42	....	....	....	.36	....	....	....	....	....	.10	....	....	....	....	....	.42	....	.50	....	1.81	.03	.20	....	....	.10	....	....	....	....	5.87
Trenton	Grand	2.73	.82	.52	....	....	.02	.02	.02	....	....	....	.04	....	....	....	....	....	.32	....	.12	....	.98	....	.01	....	....	.42	.06	....	....	....	6.08

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. T. Trace, or less than 0.01 inch.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. ** Precipitation in the next following measurement; separate dates of fall not recorded. *** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for June, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	83	57	68	73	75	79	76	80	82	88	93	74	70	84	87	87	90	92	91	81	82	70	84	76	82	84	85	83	92	95	..	81.4
	Minimum	65	55	47	47	52	57	60	60	60	62	62	66	56	55	63	68	72	72	62	63	57	62	62	66	59	60	63	64	61	69	..	60.9
Columbia	Maximum	85	65	64	70	74	79	76	75	78	85	92	78	69	80	87	87	89	91	86	78	83	75	81	76	78	83	84	82	88	92	..	80.3
	Minimum	65	50	48	48	59	56	64	61	58	61	73	63	57	54	66	70	71	68	68	63	59	64	63	65	59	59	64	66	61	76	..	62.0
Fayette	Maximum	85	69	67	73	77	80	77	79	81	87	93	74	71	84	81	87	90	92	90	81	84	75	83	78	82	83	83	85	90	93	..	81.8
	Minimum	66	56	44	42	52	51	56	57	53	56	62	67	56	49	56	65	67	68	66	64	53	60	57	64	53	54	60	64	56	64	..	57.9
Hannibal	Maximum	73	59	64	72	76	79	78	76	78	84	92	82	66	80	84	87	89	91	87	82	83	78	83	76	81	82	83	82	88	93	..	80.3
	Minimum	59	51	47	46	55	54	64	57	55	60	71	63	56	53	62	72	73	68	65	63	59	65	63	64	57	62	63	66	61	76	..	61.0
Jefferson City§§	Maximum	89	64	68	76	77	87	77	77	87	98	94	88	76	88	96	87	89	95	96	86	88	77	88	87	88	87	88	89	95	97	..	86.0
	Minimum	62	52	47	47	55	56	63	62	56	57	65	70	59	54	58	63	69	70	67	64	60	66	62	66	58	58	60	66	60	69	..	60.7
Kirksville	Maximum	76	58	65	72	78	77	75	75	79	88	93	86	70	82	84	83	89	88	82	81	84	83	80	75	80	81	83	81	88	92	..	80.3
	Minimum	56	47	46	44	56	54	61	56	57	58	71	64	53	51	60	69	69	72	64	65	53	62	61	62	55	58	61	60	59	73	..	59.2
Louisiana	Maximum	80	55	65	75	80	80	80	77	80	85	90	85	65	80	90	90	90	92	90	85	90	88	80	80	80	80	80	85	85	95	..	81.9
	Minimum	55	47	45	42	50	50	65	56	60	55	67	65	60	50	65	70	70	72	67	67	57	67	64	64	60	60	60	70	68	75	..	60.8
Macon§§	Maximum	71	55	69	74	78	80	78	80	81	88	95	77	71	81	86	89	90	91	91	80	85	76	84	78	80	84	85	82	90	95	..	81.5
	Minimum	66	51	44	45	53	55	61	56	54	57	66	64	55	52	60	67	68	73	67	63	56	62	60	64	54	60	60	63	60	67	..	59.4
Mexico§§	Maximum	75	56	65	73	73	81	84	80	79	91	93	77	69	81	88	89	91	92	86	82	85	77	82	79	79	85	85	83	89	96	..	81.5
	Minimum	65	53	45	44	53	53	62	57	54	57	63	66	59	51	59	68	69	71	65	64	57	63	61	63	56	59	61	63	59	69	..	59.6
St. Louis(1)	Maximum	78	65	65	73	74	83	81	74	76	83	91	81	74	79	88	87	88	92	87	82	85	83	86	77	79	83	86	86	90	93	..	81.6
	Minimum	65	50	47	52	60	64	65	61	57	62	66	64	60	58	62	71	70	73	70	71	67	68	68	65	62	64	65	72	68	77	..	64.1
Unionville	Maximum	77	60	66	72	78	80	70	80	82	88	94	84	70	80	84	85	95	90	90	85	87	78	86	78	82	84	83	80	94	95	..	81.9
	Minimum	57	46	42	42	54	52	60	54	56	58	70	63	52	50	58	66	70	72	58	65	52	62	57	63	52	60	62	58	56	72	..	58.0
Warrenton	Maximum	78	72	65	75	75	82	80	74	78	85	92	87	69	82	89	88	90	93	88	84	86	80	85	82	78	85	85	85	89	93	..	82.5
	Minimum	66	52	46	46	54	58	63	59	52	56	68	63	61	53	60	69	68	69	66	67	60	64	64	65	58	59	60	60	61	74	..	60.7
Southeast Lowlands																																	
Campbell	Maximum	94	89	68	77	83	86	85	78	79	86	91	89	79	79	88	88	90	93	92	92	86	90	94	91	75	78	82	85	92	94	..	85.8
	Minimum	69	61	55	52	53	58	67	66	60	54	63	71	63	55	62	66	69	69	69	69	65	69	68	67	66	57	61	72	65	71	..	63.7
Caruthersville	Maximum	92	84	79	79	82	87	87	87	81	85	91	91	84	81	89	81	92	94	94	97	88	92	92	91	83	85	91	92	95	99	..	88.2
	Minimum	72	62	57	63	58	64	64	65	62	60	67	74	63	59	65	69	71	74	73	73	78	67	73	71	68	65	67	72	71	76	..	67.4
Doniphan	Maximum	93	85	69	79	79	85	80	80	83	85	88	85	79	81	89	89	90	93	92	89	88	87	92	89	82	84	89	93	94	96	..	86.2
	Minimum	66	61	49	44	49	52	63	60	56	50	60	60	60	51	55	62	65	67	67	68	60	57	66	67	63	52	57	70	62	71	..	59.7
Jackson	Maximum	91	62	64	72	74	80	79	79	74	80	83	80	69	73	83	84	85	89	84	82	80	85	86	83	76	83	84	90	88	94	..	80.5
	Minimum	66	53	47	43	43	52	65	62	52	47	59	63	59	49	59	63	66	69	68	67	59	55	65	65	62	51	55	70	55	67	..	58.5
Poplar Bluff	Maximum	91	84	71	78	80	85	80	78	83	85	88	86	77	78	87	87	88	91	94	91	87	96	93	89	84	85	89	93	92	95	..	86.2
	Minimum	67	57	51	46	50	55	65	61	56	51	61	69	62	51	58	60	62	62	69	67	62	57	68	68	64	54	56	71	63	70	..	60.4
Sikeston	Maximum	92	78	65	76	80	85	85	83	76	87	93	93	86	82	87	88	90	95	94	94	86	93	93	90	83	84	92	95	95	98	..	87.3
	Minimum	70	58	50	48	52	59	68	64	60	53	63	72	62	66	62	65	68	71	71	70	63	62	68	71	66	57	62	72	64	73	..	63.7
Cairo, Ill	Maximum	89	75	65	72	78	82	81	74	76	81	89	82	74	79	86	86	87	91	88	88	83	87	89	87	78	81	88	91	90	94	..	83.0
	Minimum	66	56	53	55	61	64	65	65	60	61	67	65	63	60	64	70	72	75	72	73	68	66	71	72	68	64	64	73	68	75	..	65.9
Ozark Plateau																																	
Arcadia§§	Maximum	87	67	64	72	70	78	76	72	74	81	86	76	72	74	83	83	85	86	86	81	80	80	82	79	77	79	84	88	88	92	..	79.4
	Minimum	64	64	48	40	45	49	56	62	49	47	55	68	59	47	58	65	61	68	68	64	56	54	62	63	62	48	52	63	53	60	..	57.0
Aurora	Maximum	86	80	71	71	70	73	71	77	79	87	90	87	74	82	86	85	85	89	86	83	82	79	79	75	76	78	83	90	90	90	..	81.1
	Minimum	62	62	57	47	58	54	59	58	58	61	72	64	61	61	68	65	66	69	66	62	63	63	62	65	58	54	57	68	68	73	..	62.0
Birchtree	Maximum	87	78	79	75	78	80	79	79	80	82	86	84	76	76	85	84	85	89	90	86	85	80	86	84	78	81	85	92	93	94	..	83.2
	Minimum	65	61	51	45	51	53	62	61	55	52	65	66	61	51	57	63	69	69	68	67	61	60	64	67	63	61	55	65	62	69	..	60.6
Eldon§§	Maximum	87	61	65	74	76	79	75	77	86	89	82	89	89	82	89	89	..	..	93	81	84	72	..	81	80	82	87	87	93	94	..	°82.3
	Minimum	66	61	41	45	51	55	60	62	56	55	55	60	62	55	60	62	62	..	..	..	65	58	63	61	..	57	56	58	68	58	62	°58.3
Farmington	Maximum	88	69	66	77	78	84	78	72	76	88	91	78	76	76	89	87	89	91	91	86	85	86	88	78	77	85	86	91	93	93	..	83.1
	Minimum	66	50	48	43	49	52	51	61	51	49	65	61	59	49	59	63	64	67	67	65	59	52	63	65	61	50	54	63	67	71	..	58.1
Koshkonong	Maximum	85	82	75	70	74	..	75	78	..	83	89	85	76	79	86	85	86	89	89	83	81	85	88	84	78	82	87	91	92	93	..	b83.3
	Minimum	68	66	50	48	56	..	58	61	..	57	65	71	61	57	60	66	67	69	69	70	63	65	63	69	64	58	60	70	67	73	..	b63.2
Lebanon§§	Maximum	85	75	66	75	75	78	75	77	80	86	90	85	70	83	82	85	87	91	89	78	85	72	84	78	76	80	84	89	92	92	..	81.5
	Minimum	64	61	47	40	43	49	50	58	52	55	57	69	62	52	55	62	66	66	64	62	57	58	61	61	55	49	51	58	58	64	..	56.9
Mountain Grove§§	Maximum	86	83	68	76	71	77	73	79	83	81	88	87	75	79	86	82	83	86	87	81	84	76	84	82	79	78	83	91	91	91	..	81.7
	Minimum	66	62	48	42	48	50	57	59	52	55	59	..	..	..	58	62	66	68	66	67	60	64	62	62	60	51	55	64	62	67	..	°59.0
Neosho	Maximum	88	87	67	76	76	74	74	78	85	90	91	88	79	88	89	86	87	91	89	88	84	84	85	76	78	82	85	90	90	91	..	83.9
	Minimum	65	62	53	46	58	55	58	57	55	60	72	70	61	58	66	64	66	69	64	62	64	65	63	64	56	50	55	63	64	68	..	61.1
Rolla	Maximum	87	74	65	71	71	78	75	75	76	83	88	88	71	78	86	85	87	89	85	82	82	81	84	85	76	79	83	87	89	91	..	81.0
	Minimum	64	47	47	45	54	54	62	62	54	55	68	56	57	53	62	68	68	71	66	65	59	58	64	60	60	56	57	68	58	72	..	59.7
Springfield	Maximum	83	79	66	72	71	73	70	76	78	85	89	83	71	82	86	82	85	87	86	77	81	75	80	75	75	77	83	87	88	88	..	79.7
	Minimum	66	54	51	48	58	57	61	59	58	63	69	63	61	61	66	66	69	71	69	62	64	60	62	64	60	60	60	70	68	73	..	62.4
Southwest Plain																																	
Appleton City	Maximum	87	73	67	72	73	75	73	77	81	90	92	82	75	87	88	86	88	91	87	80	84	75	76	77	80	81	80	88	90	92	..	81.6
	Minimum	69	58	48	47	58	56	59	58	59	63	74	63	57	57	65	64	70	69	66	62	60	62	61	66	57	58	62	68	66	73	..	61.8
Clinton	Maximum	90	83	70	77	76	80	72	80	84	92	94	87	77	88	90	90	91	93	89	85	88	83	77	78	83	84	87	91	96	95	..	85.0
	Minimum	70	60	50	49	60	55	62	60	59	65	75	62	58	58	67	68	71	73	67	63	58	62	60	66	58	58	64	69	76	75	..	63.3
Harrisonville§§	Maximum	86	62	65	74	72	74	69	76	80	87	91	69	75	88	89	84	87	88	85	80	84	71	76	77	83	80	85	88	91	92	..	80.3
	Minimum	64	60	47	48	50	57	58	60	59	62	67	63	52	54	63	66	69	69	64	61	58	64	58	63	55	58	61	64	64	67	..	60.2
Lamar§§	Maximum	86	83	68	74	77	76	69	77	83	89	90	83	75	86	87	87	88	90	86	80	83	78	75	74	78	82	85	89	89	90	..	81.9
	Minimum	69	65	52	50	53	57	60	60	60	63	66	72	61	60	65	69	71	70	65	64	63	66	62	65	57	56	59	64	67	72	..	62.8
Lamonte	Maximum	88	68	70	77	78	80	74	81	85	92	93	81	72	86	92	89	85	93	94	80	88	75	80	78	83	84	88	85	93	95	..	83.6
	Minimum	65	53	48	46	58	56	60	60	58	61	74	63	56	56	66	68	70	70	67	63	57	63	60	62	56	57	64	65	61	73	..	61.2
Marshall	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Nevada	Maximum	85	78	67	73	75	75	70	77	81	88	89	83	75	85	87	85	87	89	86	83	83	78	74	74	78	79	83	87	89	90	..	81.1
	Minimum	67	62	50	48	58	57	66	60	59	64	75	64	58	58	69	69	70	69	65	62	59	64	62	66	56	59	61	68	65	74	..	62.8
Warrensburg	Maximum	86	79	79	74	74	76	76	75	77	..	91	78	77	78	87	85	..	..	90	75	76	79	77	74	79	81	84	83	90	92	..	°80.4
	Minimum	69	55	48	47	58	56	59	54	..	62	58	56	58	55	62	..	..	..	70	62	56	59	60	66	57	59	63	68	65	69	..	°59.5
Warsaw	Maximum	88	81	68	75	76	78	77	78	82	89	92	87	76	86	90	87	89	92	89	79	85	79	79	77	81	82	87	87	93	93	..	83.4
	Minimum	67	57	48	44	58	52	60	58	54	54	72	60	59	54	64	67	72	70	68	63	55	65	62	66	54	53	62	68	59	75	..	60.7
Northwest Plateau																																	
Chillicothe§§	Maximum	75	55	66	72	78	78	75	80	83	91	95	75	72	86	89	89	92	89	90	82	85	74	83	78	83	84	84	84	91	94	..	81.7
	Minimum	64	50	42	42	54	52	57	57	57	60	65	64	51	51	61	65	68	70	60	61	51	60	56	64	52	59	60	61	57	69	..	58.0
Grant City	Maximum	69	59	66	70	76	77	73	77	80	88	92	85	72	82	88	86	88	84	89	81	83	80	80	76	81	82	84	81	90	93	..	80.4
	Minimum	59	48	45	46	55	54	60	56	60	63	71	60	49	53	62	70	70	71	58	63	59	59	58	60	53	61	61	60	61	73	..	59.3
Kansas City	Maximum	84	63	63	73	71	73	70	74	82	89	92	80	74	86	92	86	89	87	88	80	84	76	78	75	80	82	84	84	91	93	..	80.8
	Minimum	63	47	48	52	60	62	60	60	63	68	76	63	56	63	70	72	73	73	70	64	64	63	64	66	60	64	66	70	68	76	..	64.1
Kidder§§	Maximum	80	53	62	69	78	78	70	75	78	87	92	71	70	83	87	86	87	85	87	78	80	69	78	74	78	80	82	80	90	92	..	78.6
	Minimum	62	49	43	43	51	53	56	55	57	60	62	52	49	53	60	68	66	69	61	60	54	58	56	62	53	56	60	60	60	61	..	57.0
Lexington§§	Maximum	86	72	67	67	76	76	72	79	82	90	92	91	75	85	92	97	87	86	90	87	85	83	81	86	81	80	84	84	92	92	..	83.2
	Minimum	68	53	48	48	49	57	61	61	61	64	74	69	55	58	66	68	70	73	65	63	59	63	61	66	57	62	63	69	65	75	..	62.4
Maryville	Maximum	69	61	65	70	75	76	65	78	82	89	93	85	72	84	90	87	90	83	92	77	86	74	80	75	81	84	87	82	91	96	..	80.6
	Minimum	60	48	45	45	56	53	45	54	59	65	71	59	48	53	64	70	70	68	58	63	51	59	58	60	50	60	62	60	62	72	..	58.3
Oregon	Maximum	83	65	71	71	77	74	70	77	85	92	94	91	78	88	96	91	92	87	91	88	88	86	83	80	83	85	89	88	93	95	..	84.4
	Minimum	65	49	45	47	58	57	59	58	61	69	74	60	50	57	67	72	72	68	62	64	58	63	58	62	55	61	65	62	65	74	..	61.2
St. Joseph	Maximum	83	60	66	69	73	72	71	76	83	90	93	80	74	85	95	88	91	84	90	79	85	71	80	77	81	83	86	82	93	94	..	81.1
	Minimum	60	46	47	46	59	56	60	59	61	68	75	60	53	61	68	72	73	70	62	62	55	61	58	63	57	63	66	65	66	75	..	61.6
Trenton	Maximum	77	60	64	71	79	77	75	78	82	88	95	83	74	83	90	89	91	89	88	82	85	78	83	78	83	85	86	84	93	95	..	82.2
	Minimum	60	50	45	45	55	54	60	56	61	61	65	67	52	52	62	69	70	71	64	61	52	52	57	65	66	67	62	63	60	68	..	59.7

a, b, °, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 7-23-29—955.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., JULY, 1929. No. 7.

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GENERAL SUMMARY.

July, as a whole, had mostly seasonable temperatures and unevenly distributed rainfall over most of the State of Missouri. While temperatures were rather favorable from the side of personal comfort most of the time, there were some rather hot days during the last decade and more particularly the last three or four days. There were, however, no maximum temperature records broken nor were there any outstanding cool spells.

The month, that is the first part of it for nearly all the rain fell during the first 16 days, was drier than normal from and including the Missouri River counties southward to the Ozarks and somewhat wetter than normal in northern sections. There were some scattered showers on the 30th and 31st. The heaviest rains occurred on the 6—7th in north and west, and on the 15—16th in the east sections. There were some local floods in the northwest following the rains of the 6th and 7th.

The month's weather was not altogether favorable for crops and farming operations. The first half was a continuation of wet weather starting back in the spring, while the transition to drought, and almost uninterrupted sunshine was sudden and severe. The ground soon ran to-gether and got hard on top, while pastures, late forage, and truck showed marked signs of deterioration. The corn crop while late held its own fairly well. After the rains the weather was fine for small grain harvest and hay making.

TEMPERATURE.

The monthly mean temperature for the State, 65 stations reporting, was 77.8°, or or 0.5°, above the normal. The highest local monthly mean was 80.8°, at Caruthersville, and the lowest was 74.8°, at Kidder. The highest temperature recorded was 104°, at Dean on the 31st; and the lowest was 50°, at Goodland on the 3d and at Unionville on the 20th. These values are well within the extremes of other years for July. On an average there were 15 days with temperatures 90° or higher; and 100° or higher at seven stations on one day, the 24th or 31st.

PRECIPITATION.

The average precipitation for the State, 96 stations reporting, was 4.12 inches, or 0.12 inch more than the 60 years' normal, and 1.15 inches more than last July a year ago. The greatest local monthly amount was 11.35 inches at Conception; and the least local amount was 0.55 inch, at Kansas City. The greatest amount that fell during any consecutive 24 hours was 4.95 inches, at Maryville on the 6th, and the next largest was 4.30 inches, at Bethany on the 6th.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—In northwest part of State on 15th, 16th, 17th, and 18th.

Hail.—In Mississippi County, between East Prairie and Charleston; stones small and caused little or no damage. At Conception, no damage.

Halos, lunar.—None recorded.

Halos, solar.—1st, 4th, 5th, 7th, 9th, 10th, 11th, 12th, 13th, 19th, 23d, 24th, and 30th.

Thunderstorms.—1st; every day from 4th to 16th, inclusive; scattered on the 2d, 24th, 28th, 29th, 30th, and 31st.

SPECIAL STORM NOTES.

July 1.—In the afternoon a local windstorm caused about $200 loss at Morehouse. It was a straight-line wind—a thunder-squall. There was some small wind-damage at Palmyra the same day.

July 4 to the 8th.—Tarkio was without train service. Excessive rains put the One-hundred-and-Two, Platte, Nodaway, and Tarkio Rivers over banks, waters spreading two and one-half miles wide; 50,000 acres of cornland was under water; 250 head of livestock perished, and 150 highway bridges were washed away. Damage and loss very heavy.

On July 8th, local floods did damage in Harrison County; July 14 in Franklin County a local thundershower caused a wall of water to rush down the Pineoak Creek basin, said to be five feet high, engulfing the automobile of Mrs. Marie Beckman of St. Louis, and drowning the seven occupants of the car. The fall of rain was estimated to be 3 to 4 inches. On July 16 and 17 the North Fabius and South Fabius Rivers went out of banks and damaged bottomland crops; damage and loss probably $5000.

Lightning damage—On July 5, at St. Louis City, a lad 16 years old was killed by lightning, and his playmate 14 years old was at the same time seriously injured, while playing ball at the Concordia playing grounds. A barn owned by Albert Lewis, Hinton, Mo., was destroyed by lightning the same day; loss $200. On July 15, Edward Ream, living near Brashear, was killed by lightning while at work in his garden.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.00	83	58	322	71	3,706	5.0	19	nw.	30
Hannibal	30.01	81	..	...	..	4,455	6.0	28	s.	5
Kansas City	29.98	75	53	338	75	5,611	7.5	28	n.	1
St. Joseph	29.98	80	56	280	62	4,357	5.9	29	w.	6
St. Louis	30.02	76	59	256	56	6,567	8.8	32	sw.	5
Springfield	30.04	82	59	352	79	5,299	7.1	27	sw.	5
Cairo, Ill.	30.03	84	64	...	..	4,293	5.8	39	sw.	7
Keokuk, Iowa	30.03	77	61	298	65	3,579	4.8	24	sw.	5

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JULY.

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	79.3	+2.3	111	50	3.31	−0.98	....	0	7	..	..	..
1889	77.1	+0.1	107	46	3.75	−0.54	....	0	8	..	..	..
1890	79.6	+2.6	106	52	2.98	−1.31	....	0	5	..	..	..
1891	72.7	−4.3	103	40	3.55	−0.74	....	0	8	..	..	..
1892	75.8	−1.2	101	45	4.99	+0.70	4.75	0	8	12	10	9
1893	77.3	+0.3	101	51	4.91	+0.62	6.44	0	8	14	12	5
1894	76.5	−0.5	109	42	2.48	−1.81	4.90	0	5	18	10	3
1895	74.4	−2.6	106	45	6.79	+2.50	6.52	0	10	10	12	9
1896	77.3	+0.3	108	48	5.87	+1.58	8.00	0	9	15	11	5
1897	78.7	+1.7	106	48	3.22	−1.07	4.05	0	6	19	9	3
1898	76.1	−0.9	104	42	5.58	+1.29	8.15	0	9	16	10	5
1899	76.0	−1.0	102	43	4.51	+0.22	4.48	0	9	15	11	5
1900	76.9	−0.1	102	46	4.11	−0.18	7.03	0	8	17	10	4
1901	85.4	+8.4	116	46	2.02	−2.27	3.78	0	5	19	10	2
1902	77.0	0.0	103	50	4.59	+0.30	5.30	0	8	17	11	3
1903	77.4	+0.4	102	51	3.22	−1.07	3.26	0	8	17	10	4
1904	74.2	−2.8	100	47	4.65	+0.36	4.15	0	10	15	11	5
1905	73.4	−3.6	101	48	7.45	+3.16	7.60	0	12	12	10	9
1906	74.7	−2.3	100	48	3.53	+0.76	4.46	0	8	17	10	4
1907	78.4	+1.4	105	47	4.57	+0.28	6.70	0	8	19	8	4
1908	76.5	−0.5	101	49	2.23	−2.06	2.65	0	8	18	9	4
1909	76.7	−0.3	102	41	6.41	+2.12	10.71	0	10	17	8	6
1910	76.8	−0.2	109	46	6.70	+2.41	5.80	0	9	16	9	6
1911	78.0	+1.0	113	43	3.95	−0.34	4.20	0	8	16	9	6
1912	78.8	+1.8	104	52	2.74	−1.55	3.17	0	7	18	9	4
1913	80.2	+3.2	108	47	3.13	−1.16	3.62	0	7	18	9	4
1914	80.5	+3.7	109	45	2.67	−1.66	4.45	0	17	17	9	5
1915	74.6	−2.4	102	42	6.05	+1.59	6.77	0	2	14	9	8
1916	81 6	+4.6	109	52	1.25	−3.15	2.55	0	3	25	5	1
1917	77.5	+0.2	107	42	2.96	−1.22	3.40	0	8	20	8	3
1918	77.1	+0.2	110	41	1.76	−2.49	3.75	0	6	19	8	4
1919	80.0	+2.3	115	50	2.33	−1.37	4.55	0	5	23	6	2
1920	76.3	−0.9	105	47	3 25	-0.84	3.84	0	7	18	8	5
1921	80.3	+2.9	109	46	2.32	−1.77	2.25	0	5	20	8	3
1922	76.8	−0.7	103	46	5.85	+1.82	12.25	0	8	17	9	5
1923	78.2	+0.7	105	50	3.07	−0.89	7.42	0	6	18	8	5
1924	73.3	−4.1	103	40	5.39	+1.34	7.14	0	10	15	11	5
1925	77.9	+0.5	106	46	2.71	−1.34	3.25	0	7	16	10	5
1926	78.0	+0.6	108	40	3.14	−0.91	6.00	0	7	17	9	5
1927	75.8	−1.6	101	48	4.13	+0.08	4.65	0	8	18	9	4
1928	77.2	−0.2	102	48	2.97	−1.08	3.30	0	7	17	10	4
1929	77.8	+0.5	104	50	4.12	+0.12	4.95	0	8	16	10	5

Climatological Data for July, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	78.4	+ 2.7	99	31	58	3†	32	0.90	−3.74	0.30	0	5	18	1	12	se.	O. K. Benecke
Clifton Hill	Randolph	731	29	76.8	+ 0.4	100	24	55	3	35	2.73	−1.15	0.71	0	10	16	10	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	77.8	+ 0.9	94	31	56	3	29	1.49	−2.00	0.49	0	11	8	15	8	sw.	U. S. Weather Bureau
Downing	Schuyler	876	7	75.6	.....	94	25†	51	20	31	9.60	+4.67	2.88	0	11	14	11	6	sw.	James Taylor
Fayette	Howard	661	48	76.8	− 0.6	97	31	53	3	37	3.70	+0.05	1.58	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	77.4	− 0.5	96	28†	55	3	34	4.19	+0.20	2.00	0	8	17	13	1	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	9.08	+5.05	3.13	0	10	14	7	10	sw.	J. W. Pulliam
Hannibal	Marion	534	36	77.2	+ 0.4	95	23	58	3	27	6.15	+3.06	2.36	0	9	11	10	10	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	80.5	+ 2.4	99	31	58	3	32	2.18	−1.27	1.00	0	6	16	7	8	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	75.9	− 0.2	93	24	53	20	31	5.08	+0.63	1.11	0	10	12	11	8	n.	Prof. J. S. Stokes
Louisiana	Pike	469	34	76.4	0.0	95	26	54	20	31	9.10	+5.98	2.30	0	9	19	9	3	s.	Stark Bros. Nurseries
Macon	Macon	875	29	77.3	− 0.1	95	31	55	20	32	1.45	−2.31	0.45	0	7	18	9	4	sw.	W. C. Brown
Mexico	Audrain	800	39	77.8	+ 0.5	96	27†	52	20	33	2.21	−1.54	0.63	0	8	29	0	2	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	..	..	..	5.77	.....	1.25	0	8	21	7	3	n.	J. S. Conway
St. Charles	St. Charles	456	40	79.6	+ 1.5	98	28	55	20	29	2.06	−1.17	1.40	0	6	5	13	13	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	79.8	+ 1.0	98	28	58	20	22	2.67	−0.31	1.11	0	13	11	14	6	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	79.0	− 1.1	96	28	60	20	22	2.85	+0.10	0.87	0	10	16	10	5	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	..	..	..	5.62	−1.46	2.00	0	7	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	76.3	− 1.7	95	31	55	3†	33	9.07	+4.64	2.10	0	9	13	15	3	s.	Frank Hall
Unionville	Putnam	1,062	35	75.2	− 1.4	94	25	50	20	33	7.96	+3.67	3.20	0	11	15	7	9	sw.	Geo. W. Davis
Warrenton	Warren	816	16	78.3	+ 0.5	96	28	57	20	27	4.52	+1.10	1.06	0	9	9	19	3	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	77.0	+ 0.3	94	23	57	20	27	5.75	+2.34	1.91	0	10	7	8	16	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	77.5	+ 0.3	100	24	50	20	37	4.73	+0.79	3.20	0	9	14	10	7	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	79.2	.....	97	29†	59	24	33	5.13	.....	1.92	0	11	13	14	4	s.	Jeff. King
Caruthersville	Pemiscot	265	32	80.8	+ 0.2	99	29	65	20	23	6.38	+2.97	2.00	0	8	12	13	6	s.	Sam Smith
Doniphan	Ripley	344	24	78.8	+ 0.6	98	28	57	14	40	5 10	+0.37	0.87	0	9	17	13	1	sw.	W.W. Martin
Jackson	Cape Girardeau	428	37	76.4	− 1.0	96	28	55	3†	33	5.55	+2.03	1.95	0	10	18	8	15	s.	John G. Putz
Marble Hill	Bollinger	470	33	78.6	+ 1.3	96	28	56	3	30	5.91	+1.23	1.98	0	11	12	14	5	w.	R.A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	..	..	..	4.49	−0.28	1.53	0	10	15	16	0	sw.	John A. Spence
Poplar Bluff	Butler	339	24	78.7	0.0	97	28†	58	20	28	7.72	+4.17	2.00	0	9	17	10	4	s.	J. H. Wolpers
Sikeston	Scott.	318	23	80.6	+ 2.5	99	28	58	20	28	3.57	−1.20	1.10	0	7	13	9	9	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	79.6	0.0	96	28	62	20	22	1.28	−1.79	0.36	0	10	6	12	13	s.	U. S. Weather Bureau
Section means and	extremes	....	..	79.1	+ 0.4	99	28†	55	3†	40	5.01	+0.94	2.00	0	9	13	12	6	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	75.4	− 0.5	93	31	54	3	29	4.59	+0.35	1.07	0	9	26	1	4	w.	Arcadia College
Aurora	Lawrence	1,370	38	77.6	− 0.2	93	16†	59	21	26	4.80	−0.56	1.61	0	6	19	10	2	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	77.8	+ 1.4	96	28	55	21	32	3.65	−0.34	1.10	0	8	21	5	5	sw.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	79.0	+ 1.4	104	31	55	21	37	1.40	−2.65	1.38	0	2	17	13	1	sw.	H. E. Dean
Eldon	Miller	934	32	78.3[e]	+ 1.3	100	31	56	3†	35	2.57	−1.09	1.19	0	6	2[e]	19[e]	5[e]	sw.	E. H. Shepherd
Farmington	St. Francois	918	17	77.6	+ 2.3	98	31	54	20	31	4.53	+0.98	2.51	0	9	12	18	1	sw.	Robert Forsyth
Goodland	Iron	1,000	34	75.8	+ 0.2	96	28†	50	3	35	2.57	−1.61	0.65	0	7	19	10	2	s.	F. M. Adams
Greenville	Wayne	381	6	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	..	..	..	3.05	.....	2.10	0	6	23	8	0	w.	A. W. Madison
Koshkonong	Oregon	958	27	79.2	+ 0.9	97	28	60	20†	30	2.47	−1.45	0 91	0	7	13	13	5	sw.	R. M. Hitt
Lebanon	Laclede	1,265	40	78.4	+ 1.5	99	27	55	2	37	1.57	−2.55	0.89	0	5	23	5	3	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	79.2	+ 1.6	94	15†	59	20†	30	4.96	+0.09	1.20	0	10	23	6	2	sw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	27	78.6	− 2.6	98	31	58	20	28	1.21	−2.79	0.41	0	7	13	16	2	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	77.6	0.0	98	31	55	21	40	3.35	−0.83	1.26	0	3	24	6	1	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	78.0	+ 0.6	96	28	56	21	31	1.40	−2.69	0.60	0	9	4	13	14	s.	F. H. Lane
Salem (near)	Dent	1,173	24	77.4	+ 0.5	95	28	53	21	33	3.88	+0.38	0.92	0	11	19	9	3	sw.	A. C. Leech
Seligman	Barry	1,542	26	77.9[a]	+ 1.3	96	29†	61	20†	29	3.24	−1.16	1.53	0	4	17[a]	13[a]	0[a]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	77.5	+ 2.0	96	28	53	20†	34	3.55	−1.20	1.10	0	8	19	8	4	sw.	Ira H. Hailey
Springfield	Greene	1,324	40	78.2	+ 1.4	93	16	61	20	25	1.01	−3.20	0.43	0	8	24	6	1	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	77.9	+ 0.8	104	31	50	3	40	2.99	−1.20	2.51	0	7	18	10	3	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	78.0	− 0.3	97	28†	58	3†	31	2.24	−2.39	1.03	0	8	10	20	1	sw.	W. G. Bigelow
Clinton	Henry	765	35	80.4	+ 2.9	101	31	58	21	33	2.15	−1.79	1.20	0	5	21	6	4	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	76.4	− 1.4	99	31	57	3†	31	3.61	−0.17	2.15	0	7	2	11	18	s.	John H. Patterson
Lamar	Barton	980	41	78.8	+ 0.3	100	30	60	3†	32	2.88	−1.36	0.68	0	6	20	9	2	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	79.1	− 0.4	101	31	55	3	34	2.07	−1.93	0.75	0	7	25	6	0	s.	J. E. Wheeler
Marshall	Saline	779	39	.. .	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Dr. W. H. Black
Nevada	Vernon	862	35	77.8	− 2.4	98	30	59	3	29	4.92	+0.99	1.80	0	7	18	7	6	sw.	George A. Kaupp
Warrensburg	Johnson	878	41	78.2	− 0.6	99	31	57	20	32	3.72	−0.23	1.92	0	7	15	10	6	sw.	E. A. Markey
Warsaw	Benton	687	28	79.6	+ 1.3	102	31	54	3	37	0.88	−3.42	0.48	0	4	13	15	3	s.	Everett Martin
Section means and	extremes	.....	..	78.5	− 0.1	102	31	54	3	37	2.81	−1.29	2.15	0	6	16	10	5	sw.	
Northwest Plateau																				
Bethany	Harrison	916	36	75.6[g]	− 0.4	98	27	55	20	32	6.95	+2.44	4.30	0	8	9[g]	12[g]	3[g]	se.	M. H. Moulton
Chillicothe	Livingston	779	19	76.6	− 3.6	97	31	54	3	36	3.93	−0.65	1.02	0	10	16	8	7	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	77.6	+ 1.2	95	27†	58	20	30	11.35	+7.05	4.29	0	8	17	9	5	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	77.4	.....	99	31	55	3†	32	1.99	−2.81	0.56	0	9	23	3	5	s.	Fred L Stiff
Grant City	Worth	1,134	24	75.4	− 0.8	94	31	58	2†	30	5.42	+0.26	2.82	0	8	14	17	0	sw.	W. P. Spillman
Kansas City	Jackson	963	39	79.0	+ 0.9	96	31	62	20	27	0.55	−3.58	0.14	0	8	12	13	6	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	74.8	− 2.1	94	31	54	20	32	3.97	+0.04	1.22	0	9	12	10	9	s.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	..	..	..	5.84	.....	3.68	0	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	79.1	+ 2.0	95	15	58	20	30	2.17	−2.55	0.64	0	8	20	10	1	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	76.2	+ 0.6	95	23†	57	9†	33	8.43	+3.04	4.95	0	11	17	12	2	s.	J. R. Brink
Oregon	Holt	1,048	72	79.1	+ 3.5	98	31	59	2†	29	6.77	+2.45	1.70	0	9	22	6	3	sw.	Mina Wright
St. Joseph	Buchanan	967	20	78.2	− 0.4	96	31	58	10	28	3.61	+0.51	1.80	0	9	17	8	6	s.	U. S. Weather Bureau
Tarkio	Atchison	916	25	74.0	− 3.0	94	27	57	2†	29	10.78	+7.07	2.50	0	9	17	6	8	ne.	Albert Volker
Trenton	Grundy	822	32	77.8	+ 0.9	97	24†	57	3	33	6.86	+2.53	3 31	0	9	17	13	1	s.	W. H. Estes
Section means and	extremes	.....	..	77.0	− 0.1	99	31	54	3†	36	5.62	+1.22	4.95	0	9	16	10	5	s.	
State means and	extremes	.....	..	77.8	+ 0.5	104	31	50	3†	40	4.12	+0.12	4.95	0	8	16	10	5	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for July, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain																																	
Boonville‖	Missouri	.02	.27				T.	1.03	T.	.40							.58														.01	2.31
Brunswick‖	Grand		.25				.05	.08									.30														.22	0.90
Clifton Hill	Chariton	.43					.17	.10	.33	.30		.11		.03	.09	.46	T.														.71	2.73
Columbia***	Missouri	.31				T.	.04	.04	.31	.18	.10	T.	.01		.17	.26	.03											T.			.04	1.49
Downing	Mississippi	.39	.02	T.	.07		1.70	.07	.09			1.72		1.70	.85	2.88															.11	9.60
Fayette‖	Missouri	.28	.18				1.58			.35	.04	.25				.04	.80														.18	3.70
Fulton‖	do	.04	.19					.20		1.00	.07		.16			.53	2.00	T.														4.19
Gorin	Mississippi	.50			.02		3.13		.09			1.29		.28	1.51	2.21	.04														.01	9.08
Hannibal***	do	.25				.65	.73	T.	.87	.40		.62		T.	.74	1.87	T.								.02							6.15
Hermann‖	Missouri		.09					.25	.13	.55		T.	2.42			.07	1.60	.04													.10	5.25
Jefferson City‖	do		.21				.04	.22					.09			.62	1.00															2.18
Kirksville	Mississippi	.47			.03	.15	.60		.47			1.11		.05	.55	.65															1.00	5.08
Louisiana	do	.40					.50		.15	1.80		2.20	.50		2.30	1.10									.15							9.10
Lucerne‖	Grand	.28				.12	1.66	.52		.26		1.17	.94			1.79	.09														T.	.59	7.42
Macon ‖	Chariton	.14					.14	.33		.45			.10	T.		.25	.04																1.45
Mexico ‖	Mississippi	.25	.18					.15		.63			.02		T.	.43	.45															.10	2.21
Milan‖	Grand	.46				.10	1.35		.12	1.05				.23	.50	.67	.13															.75	5.36
Monroe City	Mississippi	.38					.66	1.25	.80			.73			.80	1.09									.06							5.77
Pacific‖	Meramec							.55		.27		.04	1.22			1.09	.18	.02														3.37
St. Charles	Missouri									.19			1.40		.05	.19										12					.11	2.06
St. Louis (1)***	Mississippi	T.				.30	.23	.88	.18	.04	.02	.28	T.		.04	.03	.01							T.		35			T.		.03	.28	2.67
St. Louis (2)*	do	T.				.71	.18	.87	.25	.01	T.	.51	T.		.07	.12	T.							T.		T.			T.		.04	.09	2.85
Shelbina ‖	do	.11	.04				.52	2.00		.92						2.00	.03								T.							5.62
Steffenville	do	.32			T.	.10	2.10		.40	1.25		1.40			.55	1.60								1.35						T.		9.07
Union‖	Meramec		.20				.05	1.03		.06	.01	.01	.67			.65	.40														.01	8.09
Unionville	Chariton	.45			.10	.10	2.70	.50	.20			1.75		.06	.60	1.05	T.														.45	7.96
Warrenton	Mississippi	.25					.42	.25		1.06		.56	.22		.52	.91	.33														T.	4.52
Keokuk, Ia.***	do	.28		.01	.02	1.18	.11		1.19		T.	.97		.08	.22	1.69	T.									T.				T.		5.75
Southeast Lowlands																																	
Campbell‖	St. Francis		.64	1.92			.06		.55		.03	.07		.30		T.	.70	.60							.25						.01	5.13
Cape Girardeau‖	Mississippi		1.02	T.				.63	.11			.90			T.	.02	.19	.02		.03											.01	2.93
Caruthersville ‖	do	.20	.40		.19					1.03			1.13		.93	.50	2.00															6.38
Dexter‖	St. Francis		.30	.13			.18	.08	.43		.12	.48				.33	1.40	.33													.50	3.78
Doniphan	Black	.30	.85				.87			.78	.82					.33	.50	.15													.10	5.10
Jackson	Mississippi	.19	.36				.81	15		.73	.56			1.95	.30										.40							5.55
Marble Hill	Mississippi	.46	.50				.90	.52			.35	.42	.12	.28	.26	.12	1.98															5.91
Morehouse	do	.95	.07				.42	.38		.34	.38	.06			.12	.24	1.53															4.49
New Madrid‖	do		.28	.75			.01		.20		1.25	.14		.42	.75	.01	.52	.98		.32											5.63
Poplar Bluff‖	Black		.72	1.82			.43		.05		.85	1.18				.17	.50	2.00														7.72
Sikeston‖	Mississippi	.28					.33	.28		1.10					.10		.48	1.00														3.57
Cairo, Ill.***	do	.02	.17			T	.10	.05		.14	T.	T	T.		.36	.28	.02		.11												.03	1.28
Ozark Plateau																																	
Arcadia ‖	St. Francis		.17				.20	.33	.12			.74	.64			.86	1.07	.46		T.											T.	4.59
Aurora	Neosho	.07	.44				1.61	.56																					.88		1.24		4.80
Birchtree (near)	Black		.35				1.10	.32			.50					.85	.12													.06		.35	3.65
Bolivar	Osage																							T.							.05	.20	2.03
Caplinger Mills	Osage		.10				T.	.75		.30	.40	.23																					1.40
Dean	Neosho	T.	.02				T.	1.38					.24			T.	.67													.07			2.57
Eldon‖	Missouri		.36					1.19		.04																			.02		T.	.02	4.53
Farmington	St. Francis	T.				.54	.15					.12	.35	T.	.67	.15	2.51															.05	4.13
Fredericktown‖	do			.05				.25	.55			.12	.21			1.12	1.06	.72															2.95
Galena‖	White		.75					.92				1.28																			.27	.10	2.57
Goodland	Black					.17	.65					.62				.11	.65																
Greenville	St. Francis																		T.											.15	.10		3.05
Hailey	White						.25	2.10		.20	.25								.18											.37			2.47
Koshkonong	Black		.61			.10	.91	.22			.08																				.12		1.57
Lebanon ‖	Osage		.02				T.	.29	T.			.89	.25																.63			T.	4.02
Leeper‖	Black		.33				.87	T.				.47				.23	.89	.60													.77	.28	.32	4.96
Lockwood	Osage	.68	.34				T.	.37		.22	1.20	.10													.68						T.	T.	.05	1.21
Mountain Grove‖	White		.18				T.	.30	T		T.	.41	.10			.16	.01							T	T								3.35
Neosho	Neosho		1.21				1.26	.88											T.														2.18
Owensville ‖	Gasconade		.16					1.72								.30															.41	.11	2.65
Ozark Beach‖	White		.92				.12	.73					.36																			.15	1.40
Rolla ‖	Meramec		.06				.06	.05	.09			.60	.15				.09	.15						.23			.53		.04	.02		.60	3.88
Salem (near)	do	.73					.11	.02				.27				.41	92		T.														3.24
Seligman	Neosho		1.53			.03	.67	1.01			T.																			.18	1.10	.91	.09	3.55
Seymour (near)	White	T.	.22			T.	.56	.24	T.		T.	.25			T.															.06	.09	.05	.05	1.01
Springfield ***	do	.24	.06				.39	.07	T.		T.	T.																			T.		.91	3.72
Steelville‖	Meramec	.06					.21	.05			.10	.08	1.73			.35	.23																	1.20
Stover ‖	Missouri		.18					.70		.32		T														.15								2.56
Tuscumbia ‖	Osage		.31					1.03	T.	T.	.10	.32	.02				.63																	8.18
Williamsville‖	Black		1.10	.03			.02	.72				2.67	.04			1.57	.80	1.23													.12		.08	1.71
Willow Sprgs. ‖ (near)	White		.56				.21	.29	.10			.11					.24																	
Southwest Plain																																	
Appleton City	Osage	.15					.05	.22	.33	.10	1.03	.05																			.31	T.	2.24
Clinton	Osage						.23		1.20		.33	.33																				.06	2.15
Concordia‖	Missouri		.14				.74		.24			.40					.24																	1.76
Harrisonville‖	Osage		.20					2.15		.63	.04	.44	.14						T												.01			3.61
Joplin‖	Neosho	1.35					.60	.10																							1.70			3.75
Lamar‖	do		.68					.45		.45	T.	.50													12						T.		.68	2.88
Lamonte	Missouri	.15					.44	.08		.58	.05	.75					.02																	2.07
Marshall	do																																
Nevada	Osage	T.	.22				.26	.39		.65	1.80	1.40																				.20	4.92
Osceola‖	do							.63		.21	.11	.35													.35							.14	1.79
Warrensburg	Missouri	.12			T.		.04	1.20	T	1.92	.05	.31				T.	T.	T.													T.	.08	3.72
Warsaw	Osage	.22					.07	.48				.11							T.															0.88
Waverly ‖	Missouri	T.	.85			T.		T.		.24		.22	T.				.76															.98	3.05
Northwest Plateau																																	
Albany‖	Grand				.02	.60	2.50			1.92																					T.	1.40	6.44
Bethany	do	.40		T.	.04	.09	4.30	.02	T.		T.	.97	T.		T.	.09	T.	T.			T.										1.04		6.95
Chillicothe‖	do	.16	.01			.05	1.02	.35		.43		.47				.52	.36														T.	.56	3.93
Conception	Missouri	.75			T.	2.73	4.29					.17	.98			.17															2 17	.09	11.35
Edgerton	do	.56					.19	.15	.53		.03	.04				.07	T.														.03	.39	1.99
Gallatin ‖	Grand															T.	.06														T.	.43	
Grant City	do	.32			.05	.06	2.82				.05	1.23		T.		.12															.77		5.42
Kansas City***	Missouri	.14			T.		.06	.01	T.	.10	.10	.04				.04	T.	T.													T.	.06	0.55
Kidder ‖	Grand	.25				.12	1.22	.43		.64		.02				.11	.03															1.15	3.97
King City	Missouri				T.	.20	3.68	.05			.10	.47		T.		.14															1.10	.10	5.84
Lexington	do	.64	.20					.03		.16		.25				.03	.36															.50	2.17
Maryville ‖	do	.39			.01	.24	4.95					.71	.08		.01	.70		.01														.50	.83	8.43
Oregon	do	.72			.06	.18	1.70		T.		.11	1.08	T.			1.20		T.														1.50	.22	6.77
St. Joseph***	do	.20			.04	.41	.65		T.		.16	.06			T.	.29		T.							.04							1.71	.09	3.61
Tarkio	do	.50				1.95	2.50				.39	.75				2.14															2.36	.15	10.78
Trenton	Grand	.28			.02		3.31	.17	.84		T.	.48				.35	.02							T.							1.39		6.86

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for July, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	80	84	87	86	90	83	85	90	82	78	84	92	94	95	93	80	91	89	84	84	87	95	94	97	97	96	96	92	95	78	99	88.9
	Minimum	70	65	58	65	71	68	68	73	68	59	64	71	73	73	74	74	71	73	64	58	60	64	64	73	74	69	70	75	65	65	67	67.9
Columbia	Maximum	82	81	85	87	90	84	82	89	78	79	86	90	90	91	86	85	89	88	80	79	86	91	93	91	91	93	94	94	90	86	94	87.2
	Minimum	70	61	56	71	71	69	68	69	66	63	70	72	72	72	73	74	72	69	63	59	59	68	72	71	72	69	71	74	68	68	67	68.4
Fayette	Maximum	81	84	86	87	90	84	81	89	81	81	85	89	92	94	90	91	92	90	88	89	87	93	95	95	94	94	94	96	92	93	97	89.5
	Minimum	68	64	53	63	67	65	62	66	63	57	66	67	68	68	70	70	67	68	58	55	56	56	66	69	69	64	66	70	62	64	63	64.2
Hannibal	Maximum	85	81	84	87	91	84	85	89	80	81	78	90	92	82	81	83	90	85	76	78	85	93	95	88	94	94	93	88	88	87	91	86.4
	Minimum	69	63	58	70	66	67	67	68	65	61	71	72	73	72	70	71	72	73	62	60	62	67	74	74	74	72	73	70	65	66	64	68.1
Jefferson City§§	Maximum	89	88	88	95	94	89	88	93	89	88	95	96	96	93	87	96	97	94	88	87	88	96	97	96	95	97	96	98	94	95	99	92.9
	Minimum	71	68	58	67	70	69	66	72	66	64	67	69	71	73	70	72	72	74	64	59	59	64	69	70	69	68	71	73	71	67	68	68.1
Kirksville	Maximum	85	80	84	82	89	78	86	81	80	79	85	86	91	89	83	80	89	88	81	72	84	89	90	93	92	91	92	88	89	81	92	85.5
	Minimum	66	61	59	70	69	64	64	68	64	57	67	69	73	69	70	69	68	71	57	53	59	63	69	76	71	76	79	74	60	60	61	66.3
Louisiana	Maximum	92	85	85	90	90	85	85	88	82	80	73	90	92	88	85	85	90	85	80	80	85	92	90	90	85	95	90	88	90	85	91	86.8
	Minimum	70	70	55	60	70	66	67	66	67	55	69	70	70	70	70	66	70	70	60	54	60	67	70	70	70	72	70	73	62	60	60	66.1
Macon§§	Maximum	83	82	87	88	92	84	86	89	80	79	86	92	93	86	90	80	90	87	81	85	87	93	94	94	94	94	94	92	94	81	95	88.1
	Minimum	67	62	57	64	64	65	65	71	65	59	65	70	72	73	71	72	68	70	60	55	61	70	69	72	72	70	70	70	68	63	63	66.5
Mexico§§	Maximum	82	81	87	90	91	86	83	90	82	80	87	92	93	94	89	84	90	92	78	79	87	94	95	94	94	95	96	96	90	87	95	88.8
	Minimum	67	65	56	68	71	67	67	71	67	60	69	70	72	71	71	69	69	70	58	52	54	66	71	71	71	69	71	73	64	63	64	66.7
St. Louis(1)	Maximum	85	83	85	91	88	82	82	92	85	82	87	91	91	91	84	84	90	91	81	78	87	89	92	92	92	93	94	98	91	92	94	88.3
	Minimum	76	69	65	70	74	69	67	70	70	71	70	72	76	76	70	68	73	74	61	58	67	72	74	73	74	75	76	80	75	72	72	71.3
Unionville	Maximum	90	83	85	93	88	86	84	86	80	80	84	85	90	88	83	80	88	84	80	80	83	90	92	92	94	90	92	88	90	86	93	86.7
	Minimum	65	56	57	68	68	62	60	70	60	55	65	68	72	68	69	68	65	66	58	50	56	60	64	66	70	68	68	72	58	60	60	63.6
Warrenton	Maximum	89	83	87	91	92	87	83	91	83	81	83	90	90	93	87	87	89	89	82	82	87	92	92	91	94	94	94	96	90	90	92	88.7
	Minimum	70	67	60	69	70	67	65	70	67	66	68	69	72	71	71	69	70	71	59	57	60	68	70	70	71	70	71	73	70	66	67	67.9
Southeast Lowlands																																	
Campbell	Maximum	94	85	87	90	91	88	89	93	92	90	92	94	94	96	93	83	91	92	84	82	90	91	94	91	92	89	95	96	97	97	89	91.0
	Minimum	71	69	62	66	70	69	70	68	71	67	67	70	67	71	67	68	69	71	65	64	62	62	61	59	62	67	68	69	73	70	74	67.4
Caruthersville	Maximum	98	88	87	91	91	93	99	92	76	89	91	93	93	93	86	90	91	85	76	89	80	90	82	92	91	95	94	99	94	93	90	90.1
	Minimum	76	70	67	71	72	72	76	73	69	71	72	70	72	70	72	73	71	75	70	65	69	70	69	67	70	72	73	75	76	75	78	71.6
Doniphan	Maximum	97	84	85	92	92	85	87	94	90	87	92	94	94	97	93	85	90	92	92	90	91	93	93	91	90	94	95	98	94	96	83	91.3
	Minimum	69	67	61	63	70	67	72	66	68	68	65	70	68	57	67	70	73	70	60	60	59	63	62	63	63	65	68	69	73	70	71	66.4
Jackson	Maximum	89	79	80	87	86	86	85	90	86	86	82	86	91	90	90	82	88	89	89	77	83	86	91	88	87	88	91	96	94	90	92	87.2
	Minimum	71	69	55	61	68	66	70	67	69	67	65	71	67	70	66	63	68	68	64	55	58	62	62	62	62	67	68	63	71	64	70	65.5
Poplar Bluff	Maximum	95	84	84	89	89	85	86	93	91	88	88	93	93	86	91	85	92	94	86	83	87	91	90	90	91	89	95	97	97	94	87	89.8
	Minimum	70	69	60	64	70	68	73	66	70	67	67	71	69	72	68	71	70	71	64	58	61	64	64	62	63	70	69	69	72	69	74	67.6
Sikeston	Maximum	97	83	86	91	92	90	91	94	94	89	92	95	96	94	94	91	91	92	90	86	88	92	93	90	94	91	96	99	97	97	95	92.3
	Minimum	72	71	61	66	70	68	69	69	69	70	68	68	74	68	78	70	68	71	72	66	58	62	66	65	63	68	70	70	72	74	71	77	68.9
Cairo, Ill	Maximum	91	81	83	89	88	85	89	92	88	88	88	90	92	89	88	83	89	89	82	80	88	89	90	87	91	88	91	96	92	92	89	88.3
	Minimum	74	70	63	69	73	70	70	73	70	70	70	75	73	75	70	69	74	74	69	62	66	71	69	68	72	73	73	75	77	73	72	71.0
Ozark Plateau																																	
Arcadia§§	Maximum	88	81	82	87	86	80	80	89	85	83	84	86	86	88	82	84	85	87	81	85	83	85	87	86	87	88	90	90	89	89	93	85.7
	Minimum	71	70	54	60	70	65	65	65	66	68	66	66	67	70	64	68	69	66	66	56	61	63	63	63	63	64	68	68	68	61	67	65.2
Aurora	Maximum	89	82	84	85	86	79	83	85	85	85	89	90	91	92	93	90	91	89	85	82	85	90	90	89	88	87	90	92	90	93	89	87.5
	Minimum	69	67	60	66	70	65	64	70	67	66	67	68	72	70	72	75	72	72	61	60	59	66	66	65	66	66	70	73	74	71	72	67.8
Birchtree	Maximum	95	84	85	84	90	85	84	89	89	86	88	92	95	93	88	83	93	88	83	83	87	90	91	92	93	94	95	96	93	94	91	89.5
	Minimum	66	67	60	59	68	67	67	66	65	66	67	71	68	67	66	70	76	71	64	59	55	65	64	63	64	66	67	67	67	69	71	66.1
Eldon§§	Maximum	77	85	..	..	..	92	85	87	82	83	87	89	90	91	92	91	90	92	82	83	86	95	95	..	..	95	97	98	96	96	100	°89.8
	Minimum	74	67	56	..	..	..	59	69	67	66	69	70	69	71	74	71	72	72	62	57	56	63	68	69	..	..	62	70	69	67	67	°66.8
Farmington	Maximum	86	78	86	90	91	82	79	91	89	87	86	92	93	95	90	86	90	91	81	79	88	92	93	91	91	92	93	93	92	93	98	89.0
	Minimum	74	70	64	62	67	64	71	66	69	67	66	67	69	67	67	69	67	68	62	54	57	66	66	68	65	61	68	68	69	63	67	66.1
Koshkonong	Maximum	94	85	85	87	89	81	83	89	90	88	88	90	92	93	93	92	89	89	85	83	90	92	93	93	90	91	94	97	93	95	88	89.7
	Minimum	71	69	63	67	69	67	69	68	70	67	67	71	70	72	69	72	72	72	66	60	60	68	68	67	67	69	69	71	73	72	71	68.6
Lebanon§§	Maximum	86	90	85	96	90	84	86	90	85	87	85	90	91	93	94	96	92	93	87	85	92	95	96	96	97	97	99	98	98	98	91	91.9
	Minimum	74	55	64	64	64	64	63	64	65	65	63	67	68	68	68	69	73	66	56	56	57	58	65	65	65	65	67	70	65	68	75	65.0
Mountain Grove§§	Maximum	93	87	83	85	87	80	81	89	91	87	85	90	91	93	94	96	94	94	88	83	87	92	92	92	92	92	95	96	95	92	98	90.1
	Minimum	70	69	61	66	68	66	65	65	66	67	67	68	70	70	69	70	72	69	59	58	59	66	67	65	65	67	69	71	73	68	71	67.0
Neosho	Maximum	93	86	87	86	86	83	85	88	87	91	87	90	95	96	93	95	93	88	88	85	89	93	93	93	91	91	96	94	95	97	98	90.7
	Minimum	70	67	58	65	68	65	64	71	67	64	67	65	65	66	68	70	68	71	59	56	55	58	64	64	60	62	56	59	68	67	70	64.4
Rolla	Maximum	85	82	84	86	89	86	80	90	85	84	85	89	90	90	87	88	87	88	83	80	87	91	92	93	92	93	94	96	92	92	95	88.2
	Minimum	66	66	58	69	70	68	67	70	69	65	67	67	71	72	70	71	73	70	63	59	56	69	70	70	68	67	71	78	72	66	66	67.9
Springfield	Maximum	88	81	83	82	85	79	83	86	84	84	85	88	90	91	91	93	90	89	83	81	86	90	90	89	89	88	90	92	92	92	91	87.3
	Minimum	70	67	63	67	68	66	64	69	68	67	68	71	72	74	72	75	73	71	64	61	61	70	70	70	69	69	71	73	75	72	73	69.1
Southwest Plain																																	
Appleton City	Maximum	83	83	86	85	89	78	85	86	77	80	84	89	90	93	94	90	87	91	84	86	89	93	93	92	92	92	92	97	95	94	97	88.6
	Minimum	70	67	58	67	70	70	65	65	63	65	67	67	69	73	73	74	70	73	62	58	58	63	68	71	67	67	69	73	70	71	70	67.5
Clinton	Maximum	83	87	90	88	92	85	88	89	80	83	85	91	91	95	96	92	90	95	88	90	91	95	95	95	95	94	95	98	99	98	101	91.4
	Minimum	73	68	59	68	70	70	67	77	65	66	68	70	71	75	75	75	70	75	64	59	58	63	70	72	68	68	71	72	78	70	72	69.3
Harrisonville§§	Maximum	76	82	86	84	89	86	86	87	78	77	81	87	87	93	93	88	81	89	81	83	88	93	93	93	92	91	91	96	91	85	99	87.3
	Minimum	69	63	57	64	67	67	63	65	61	62	64	67	68	71	73	72	66	70	59	57	59	64	65	70	66	66	67	70	65	69	68	65.6
Lamar§§	Maximum	92	83	86	84	87	81	84	87	80	86	85	88	92	92	93	95	88	89	86	86	89	93	95	91	91	93	92	94	98	100	89	89.3
	Minimum	74	68	60	63	71	71	66	68	65	66	69	68	70	71	72	75	73	73	64	62	60	61	66	69	67	67	70	73	72	72	74	68.4
Lamonte	Maximum	86	85	89	88	93	86	88	88	77	80	83	91	93	96	96	88	90	90	89	89	90	96	96	98	100	97	97	96	98	91	101	91.1
	Minimum	71	63	55	69	69	65	66	68	63	64	67	70	70	72	75	74	70	67	61	57	57	63	68	71	68	67	70	73	69	69	69	67.1
Marshall	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Nevada	Maximum	86	82	85	86	87	82	83	86	75	82	84	87	90	91	92	88	85	89	84	83	86	91	91	91	90	91	91	93	94	98	92	87.6
	Minimum	70	67	59	64	68	67	65	71	64	66	68	69	71	72	74	74	72	73	62	60	60	62	69	72	69	66	71	74	70	71	71	68.1
Warrensburg	Maximum	92	80	86	85	89	82	87	88	80	78	81	90	88	94	93	86	86	87	87	84	89	94	93	95	94	94	95	95	93	88	99	88.8
	Minimum	70	65	58	68	70	69	63	60	63	65	66	71	71	74	74	74	72	74	61	57	58	62	70	72	69	70	71	74	68	68	67	67.5
Warsaw	Maximum	84	84	89	88	92	85	87	89	79	83	85	93	94	96	96	92	91	93	87	87	91	97	96	96	97	96	98	98	99	98	102	91.7
	Minimum	76	67	54	68	69	70	67	76	65	65	69	71	68	69	74	74	72	72	58	58	56	60	69	69	66	64	69	75	69	69	69	67.6
Northwest Plateau																																	
Chillicothe§§	Maximum	87	84	88	84	91	84	87	88	82	78	86	90	93	92	89	83	90	86	80	83	84	94	94	96	96	95	95	89	93	81	97	88.4
	Minimum	66	59	54	66	68	62	64	67	62	56	66	68	72	72	71	70	66	68	61	55	57	58	72	62	73	66	68	72	59	67	61	64.8
Grant City	Maximum	86	82	84	82	81	79	82	84	81	75	82	88	86	88	86	81	87	83	80	83	86	91	92	91	92	91	92	85	91	83	94	85.4
	Minimum	66	58	59	69	63	61	61	67	59	58	66	71	72	73	71	69	65	69	61	58	61	63	69	73	70	68	67	70	61	67	64	65.5
Kansas City	Maximum	83	80	87	84	90	80	84	85	80	74	82	89	90	93	94	83	83	88	80	83	87	93	93	93	93	91	92	89	90	84	96	86.9
	Minimum	68	66	67	71	71	69	67	72	66	66	69	73	74	78	76	74	70	72	64	62	64	72	76	78	75	74	75	77	75	72	69	71.0
Kidder§§	Maximum	84	80	84	84	87	81	84	86	78	74	84	89	90	90	92	83	86	83	79	82	85	92	93	93	92	91	93	85	91	76	94	86.0
	Minimum	65	58	56	60	65	62	62	65	60	57	62	68	69	70	72	68	64	67	58	54	56	60	63	71	69	65	66	70	62	66	62	63.6
Lexington§§	Maximum	84	83	87	85	89	85	88	84	83	80	84	91	89	94	95	90	87	89	85	85	87	94	93	94	94	92	94	94	94	89	94	88.9
	Minimum	68	64	60	71	71	72	67	73	65	64	67	72	74	75	76	75	70	74	62	58	60	64	70	75	73	71	74	75	70	70	69	69.3
Maryville	Maximum	89	82	87	85	86	82	85	85	78	75	81	90	84	92	90	84	80	84	81	85	88	94	95	95	95	94	95	88	93	79	95	87.0
	Minimum	65	58	58	66	65	61	59	68	57	70	66	70	71	71	68	70	65	71	60	57	62	64	70	72	68	65	68	71	60	64	66	65.3
Oregon	Maximum	90	87	88	89	89	84	89	86	84	80	85	91	91	97	94	89	87	90	87	87	91	95	96	95	96	95	95	93	95	89	98	90.4
	Minimum	67	59	63	72	65	65	64	71	62	60	66	72	73	75	70	74	69	70	61	59	64	68	72	75	71	70	72	72	67	66	69	67.8
St. Joseph	Maximum	85	83	87	85	90	84	87	86	80	75	83	90	91	96	93	86	83	87	82	85	89	93	95	94	94	93	95	89	93	78	96	88.0
	Minimum	69	63	63	72	67	64	66	68	64	58	69	73	74	74	74	73	69	68	62	60	63	68	72	77	74	72	74	70	67	64	68	68.4
Trenton	Maximum	89	84	88	87	92	84	87	87	84	80	79	92	93	90	89	84	92	87	84	82	84	92	95	97	97	95	95	88	94	90	97	89.0
	Minimum	68	60	57	61	68	66	64	67	64	58	64	70	73	74	71	69	68	71	67	68	68	59	64	73	73	67	70	73	62	64	65	66.6

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 8-15-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXXIII. COLUMBIA, MO., AUGUST, 1929. No. 8.

GENERAL SUMMARY.

Over the State of Missouri, as a whole, temperatures were high at the beginning of the month and again for five or six days beginning on the 21st, but the greater part of the month was rather pleasant from the physiological side. The outstanding feature of August was the persistent and ever widening drought, and the low state of humidity, and resulting unfavorable effects on most crops.

Fortunately, there was no prolonged hot weather. There would be three or four hot days together followed by as many moderate days, such spells alternating quite regularly throughout the month. The western half of the State from north to south averaged warmer than normal, while the eastern half averaged about as much below the normal, making a State average of 76°, which is normal. Maximum readings of 100° or over occurred at 33 stations on the 1st, and again on one or two days during the latter half of the month. The southwestern plain being the driest section had more hot days than other parts. Afternoon temperatures reached 90° or higher on an average of 14 days, but at some stations in the western part of the Ozarks and southwestern plain this was nearly daily affair. The coolest spell prevailed more or less generally on the 14th, and 15th, when the daily deficiency amounted to as much as 10° to 16°. The extremes, however, 105° and 43°, are quite well within those of other years in the same month.

The rainfall, 2.50 inches, is the least for any August since 1922. Unlike that August, however, the current month's drought was not broken by timely, copious and well distributed rains the latter half of the month as happened in 1922. Estimating by the adverse effects on nearly all growing crops this season's drought is the worst since 1918. In the extreme southeastern counties the rainfall was nearly normal, though mostly bunched in a six-day period beginning on the 6th; but over the remainder of the State, save some few widely separated localities, the deficiency was large. Considering all stations, there were about eight with more than the normal amounts; and 52 stations with a little more than one-half the usual August rainfall.

All growing crops everywhere, except in the southeastern lowlands, were quite seriously damaged; corn, caught in its critical stage of tassel and silk suffered more than any time in the last ten years, probably cut to nearly one-half. Sorghum crops held up fairly well, while the soy bean crop suffered the least of all. Fruits were inferior everywhere, the drought bringing about excessive drop. The ground, as a rule, was too dry and hard for plowing for fall seeding.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 65 stations, was 76.0° or just about normal. The highest local monthly mean was 80.8°, at Clinton, and the lowest was 71.0°, at Arcadia. The highest temperature reported was 105°, at Lamonte on the 1st; and the lowest was 43°, at Mexico and Neosho on the 15th; the greatest daily range was 47° at Dean. The average days with 90° or higher was 14; 100° or over occurred on from one to three days at 33 stations.

PRECIPITATION.

The average precipitation for the State, 96 stations reporting, was 2.50 inches, or 1.25 inches less than the 60 years' normal, and 2.85 inches less than last August a year ago. The greatest local monthly amount was 8.57 inches at Campbell; and the least local monthly was 0.32 inch at Neosho. The greatest amount that fell in any twenty-four consecutive hours or less was 3.27 inches, at Campbell on the 7th.

MISCELLANEOUS PHENOMENA.

Fogs, dense.—At Hannibal on the 12th; at St. Joseph on 15th.
Hail, light.—St. Louis on the 13th; at Lamonte on the 25th.
Halos, lunar.—On the 17th. Solar.—1st, 2d, 10th, 25th, 28th, and 31st.
Thunderstorms.—More or less general on the 5th, 6th, 8th, 9th, 10th, 11th, 23d, and 25th. Scattering on the 1st, 2d, 7th, 12th, 13th, 22d, 24th, 27th, and 31st.
Wind.—Strong wind during the afternoon of the 10th, and the 13th, caused some minor damage at Jackson; on the 25th at Brunswick, and on the 3d at Oregon; they were straight-line winds.
Lightning.—At Hannibal on the 6th lightning struck and set on fire St. Johns' Evangelical Lutheran Church; damage about $2,000. John Lewis, farmer at Downing, Mo., had about $80 worth of hay destroyed by lightning on the 23d.

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations	Mean barometric pressure (sea-level)	Mean relative humidity 7 a. m.	Mean relative humidity 7 p. m.	Sunshine Total hours	Sunshine Percentage of possible	Wind Total movement miles	Wind Average hourly velocity	Wind Max. velocity Miles per hour	Wind Max. velocity Direction	Wind Max. velocity Date
Columbia	30.01	81	57	316	75	4,109	5.5	25	sw.	13
Hannibal	30.02	82	..	...	..	4,193	5.6	21	e.	6
Kansas City	29.99	73	50	327	77	5,614	7.5	33	sw.	24
St. Joseph	29.99	81	56	304	72	4,629	6.2	28	nw.	22
St. Louis	30.02	75	58	278	66	6,335	8.5	33	sw.	13
Springfield	30.03	76	55	341	81	5,658	7.6	33	se.	8
Cairo, Ill.	30.02	85	65	...	..	4,070	5.5	34	n.	13
Keokuk, Iowa	30.04	78	60	294	69	3,602	4.8	24	s.	2

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR AUGUST.

Year	Temperature Mean	Departure	Highest	Lowest	Precipitation Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	Number of days With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	74.0	−1.6	110	48	7.25	−3.80	....	0	11	..	..	..
1889	73.5	−2.1	101	52	1.96	−1.49	....	0	14	..	..	..
1890	73.3	−2.3	104	49	4.84	+1.39	....	0	9	..	..	..
1891	73.2	−2.4	108	38	5.34	+1.89	....	0	8	..	..	..
1892	74.3	−1.3	100	40	2.42	−1.03	4.55	0	6	17	8	6
1893	72.8	−2.8	100	40	2.20	−1.25	5.60	0	4	18	10	3
1894	77.0	+1.4	111	39	1.58	−1.87	3.07	0	5	14	16	1
1895	75.3	−0 3	104	48	4.23	+0.78	3.50	0	8	15	11	5
1896	76.6	+1.0	108	41	3.25	−0.20	4.80	0	6	17	10	4
1897	74.1	−1.5	108	41	2.39	−1.06	5.00	0	6	19	9	3
1898	75.8	+0.2	103	44	3.03	−0.42	4.75	0	5	17	10	4
1899	78.8	+3.2	107	49	3.35	−0.10	4.28	0	7	18	10	3
1900	80 3	+4.7	105	52	3.51	+0.06	2.77	0	6	19	9	3
1901	78.4	+2.8	109	47	1.88	−1.57	4.33	0	5	19	9	3
1902	75.0	−0.6	103	47	6.16	+2.71	7.84	0	10	14	11	6
1903	74.4	−1.2	102	43	5.40	−1.95	6.40	0	10	16	11	4
1904	73.7	−1.9	100	43	5.46	+2.01	4.43	0	8	16	10	5
1905	76.4	+0.8	102	48	4.69	+1.24	3.94	0	8	19	7	5
1906	76.6	+1.0	101	40	4.72	+0.27	3.55	0	11	14	10	7
1907	77.3	+1.7	109	47	3.71	+0.26	6.30	0	9	17	8	6
1908	76.4	+0.8	102	46	3.87	+0.42	3.57	0	8	17	9	5
1909	79.5	+3.9	110	40	0.55	−2.90	4.00	0	2	24	6	1
1910	74.7	−0.9	103	40	2.77	−0.68	5.80	0	6	15	9	7
1911	75.4	−0.2	109	41	4.20	+0 55	5.17	0	7	15	8	8
1912	76.2	+0.6	104	41	4.19	−0.74	2.62	0	9	17	8	6
1913	82.8	+6.9	110	41	1.06	−2.51	3.51	0	3	22	7	2
1914	78.0	+1.8	106	49	4.25	+0.60	8.50	0	9	15	9	7
1915	69.8	−6.5	98	37	7.86	+4.15	8.20	0	12	12	9	10
1916	79.2	+2.9	107	41	4.05	+0.49	6.48	0	7	19	7	5
1917	73.3	−2.9	104	38	4.45	+0.94	5.20	0	9	16	8	7
1918	81.8	+5 8	111	45	3.34	−0.27	3.42	0	8	17	9	5
1919	75.7	−0.5	106	44	4.29	+0.49	7.00	0	8	17	9	5
1920	73.1	−3.0	102	43	4.78	+0.89	5.77	0	9	15	8	8
1921	76.8	+0.8	109	48	5.27	+1.63	5.20	0	9	14	0	7
1922	77.5	+1.2	107	46	2.40	−1.60	3.87	0	6	18	18	5
1923	77 3	+1.3	108	42	3.99	+0.31	5.25	0	8	16	9	6
1924	77.2	+1.2	106	48	4.14	+0.46	3.50	0	7	19	8	4
1925	76.5	+0.5	107	45	3.45	−0.23	4.26	0	6	19	8	4
1926	77.5	+1.5	106	50	5.63	+1.95	5.83	0	10	15	9	7
1927	71.1	−4.9	97	39	5.06	+1.38	7.76	0	9	14	10	7
1928	76.4	+0.4	99	45	5.35	+1.67	5.52	0	9	15	10	6
1929	76.0	0.0	105	43	2.50	−1.25	3.27	0	6	18	9	4

Climatological Data for August, 1929

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Brunswick	Chariton	652	49	73.6	− 0.2	100	21†	53	15	33	1.82	−2.07	0.52	0	7	13	3	15	se.	O. K. Beuecke
Clifton Hill	Randolph	731	29	75.9	− 0.3	99	22	48	15	42	1.43	−2.60	0.31	0	10	14	14	3	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	76.6	+ 1.0	100	2	50	15	32	0.40	−3.20	0.12	0	6	14	12	5	ne.	U. S. Weather Bureau
Downing	Schuyler	876	7	73.3	.. ..	98	22	49	15	33	2.87	−0.65	1.53	0	7	20	6	5	s.	James Taylor
Fayette	Howard	661	48	75.0	− 1.1	100	22	44	15	43	1.11	−2.11	0.23	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	76.0	− 0.5	100	22	47	15	40	0.92	−2.59	0.54	0	6	23	5	3	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	1.58	−1.42	0.55	0	6	17	6	8	se.	J. W. Pulliam
Hannibal	Marion	534	36	74.1	− 0.9	98	2	49	15	31	1.34	−2.00	0.98	0	10	11	13	7	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	78.6	+ 1.9	100	2†	52	15	43	3.29	+0.23	2.20	0	7	15	11	5	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	73.4	− 0.6	95	2†	50	15	31	2.40	−0.92	0.87	0	6	22	3	6	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	34	71.9	− 3.1	100	2	45	15†	35	2.08	−1.65	0.94	0	3	21	5	5	e.	Stark Bros. Nurseries
Macon	Macon	875	29	74.8	− 1.5	99	2	50	15	33	2.12	−1.16	0.73	0	10	20	7	4	s.	W. C. Brown
Mexico	Audrain	800	39	73.4	− 2.7	102	2	43	15	42	1.58	−1.67	0.80	0	5	28	0	3	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	..	..	..	2.37	.....	1.60	0	4	22	7	2	ne.	J. S. Conway
St. Charles	St. Charles	456	40	76.0	− 2.1	100	2	51	15	35	1.70	−1.76	1.20	0	2	15	10	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	76.4	− 1.1	99	2	57	15†	24	3.40	+0.41	2.70	0	7	18	9	4	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	75.6	− 1.6	99	2†	56	15	24	3.21	−2.40	2.62	0	6	20	9	2	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	..	..	..	2.68	−0.17	1.50	0	9	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	74.8	− 1.9	97	2	47	15	42	2.80	−0.67	2.00	0	5	11	17	3	s.	Frank Hall
Unionville	Putnam	1,062	35	73.7	− 1.3	100	22	48	15	33	3.04	−0.92	0.95	0	6	17	7	7	sw.	Geo. W. Davis
Warrenton	Warren	816	46	76.0	− 0.4	100	22	48	15	35	0.89	−2.29	0.59	0	5	11	16	4	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	73.2	− 1.8	97	22	52	15	27	1.41	−1.79	0.85	0	5	10	12	9	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	74.9	− 1.0	102	2	43	15	43	2.02	−1.50	2.70	0	7	17	9	5	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	76.2	.....	99	2	51	16	38	8.57	.....	3.27	0	7	27	0	4	s.	Jeff. King
Caruthersville	Pemiscot	265	32	78.0	− 1.7	100	2†	58	15	30	3.54	−0.03	1.14	0	7	16	12	3	s.	Sam Smith
Doniphan	Ripley	344	24	75.6	− 1.8	99	1	51	16‖	36	4.18	−0.13	1.18	0	8	18	13	0	sw.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	37	73.2	− 3.0	98	1	48	16	36	3.49	−0.12	1.42	0	8	8	7	16	s.	John G. Putz
Marble Hill	Bollinger	470	33	74.6	− 2.4	98	2	47	16	37	2.69	−0.81	1.12	0	5	18	11	2	w.	R.A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	..	..	..	3.47	−0.34	1.35	0	7	18[d]	7[d]	2[d]	sw.	John A. Spence
Poplar Bluff	Butler	329	24	75.7	− 2.3	98	1	51	16	34	6.82	+2.55	2.00	0	9	20	6	5	s.	J. H. Wolpers
Sikeston	Scott.	318	23	76.6	− 1.0	100	1	52	15	36	3.80	−0.01	1.60	0	7	21	2	8	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	75.8	− 2.0	96	2	57	15	25	3.29	+0.27	0.98	0	9	13	9	9	ne.	U. S. Weather Bureau
Section means and	extremes	....	..	75.7	− 2.0	100	1†	47	16	38	4.43	+0.17	3.27	0	7	18	7	6	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	71.0	− 3.5	94	2	46	16	36	2.22	−1.50	1.00	0	6	30	1	0	w.	Arcadia College
Aurora	Lawrence	1,370	38	77.4	+ 0.6	95	1†	51	15	31	2.30	−1.97	0.90	0	4	25	5	1	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	77.4	+ 1.5	98	1	50	29	33	7.10	+2.71	1.75	0	6	23	5	3	ne.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	80.2	+ 2.7	104	1	50	29	47	1.37	−2.90	0.85	0	2	21	9	1	sw.	H. E. Dean
Eldon	Miller	934	32	77.3	+ 0.9	101	2	51	15†	44	1.94	−2.04	0.75	0	5	4	20	7	sw.	E. H. Shepherd
Farmington	St. Francois	918	17	73.9	− 0.9	95	2†	47	16	38	3.73	+0.35	1.45	0	7	16	11	4	sw.	Robert Forsyth
Goodland	Iron	1,000	34	72.2	− 2.3	97	1	44	16	41	3.17	−0.86	0.93	0	6	18	10	3	w.	F. M. Adams
Greenville	Wayne	381	6	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	..	..	..	4.10	.....	2.00	0	3	21	5	5	w.	A. W. Madison
Koshkonong	Oregon	958	27	76.8	− 0.9	100	1	49	15	30	2.88	−1.57	1.26	0	4	17	9	5	n.	R. M. Hitt
Lebanon	Laclede	1,265	40	74.5	− 1.8	104	1	47	29†	42	4.88	+1.35	1.66	0	6	22	6	3	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	79.3	− 2.1	99	21†	54	29	36	0.77	−3.40	0.29	0	4	20	10	1	ne.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	76.1	+ 1.0	100	1	50	15	34	3.82	−0.58	2.09	0	6	16	12	3	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	78.3	+ 1.4	99	1	43	15	44	0.32	−3.77	0.32	0	1	27	4	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	75.2	− 0.6	98	2†	50	29	36	2.28	−1.80	0.95	0	8	13	9	9	s.	F. H. Lane
Salem(near)	Dent	1,173	24	74.2	− 1.9	97	1	47	15	37	4.71	+0.30	1.37	0	8	18	9	4	se.	A. C. Leech
Seligman	Barry	1,542	26	79.1	+ 3.5	100	6	50	15	38	2 01	−1.98	1.55	0	3	21	9	1	ne.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	75.0	0.0	98	1	46	15	34	3.56	−0.28	2.08	0	5	20	10	1	s.	Ira H. Hailey
Springfield	Greene	1,324	40	77.0	+ 1.3	97	1	56	15	30	2.97	−1.12	1.10	0	6	25	6	0	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	76.1	− 0.1	104	1	43	15	47	3.01	−1.12	2.09	0	5	20	8	3	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	78.8[d]	+ 1.0	100	1†	52	16	36	0.91	−2.83	0.49	0	4	8[d]	17[d]	2[d]	sw.	W. G. Bigelow
Clinton	Henry	765	35	80.8	+ 4.0	104	1	52	15	36	1.19	−2.17	0.37	0	6	24	7	0	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	77.1	+ 1.3	103	24	50	15	35	1.41	−2.74	1.15	0	7	6	10	15	s.	John H. Patterson
Lamar	Barton	980	41	78.4	+ 0.9	99	23	50	15	39	1.30	−2.88	0 55	0	4	20	8	3	ne.	Jesse A. Mann
Lamonte	Pettis	867	27	78.4	+ 1.7	105	1	51	15†	40	1.44	−2.28	0.48	0	5	24	6	1	s.	J. E. Wheeler
Marshall	Saline	779	39	76.6[b]	+ 1.0	99	1	53	29	36	2.53	−1.13	0.56	0	7	22	8	1	.....	Sec. Chamber of Commerce
Nevada	Vernon	862	35	78.2	+ 1.3	100	21	48	15	36	2.22	−1.29	1.58	0	4	18	10	3	sw.	George A. Kaupp
Warrensburg	Johnson	878	41	78.6	+ 1.6	103	1	54	14	37	1.91	−1.68	1.10	0	4	14	14	3	sw.	E. A. Markey
Warsaw	Benton	687	28	79.4	+ 2.0	104	1	48	15	42	0.66	−3.63	0.41	0	3	13	17	1	s.	Everett Martin
Section means and	extremes	.....	..	78.5	+ 1.6	105	1	48	15	42	1.51	−2.30	1.58	0	5	17	10	4	s.	
Northwest Plateau																				
Bethany	Harrison	916	36	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	M. H. Moulton
Chillicothe	Livingston	779	19	75.0	− 1.1	101	21†	48	15	41	2.26	−2.40	0.66	0	9	19	10	2	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	75.5	+ 0.9	100	22	50	14†	33	1.20	−2.28	0.65	0	7	16	11	4	e.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	76.0[d]	.....	101	21	44	15	40	0.78	−3.06	0.35	0	6	26	1	4	s.	Fred L Stiff
Grant City	Worth	1,134	24	74.8	− 0.1	98	21†	50	14†	34	1.45	−2.18	0.40	0	6	17	13	1	se.	W. P. Spillman
Kansas City	Jackson	963	39	78.2	+ 1.6	100	1	57	15	31	4.13	+0.04	1.72	0	9	14	13	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	73.1	− 2.6	100	21	47	14	39	1.04	−2.87	0.46	0	7	12	10	9	se.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	..	..	..	1.53	.....	0.53	0	7	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	76.6	+ 0.6	96	2†	54	14†	32	2.42	−0.81	1.41	0	8	18	10	3	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	74.8[e]	+ 1.2	99	2	50	14†	35	1.59	−2.27	0.50	0	8	19	7	5	e.	J. R. Brink
Oregon	Holt	1,048	72	78.8	+ 3.8	104	21	49	14	36	1.38	−2.59	0.62	0	10	23	4	4	se.	Mina Wright
St. Joseph	Buchanan	967	20	77.0	+ 0.3	101	2	50	15	33	2.09	−1.39	0.66	0	10	20	8	3	se.	U. S. Weather Bureau
Tarkio	Atchison	916	25	73.6	− 2.0	99	21	49	15	35	1.71	−2.16	0.35	0	8	16	8	7	se.	Albert Volker
Trenton	Grundy	822	32	75.5	+ 0.3	102	21†	48	15	36	1.48	−2.14	0.55	0	8	23	7	1	s.	W. H. Estes
Section means and	extremes	.....	..	75.7	+ 0.3	104	21	44	15	41	1.77	−2.01	1.72	0	8	18	9	4	se.	
State means and	extremes	.....	..	76.0	0.0	105	1	43	15	47	2.50	−1.25	3.47	0	6	18	9	4	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for August, 1929

Stations.	Drainage-basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain																																	
Boonville‖	Missouri	....	.05	T.	....	....	....	.06	....	.20	....	....	.37	....	....	....	....	....	....	....	.16	.19	....	....	.18	....	.03	....	....	....	....	....	1.24
Brunswick‖	Grand	....	....	.02	....	....	....	....	....	.52	.12	.35	....	....	....	....	....	....	....	....	.35	....	....	.18	....	....	.28	....	....	....	....	....	1.82
Clifton Hill	Chariton	.03	....	.03	....	....	.31	....	.06	.21	.28	.04	....	....	....	....	....	....	....	....	.20	....	....	.24	....	....	.03	....	....	....	....	T.	1.43
Columbia***	Missouri	T.	....	T.	....	....	.07	.02	.12	T.	.08	T.	....	....	....	....	....	....	....	....	.10	....	....	T	....	.01	....	....	....	....	....	T.	0.40
Downing	Mississippi	T	....	....	....	.10	.50	..	....	.01	....	.15	....	....	....	....	....	....	....	....	.38	....	....	1.53	....	.20	....	....	....	....	....	....	2.87
Fayette‖	Missouri	.05	....	....	....	....	.09	....	.23	.15	.11	....	....	....	....	....	....	....	....	....	.13	.13	..	....	.12	.10	....	....	....	....	....	....	1.11
Fulton‖	...do	....	....	....	....	....	.04	.04	....	.12	....	.03	....	....	....	....	....	....	....	....	....	.15	....	....	....	....	.54	....	....	....	....	....	0.92
Gorin	Mississippi	T.	....	.09	....	....	.55	....	.30	....	....	....	....	....	....	....	....	....	....	....	.20	....	....	.37	....	.07	....	....	....	....	....	....	1.58
Hannibal***	...do	....	.02	T.	....	.06	.92	....	T.	.04	.13	.02	....	T.	....	....	....	....	.06	....	.02	.06	....	.01	....	T.	T	....	....	....	....	T.	1.34
Hermann‖	Missouri	....	....	.03	....	....	.22	.02	...	.06	....	.10	.33	....	....	....	....	....	....	....	....	.06	.03	....	....	....	....	.44	....	....	....	....	1.29
Jefferson City‖	...do	....	....	....	....	....	.07	.12	....	.55	....	2.20	....	....	....	....	....	....	....	....	....	.10	....	....	....	....	.05	.20	....	....	....	....	3.29
Kirksville	Mississippi	....	....	....	....	.16	.82	....	....	....	....	....	....	....	....	....	....	....	....	....	.87	....	....	.41	....	.13	....	....	....	....	....	.01	2.40
Louisiana	...do	....	....	....	....	.80	....	....	....	.94	.34	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.08
Lucerne‖	Grand	....	....	....	....	....	1.39	....	....	....	....	....	....	....	....	....	....	....	....	....	.22	....	....	.78	....	....	.13	....	....	....	....	....	2.52
Macon ‖	Chariton	....	....	.20	....	....	.50	....	....	.10	.22	.14	....	....	....	....	....	....	.03	....	.04	.73	....	.10	....	....	.06	....	....	....	....	....	2.12
Mexico ‖	Mississippi	....	....	....	....	....	.80	....	....	.21	....	.08	....	....	....	....	....	....	....	....	....	.45	....	.12	.52	....	....	.78	....	....	....	T.	1.58
Milan‖	Grand	....	....	.15	....	....	.50	....	....	....	T.	....	....	....	....	....	....	....	....	....	.13	....	....	.17	....	....	....	....	....	....	....	....	2.07
Monroe City	Mississippi	....	....	....	....	T.	1.60	....	....	....	.47	....	....	....	....	....	....	....	....	....	....	.01	....	....	.06	....	T.	....	....	....	....	....	2.37
Pacific‖	Meramec	....	....	.10	....	....	1.08	.02	....	.13	....	.30	.31	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	....	....	....	2.01
St. Charles	Missouri	....	....	T.	....	....	1.20	....	....	T.	.50	T.	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	T.	....	....	....	....	....	1.70
St Louis (1)***	Mississippi	....	....	T.	....	T.	2.70	T.	.04	.06	T.	.03	....	.38	....	....	....	....	....	....	....	.01	....	.18	....	....	T.	....	....	....	....	....	3.40
St. Louis (2)*	...do	....	....	....	....	T.	2.62	T.	.05	.08	T	.05	....	.40	....	....	....	....	....	....	....	T.	....	.01	....	....	....	....	....	....	....	....	3.21
Shelbina ‖‖	...do	....	....	.04	....	....	1.50	....	....	.01	.18	.19	.23	....	....	....	....	....	.03	....	....	.35	....	....	.15	....	....	....	....	....	....	....	2.68
Steffenville	...do	....	....	T.	....	.05	2.00	....	....	....	T.	....	....	T.	....	....	....	....	T.	....	.20	....	.05	.08	....	.20	....	.35	....	....	....	....	....	2.80
Union‖	Meramec	....	....	....	....	....	.97	.22	....	.19	....	.40	.23	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.14
Unionville	Chariton	T.	....	....	....	.25	.60	....	....	....	T.	T.	....	....	....	....	....	....	....	....	.30	....	....	.84	....	.95	....	....	....	....	....	.10	3.04
Warrenton	Mississippi	....	....	....	....	....	.59	....	....	.06	.02	....	....	....	....	....	....	....	....	....	T.	T.	....	.05	....	.17	....	....	....	....	....	....	0.89
Keokuk, Ia.***	...do	....	T	....	....	.85	T.	....	T.	.28	T	T.	.03	T.	....	....	....	....	....	....	....	....	....	.24	....	T.	....	....	....	....	....	.01	1.41
Southeast Lowlands																																	
Campbell‖	St. Francis	.17	....	....	....	....	.21	3.27	1.40	....	2.32	....	.65	....	.55	....	....	....	....	....	....	....	....	....	.35	....	....	....	....	....	....	....	8.57
Cape Girardeau‖	Mississippi	....	....	....	T.	....	1.24	.17	.16	.15	.19	.42	....	....	.35	....	....	....	....	....	....	....	....	....	.25	....	....	....	....	....	....	....	3.03
Caruthersville ‖	... do	....	....	....	....	....	1.14	.12	.38	1.00	.10	.55	....	....	....	....	....	....	....	....	....	....	....	....	.37	....	....	.13	....	....	....	....	3.54
Dexter‖	St. Francis	....	....	....	....	....	.10	.80	.75	.95	.15	.14	....	....	.08	....	....	....	....	....	....	T.	....	....	.02	....	T.	....	....	....	....	....	3.47
Doniphan	Black	....	....	....	....	....	.12	.62	1.18	.24	.40	.50	1.10	....	....	....	....	....	....	....	....	....	....	....	.35	....	....	....	....	....	....	....	4.18
Jackson	Mississippi	....	....	.04	....	....	1.42	.32	....	.40	.54	.03	....	.39	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.49
Marble Hill	Mississippi	....	....	....	....	....	1.12	.75	.12	.43	.27	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	2.69
Morehouse	...do	....	....	T.	....	....	1.35	.65	.33	.94	.07	.03	....	....	....	....	....	....	....	....	....	....	....	.10	....	....	....	....	....	....	....	....	3.47
New Madrid‖	...do	....	....	....	....	....	....	.82	.35	1.15	.52	.22	.07	....	.02	....	....	....	....	....	....	....	....	....	.32	.25	....	....	.01	....	....	....	3.73
Poplar Bluff‖‖	Black	.33	....	....	....	....	.05	2.00	1.30	1.73	.13	.21	1.00	....	.07	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6.82
Sikeston‖	Mississippi	....	....	....	....	....	1.60	.98	.19	.57	.28	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.08	....	....	....	....	....	3.80
Cairo, Ill.***	... do	....	....	.04	....	....	.61	.23	.03	.59	.05	.98	....	.37	....	....	....	....	....	....	....	....	....	....	.39	....	....	....	....	....	....	....	3.29
Ozark Plateau																																	
Arcadia ‖	St. Francis	....	....	....	.02	....	T.	.51	.10	1.00	T.	.50	....	....	.09	....	....	....	....	....	....	T.	....	....	T.	....	....	....	....	....	....	....	2.22
Aurora	Neosho	.90	....	....	....	....	....	....	.61	.07	....	.72	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.30
Birchtree (near)	Black	....	....	....	....	....	....	.71	1.28	1.13	1.37	.86	....	....	....	....	....	....	....	....	....	....	....	....	1.75	....	....	....	....	....	....	....	7.10
Bolivar	Osage	....	....	....	....	....	T.	1.20	.32	.07	....	.25	....	....	....	....	....	....	....	....	.11	....	....	....	T.	....	....	....	....	....	....	....	....
Caplinger Mills	Osage	....	....	....	....	....	....	....	T.	....	....	.85	....	....	....	....	....	....	....	....	....	....	....	....	.52	....	....	....	....	....	....	....	1.95
Dean	Neosho	....	....	....	....	....	....	....	....	.75	....	.60	.05	....	....	....	....	....	....	....	....	.47	....	....	....	....	....	....	....	....	....	....	1.37
Eldon‖	Missouri	....	.07	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	.11	....	....	....	....	....	....	....	1.94
Farmington	St. Francis	....	....	....	....	....	.65	.16	.40	1.45	.11	.85	....	....	....	....	....	....	....	....	....	....	....	....	.85	....	....	....	....	....	....	....	3.73
Fredericktown‖‖	... do	....	....	....	....	....	.10	.57	.15	.27	.20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.14
Galena‖	White	....	.35	....	....	....	....	....	....	.55	.45	1.28	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.63
Goodland	Black	.07	....	....	....	....	....	.82	....	.93	.89	....	....	....	....	....	....	....	....	....	.05	....	....	....	....	....	.41	....	....	....	....	....	3.17
Greenville	St. Francis	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hailey	White	....	.50	....	....	....	....	....	1.60	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.00	....	....	....	....	....	....	....	4.10
Koshkonong	Black	....	....	....	....	....	....	....	....	1.26	.07	1.20	.35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.88
Lebanon ‖‖	Osage	....	....	....	....	....	....	1.10	1.66	1.30	.46	.24	.12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.88
Leeper‖‖	Black	T.	T.	....	....	....	....	.46	.76	.33	....	.47	1.25	T.	.15	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	....	....	....	3.42
Lockwood	Osage	....	....	....	....	....	....	.23	....	....	....	.29	....	....	....	....	....	....	....	....	14	....	....	....	.11	....	....	....	....	....	....	....	0.77
Mountain Grove‖	White	.20	T.	....	....	....	....	.72	.06	.20	.55	2.09	....	....	....	....	....	....	....	....	....	T.	....	....	....	T.	....	....	....	....	....	....	3.82
Neosho	Neosho	T.	....	....	....	....	....	....	....	T.	.32	....	....	....	....	....	....	....	....	T.	....	....	....	....	T.	....	T.	....	....	....	....	....	0.32
Owensville ‖	Gasconade	....	....	.08	....	....	.77	....	....	1.30	....	.85	.20	....	....	....	....	....	....	....	.08	....	.22	..	....	....	.78	....	....	....	....	....	3.42
Ozark Beach‖‖	White	....	....	....	....	....	....	....	2.00	....	.27	.41	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.54
Rolla ‖	Meramec	....	....	....	.02	....	....	.33	.05	.50	....	.95	.35	....	....	....	....	....	....	....	....	.03	....	....	....	....	.05	....	....	....	....	....	2.28
Salem (near)	...do	....	....	.08	....	....	1.37	.43	.81	1.35	.59	....	....	....	....	....	....	....	....	....	....	.07	....	....	.01	....	....	....	....	....	....	....	4.71
Seligman	Neosho	....	....	....	....	....	....	....	....	1.55	.42	....	T.	....	....	....	....	....	....	.04	....	....	....	....	....	....	....	....	....	....	....	....	2.01
Seymour (near)	White	.48	....	....	....	....	....	.66	.28	.06	....	2.08	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	....	....	....	....	3.56
Springfield***	...do	1.10	....	....	....	....	.25	.19	.36	T.	.69	.38	....	....	....	....	....	....	....	....	T.	....	T.	T.	T.	T.	T.	....	....	....	....	....	2.97
Steelville‖	Meramec	....	.44	....	....	....	.03	.25	....	.75	....	.16	....	....	.20	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	1.83
Stover‖	Missouri	....	1.12	....	....	....	....	.43	....	1.00	....	.02	....	....	....	....	....	....	....	....	.17	....	....	....	....	....	....	....	....	....	....	T.	2.74
Tuscumbia ‖	Osage	....	....	....	....	....	....	.40	....	.15	.19	.96	.05	....	....	....	....	....	....	....	....	.32	....	....	.11	....	.63	....	....	....	....	....	2.81
Williamsville‖‖	Black	.51	....	....	....	....	.09	.72	1.14	.05	.80	.19	1.80	....	.05	....	....	....	....	....	....	.04	....	....	....	....	....	15	....	....	....	....	5.54
Willow Sprgs. ‖ (near)	White	....	.98	....	....	....	....	.84	....	.49	.06	1.63	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.00
Southwest Plain																																	
Appleton City	Osage	....	....	.49	....	T.	.36	....	....	....	....	.05	....	....	....	....	....	....	....	....	.01	....	....	T.	T.	....	.05	....	....	....	....	....	0.91
Clinton	Osage	....	....	....	....	.20	.37	.07	....	....	....	....	....	....	....	....	....	....	....	....	.22	....	....	....	....	....	.28	....	....	....	....	....	1.19
Concordia‖	Missouri	....	....	....	....	....	....	....	....	1.96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.96
Harrisonville‖	Osage	....	....	....	....	....	.02	.05	....	1.15	.01	.02	....	....	....	....	....	....	....	....	....	....	....	....	....	.14	.02	....	....	....	....	....	1.41
Joplin‖	Neosho	....	....	....	....	....	....	.60	....	....	1.16	.21	....	....	....	....	....	....	....	....	....	....	....	....	.02	....	....	....	....	....	....	....	1.99
Lamar‖	...do	.15	....	....	....	....	.55	.05	....	....	....	.55	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.30
Lamonte	Missouri	....	....	....	....	....	.60	....	T.	....	....	.10	....	....	....	....	....	....	....	....	.16	....	....	....	....	.48	.10	....	....	....	....	....	1.44
Marshall	... do	.44	....	.41	....	....	....	....	.26	.56	....	....	....	....	....	....	....	....	....	....	.55	....	....	.21	....	.10	....	....	....	....	....	....	2.53
Nevada	Osage	....	....	....	....	....	T.	.12	.12	T.	1.58	.40	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.22
Osceola‖	...do	....	....	....	....	....	....	.27	....	.10	....	.15	....	....	....	....	....	....	....	....	.11	....	....	....	....	....	....	....	....	....	....	....	0.63
Warrensburg	Missouri	....	....	....	....	....	1.10	T.	....	.31	....	....	....	....	....	....	....	....	....	....	.28	....	....	....	....	.22	....	....	....	....	....	....	1.91
Warsaw	Osage	....	....	....	....	....	.41	....	....	T.	T.	.15	....	....	....	....	....	....	....	....	.10	....	....	....	T.	....	....	....	....	....	....	....	0.66
Waverly ‖	Misouri	T.	....	T.	....	....	T.	T.	....	.40	T.	.27	....	T.	T.	....	....	....	....	....	.17	....	....	.36	....	....	1.70	....	....	....	....	....	2.90
Northwest Plateau																																	
Albany‖‖	Grand	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bethany	...do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Chillicothe ‖‖	...do	....	....	.05	....	....	.31	T.	....	T.	.03	.09	.66	.01	....	....	....	....	....	....	.58	....	....	.30	T.	....	.23	....	....	....	....	....	2.26
Concepción	Missouri	.03	....	....	....	.05	....	.04	....	....	T.	....	....	.04	....	....	....	....	....	T.	T.	....	T.	.65	....	....	.14	....	....	....	....	.25	1.20
Edgerton	...do	....	....	....	....	.04	....	T.	....	.04	.35	T.	....	.03	....	....	....	....	....	....	....	....	....	.07	T.	....	.25	....	....	....	....	T.	0.78
Gallatin ‖	Grand	....	....	.04	....	....	....	....	....	....	.05	....	....	....	....	....	....	....	....	....	.45	....	....	.49	....	....	....	....	....	....	....	....	1.03
Grant City	... do	....	.15	....	....	.09	....	.25	....	....	....	....	....	T.	....	....	....	....	....	....	T.	....	.40	....	....	.18	....	....	....	....	....	.38	1.45
Kansas City***	Missouri	....	.01	....	....	T.	T.	....	.75	.57	.04	T.	....	.02	....	....	....	....	....	....	T.	....	....	.05	.97	1.65	.07	....	....	....	....	T.	4.13
Kidder ‖	Grand	....	....	.08	....	....	.46	T.	....	....	.15	.06	....	T.	....	....	....	....	....	....	T.	....	....	.12	.06	....	.11	....	....	....	....	....	1.04
King City	Missouri	....	....	.53	....	.04	....	....	T.	....	.10	T.	....	....	....	....	....	....	....	T.	....	....	.35	....	....	....	.04	.32	....	....	....	.15	1.53
Lexington	...do	.05	....	....	....	....	....	....	....	1.41	.15	.06	....	.03	....	....	....	....	....	....	.42	....	....	.06	....	.24	....	....	....	....	....	....	2.42
Maryville ‖	...do	.02	....	....	....	.07	....	.03	....	.25	....	.27	....	....	....	....	....	....	....	....	....	....	....	.50	....	....	.23	....	....	....	....	.22	1.59
Oregon	...do	.04	....	.13	....	.04	....	....	.02	....	.13	....	....	.04	....	....	....	....	....	....	....	....	....	.04	.08	....	T.	.62	....	....	....	.24	1.59
St. Joseph***	...do	.05	.02	....	....	.51	....	....	T.	T.	.66	....	....	.03	....	....	....	....	....	T.	....	....	....	.01	.08	....	.54	.01	....	....	....	.18	1.38
Tarkio	...do	.15	....	....	....	.22	....	....	.25	....	.21	.12	....	.07	....	....	....	....	....	....	....	....	....	.35	....	....	....	....	....	....	....	.34	2.09
Trenton	Grand	....	....	.55	....	.02	.04	....	....	....	.04	....	....	....	....	....	....	....	....	....	.27	....	....	.31	....	.15	....	....	....	....	....	.10	1.71

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for August, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	95	100	86	85	92	75	88	92	86	90	92	95	92	78	82	76	88	77	73	71	86	100	83	83	74	92	75	78	60	87	71	83.9
	Minimum	69	75	75	56	59	60	65	64	67	70	71	66	67	55	53	55	55	61	59	62	62	70	71	69	67	67	67	58	55	57	59	63.4
Columbia	Maximum	92	100	84	80	89	78	84	88	87	87	89	92	96	75	78	85	91	90	83	79	99	98	91	94	93	91	86	73	85	89	86	87.7
	Minimum	75	74	65	57	62	67	67	65	71	73	72	67	67	56	50	58	61	66	62	63	70	76	74	72	72	71	63	56	53	62	67	65.6
Fayette	Maximum	95	99	87	85	91	92	85	94	87	85	92	94	95	81	82	84	92	91	86	81	98	100	93	98	95	94	90	84	89	93	86	90.3
	Minimum	68	69	73	51	52	60	53	62	67	68	69	61	64	49	44	46	53	60	59	59	58	67	69	66	64	65	66	52	46	57	56	59.8
Hannibal	Maximum	91	98	82	77	76	72	82	87	85	85	87	89	92	69	75	79	88	86	79	80	95	97	86	90	88	90	81	77	83	87	77	84.2
	Minimum	67	77	67	56	59	64	65	65	71	70	71	65	67	53	49	54	58	69	60	61	67	75	72	68	66	72	64	56	52	56	68	61.0
Jefferson City§§	Maximum	99	100	94	93	97	89	88	96	96	96	96	97	96	77	86	87	96	97	88	88	96	100	99	98	100	97	96	97	87	96	88	93.9
	Minimum	73	71	74	58	57	61	67	64	68	70	69	66	68	55	52	53	56	56	61	62	62	67	73	69	68	71	68	56	53	53	57	63.2
Kirksville	Maximum	89	95	87	80	76	70	78	83	83	86	91	90	89	78	79	81	90	87	78	75	94	95	89	88	84	90	86	78	84	88	83	84.6
	Minimum	66	66	72	54	60	58	60	61	68	66	70	64	72	51	50	53	59	66	57	59	65	72	67	66	66	64	58	55	55	58	66	62.1
Louisiana	Maximum	91	100	90	80	80	73	85	85	85	88	85	90	90	78	75	80	85	90	80	80	95	99	90	90	88	90	85	80	75	80	80	85.2
	Minimum	60	74	75	52	52	65	61	60	60	60	70	60	60	55	45	45	50	65	65	52	67	67	70	60	60	55	50	50	45	47	60	58.6
Macon§§	Maximum	94	99	85	88	82	74	86	90	85	86	89	93	91	75	81	84	91	91	85	79	96	98	90	94	91	91	86	83	86	91	75	87.4
	Minimum	67	74	71	56	57	56	61	62	67	69	70	63	68	52	50	53	58	63	59	61	60	70	69	67	66	66	60	55	53	58	64	62.1
Mexico§§	Maximum	92	102	86	82	89	72	83	97	89	87	90	91	97	75	78	85	98	87	82	80	99	100	88	93	95	94	85	79	83	92	85	85.0
	Minimum	62	73	74	53	56	59	63	62	65	69	72	65	71	53	43	53	56	61	56	59	63	70	71	66	66	70	69	53	49	53	60	61.8
St. Louis(1)	Maximum	93	99	85	80	86	75	83	88	86	88	87	91	93	72	75	80	86	85	80	81	89	98	89	90	92	87	83	78	81	85	82	85.4
	Minimum	76	75	69	62	64	61	67	70	71	74	71	71	71	61	57	62	63	68	60	62	67	76	75	70	72	71	64	57	61	66	68	67.3
Unionville	Maximum	90	93	85	80	80	78	83	78	90	88	90	93	87	80	80	82	90	90	80	80	97	100	90	92	87	88	86	80	83	90	80	86.1
	Minimum	63	72	70	50	60	58	58	60	65	66	70	65	70	50	48	52	60	62	56	58	64	73	66	66	65	63	54	52	54	65	64	61.3
Warrenton	Maximum	94	98	93	83	87	80	84	90	87	85	86	90	95	90	76	84	92	88	83	81	94	100	93	92	93	90	84	79	84	91	85	88.1
	Minimum	72	71	74	55	58	63	65	64	69	70	71	66	70	55	48	54	58	66	57	59	65	74	74	68	74	68	67	51	53	61	63	64.0
Southeast Lowlands																																	
Campbell	Maximum	98	99	98	94	87	87	83	88	90	93	93	92	94	83	78	83	89	94	85	89	95	96	95	96	91	90	93	83	84	85	87	90.1
	Minimum	66	72	72	66	52	62	67	66	68	65	68	67	65	64	52	51	54	56	63	57	62	64	67	70	74	63	61	56	55	54	53	62.3
Caruthersville	Maximum	97	100	100	88	89	88	81	86	91	92	91	91	91	82	77	83	87	81	85	88	81	94	94	91	90	90	91	83	84	85	87	88.3
	Minimum	70	79	70	67	64	67	70	73	71	70	71	72	71	70	58	64	61	65	69	63	67	72	73	72	72	67	66	61	63	64	61	67.8
Doniphan	Maximum	99	98	97	86	89	89	83	85	87	90	92	90	92	84	79	81	86	90	83	90	91	97	95	97	92	95	95	87	87	87	88	89.7
	Minimum	69	70	70	59	53	65	67	70	68	65	69	69	64	63	52	51	51	55	64	52	62	62	61	70	69	59	61	55	55	53	52	61.5
Jackson	Maximum	98	95	92	84	84	83	79	84	82	88	87	89	90	85	74	80	85	89	84	86	88	92	92	89	90	90	89	81	82	85	85	86.5
	Minimum	67	71	65	57	52	61	63	64	65	65	67	63	63	59	49	48	51	53	62	55	61	63	69	67	64	60	63	53	53	52	51	59.9
Poplar Bluff	Maximum	98	97	96	88	85	88	81	86	89	87	92	91	92	84	79	82	81	90	86	87	87	94	95	95	90	91	94	86	85	85	86	88.6
	Minimum	69	71	72	59	55	65	68	69	69	68	69	69	65	63	52	51	54	56	66	56	65	64	67	72	67	62	64	55	56	55	54	62.8
Sikeston	Maximum	100	99	98	84	87	86	80	85	84	89	91	90	91	89	75	80	87	91	86	87	91	96	95	94	91	93	95	91	84	85	90	89.2
	Minimum	69	76	74	56	62	63	65	69	69	68	70	68	68	65	52	54	57	59	65	59	64	68	70	71	68	64	66	55	56	58	57	64.0
Cairo, Ill	Maximum	95	96	93	80	85	78	78	85	81	88	89	89	89	74	74	79	84	87	81	84	88	92	91	88	86	86	88	78	80	81	83	84.8
	Minimum	70	78	75	65	64	63	67	70	70	70	72	70	66	62	57	59	63	65	66	63	68	72	73	70	71	68	69	60	61	63	61	66.8
Ozark Plateau																																	
Arcadia§§	Maximum	91	94	81	80	82	80	77	84	81	85	85	88	90	75	74	78	83	88	81	80	84	92	88	90	88	88	87	80	82	85	80	83.9
	Minimum	66	66	68	56	50	55	64	63	65	67	69	62	61	59	47	46	48	52	59	48	55	66	67	67	63	56	59	50	49	50	51	58.2
Aurora	Maximum	95	94	89	85	91	94	86	92	84	90	87	88	91	85	78	81	88	90	90	88	95	95	93	93	91	89	90	82	84	87	88	88.8
	Minimum	70	71	71	59	60	79	70	70	68	72	67	71	69	59	51	56	57	65	70	64	69	74	73	72	69	69	65	58	54	62	61	66.0
Birchtree	Maximum	98	95	95	86	88	91	81	81	86	87	89	88	92	88	78	79	84	89	84	82	89	94	92	94	89	86	87	81	83	83	82	90.4
	Minimum	68	69	70	58	55	69	64	69	70	67	67	68	64	61	52	56	61	67	69	68	70	72	76	69	63	65	69	51	50	55	60	64.3
Eldon§§	Maximum	98	101	87	91	94	88	94	90	87	93	88	93	92	95	85	85	91	95	87	80	95	99	95	100	98	95	92	85	92	92	91	91.9
	Minimum	69	70	74	57	61	55	67	65	67	68	69	65	65	67	51	52	51	51	62	62	61	69	71	69	67	70	69	54	51	52	62	62.7
Farmington	Maximum	93	95	85	80	89	79	85	88	85	94	82	85	92	75	75	75	91	89	84	84	89	95	90	91	90	89	86	76	83	88	87	86.1
	Minimum	66	66	74	56	51	58	61	63	65	65	69	69	65	57	48	47	56	63	68	66	65	68	67	68	67	66	63	56	53	52	54	61.7
Koshkonong	Maximum	100	99	97	85	90	88	84	86	87	88	88	89	91	84	76	80	85	81	86	82	90	94	94	92	92	91	91	83	84	86	86	88.0
	Minimum	71	72	73	62	60	69	69	71	69	69	69	70	69	64	49	56	58	62	68	61	66	70	71	72	69	65	69	58	58	66	61	65.7
Lebanon§§	Maximum	104	97	88	86	93	88	78	89	89	90	86	90	91	76	78	81	89	90	92	85	93	95	94	97	97	89	89	80	87	89	87	88.9
	Minimum	75	70	73	52	52	57	65	67	64	65	69	65	66	55	49	50	52	55	60	60	53	57	69	68	65	66	63	52	47	47	55	60.1
Mountain Grove§§	Maximum	100	97	94	89	89	92	81	87	92	93	88	92	91	77	79	78	85	92	85	79	94	96	93	94	92	95	92	84	86	85	85	88.9
	Minimum	72	72	73	56	58	61	68	68	69	67	68	68	59	50	51	57	59	66	62	65	68	68	72	69	64	64	54	52	54	60	63.3	
Neosho	Maximum	99	98	96	87	97	96	92	96	95	94	94	92	94	93	84	89	94	97	96	95	98	98	97	98	96	95	92	89	91	92	94	94.1
	Minimum	69	69	74	54	55	77	70	67	66	68	66	69	62	56	43	50	55	60	68	67	72	67	69	67	62	67	61	50	47	52	58	62.5
Rolla	Maximum	90	98	89	82	88	86	77	86	86	88	82	89	88	87	74	80	89	90	81	85	92	98	82	95	93	91	83	79	86	87	85	86.6
	Minimum	80	73	73	60	55	65	61	66	66	65	69	69	68	59	52	52	54	61	64	60	67	72	74	70	70	66	65	56	50	55	61	63.8
Springfield	Maximum	97	94	84	80	90	94	81	91	88	89	85	89	90	74	79	79	86	92	86	84	94	94	91	93	92	85	87	79	85	87	86	87.3
	Minimum	67	74	69	61	64	70	68	69	69	69	70	73	69	60	56	58	61	66	70	66	70	74	73	73	70	71	67	58	59	63	65	66.8
Southwest Plain																																	
Appleton City	Maximum	100	98	87	83	94	92	80	89	88	94	90	..	..	..	..	96	94	89	92	88	99	100	98	100	97	89	89	83	88	92	92	[a]91.9
	Minimum	73	76	72	57	58	70	67	68	68	70	69	..	..	..	..	52	60	59	69	64	70	72	71	70	67	71	71	56	55	60	61	[a]65.8
Clinton	Maximum	104	102	95	92	96	92	82	92	91	92	92	98	98	83	83	91	94	96	94	91	101	101	98	103	102	93	93	95	92	94	93	94.3
	Minimum	74	75	78	72	60	71	67	68	69	80	75	66	70	56	52	55	60	65	68	62	70	73	70	72	70	71	71	68	56	58	65	67.3
Harrisonville§§	Maximum	101	100	88	83	93	80	79	85	86	92	92	94	93	81	82	87	91	90	87	88	101	100	94	103	95	92	90	83	88	92	86	90.2
	Minimum	72	72	74	56	59	63	65	66	66	69	67	66	51	50	55	58	60	65	64	66	70	71	70	68	69	68	58	58	60	62	64.0	
Lamar§§	Maximum	98	96	86	84	95	92	80	88	90	93	89	91	93	76	82	89	92	98	93	95	98	98	99	98	97	86	92	82	89	93	94	91.2
	Minimum	73	74	74	59	60	64	69	70	71	69	71	67	57	50	52	60	63	69	69	69	73	73	70	69	69	71	58	52	54	62	65.5	
Lamonte	Maximum	105	102	89	89	98	88	84	92	90	93	92	97	97	79	88	91	96	97	95	91	103	101	98	102	101	91	92	88	76	72	89	92.5
	Minimum	74	75	75	56	57	67	68	66	70	72	72	64	66	52	51	51	60	65	63	61	70	74	69	70	66	68	64	54	54	58	65	64.4
Marshall	Maximum	99	98	85	82	94	82	84	88	84	86	89	92	92	84	78	83	92	89	85	85	97	97	92	94	93	90	87	81	84	91	88	88.5
	Minimum	..	..	80	65	58	67	65	63	74	73	60	66	71	55	54	54	60	64	61	60	70	71	72	71	69	68	68	55	53	60	65	[b]64.6
Nevada	Maximum	98	97	95	82	95	87	85	88	86	92	86	90	94	81	80	88	90	94	90	85	100	99	98	98	96	89	90	81	87	92	94	90.5
	Minimum	74	75	76	59	62	70	68	68	69	64	69	60	70	56	48	58	61	64	72	67	70	75	75	70	70	73	68	55	51	61	62	65.8
Warrensburg	Maximum	103	100	92	85	94	87	87	89	87	91	89	97	85	81	82	94	95	92	89	90	100	99	98	100	98	89	93	89	93	89	91.5	
	Minimum	74	75	75	56	57	68	67	65	70	72	72	66	62	54	58	60	64	64	62	60	71	74	69	70	67	69	69	55	65	60	64	65.6
Warsaw	Maximum	104	101	95	87	97	90	84	93	92	97	92	97	98	81	85	90	96	98	92	91	102	102	98	103	101	95	94	87	90	94	95	94.3
	Minimum	71	76	76	56	55	71	68	68	67	69	71	63	67	56	48	52	60	62	69	62	72	73	73	68	65	72	66	53	50	54	66	64.5
Northwest Plateau																																	
Chillicothe§§	Maximum	92	99	85	83	92	73	84	87	89	90	95	93	90	79	83	88	93	90	84	86	101	101	93	95	90	94	86	84	87	93	76	88.9
	Minimum	73	73	72	51	56	61	61	60	65	66	69	62	69	49	48	50	56	64	58	58	60	69	67	68	67	62	61	53	52	55	62	61.2
Grant City	Maximum	91	94	82	80	81	77	84	78	88	88	91	93	86	76	82	87	92	91	84	86	98	98	92	96	83	92	85	85	87	90	83	87.1
	Minimum	68	73	69	54	56	59	62	62	62	68	69	66	68	50	50	57	60	59	59	61	64	74	68	69	69	65	60	57	57	60	64	62.5
Kansas City	Maximum	100	100	85	80	94	83	81	81	83	86	91	92	88	76	81	87	91	88	84	89	99	97	94	99	94	89	86	80	85	90	79	88.1
	Minimum	79	79	68	63	64	65	66	68	70	71	73	72	68	58	57	62	65	72	68	67	74	81	72	68	69	69	70	69	64	67	68	68.1
Kidder§§	Maximum	90	98	80	78	90	73	80	82	86	85	90	92	88	75	80	85	91	87	81	82	100	99	90	96	87	90	84	82	85	89	77	86.2
	Minimum	66	72	69	52	57	58	59	61	63	65	66	66	68	47	50	52	53	58	57	57	61	67	66	66	65	64	60	53	53	54	58	60.1
Lexington§§	Maximum	94	96	96	83	91	90	93	81	84	82	84	90	90	82	79	81	89	84	84	86	94	93	91	88	86	86	82	76	81	86	86	86.7
	Minimum	76	79	75	58	59	66	66	65	71	72	74	68	73	54	54	56	61	67	64	61	70	76	70	71	70	70	69	59	57	60	67	66.4
Maryville	Maximum	90	99	86	81	85	77	82	76	87	88	90	95	86	85	82	86	91	90	85	86	97	97	92	..	..	..	..	85	82	85	92	80	[c]87.0
	Minimum	70	75	70	54	59	59	61	64	61	68	67	64	68	50	50	57	61	60	60	68	65	72	67	70	.	..	63	57	56	58	64	[b]62.7
Oregon	Maximum	97	102	95	84	95	90	89	84	93	90	96	96	92	80	86	89	95	94	86	92	104	103	96	103	92	94	89	85	90	95	87	92 4
	Minimum	74	80	71	58	61	62	61	66	63	69	68	67	68	49	50	60	67	67	62	65	71	73	69	72	72	67	64	59	60	62	64	65.2
St. Joseph	Maximum	95	101	83	80	94	76	84	78	88	87	91	93	85	75	83	88	91	90	84	89	101	98	93	100	89	89	86	82	87	91	79	88.1
	Minimum	76	80	67	59	61	62	63	67	66	70	71	68	64	54	50	60	64	69	64	66	72	74	71	72	71	69	64	60	62	61	65	65.9
Trenton	Maximum	92	100	91	82	80	75	82	84	89	91	93	95	90	80	80	85	93	85	82	85	102	102	94	95	87	95	83	82	83	92	85	88.2
	Minimum	70	73	70	54	58	60	62	65	63	67	71	64	70	53	48	56	58	62	63	60	66	72	68	71	70	65	62	56	52	56	62	62.8

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIII COLUMBIA, MO., SEPTEMBER, 1929 No. 9

GENERAL SUMMARY

The month's weather was at considerable variance with the usual type but did not greatly differ from the prevailing condition of the months which had just preceded, for relatively dry and cool weather dominated, as a rule, July and August as well as September over most of Missouri. There were only two warm spells, confined to the first five opening days and the last week of the month. As a rule the 2d was the warmest single day. While light frost occurred at but one station, according to reports received, at Downing, Schuyler County, the minimum temperatures on two or three mornings during the latter half of the month approximated light frost values. For the State as a whole the month averaged 1.6° cooler than normal, but still it was 2° warmer than the same month a year ago; but, after all, the two Septembers (1928 and 1929) were strikingly similar in two main features, lacking in moisture and warmth.

Rainfall was fairly well distributed, although deficient for the average amount of plowing and fall seeding, except in the southeastern lowlands where moisture was quite ample for most needs. Indeed, the southeastern lowlands seems to have been set apart from the rest of the State, for nearly the entire season has been outstandingly favorable there for the farmer. The fifteen days beginning with the 5th brought most of the rain to the Ozark Plateau and the eastern half of the State, the most substantial amounts probably falling during a two or three-day spell from the 9th to the 12th. The northwestern plateau had less rain than other parts. The month was practically free from injurious wind and hail storms.

Dry and rather hard ground held back the usual plowing and seeding, though some work of the kind was done. Corn has been badly hurt by the season's drought; most of the early planted was cut for fodder or ensilage. The late crop is inferior and must take its chance against frost. Hay, and most legumes, turned out remarkably well.

TEMPERATURE

The monthly mean temperature for the State, 64 stations reporting, was 67.4° or 1.6°, cooler than the normal, but 2.4° warmer than September of last year. The highest local monthly mean was 72.6°, at Caruthersville, and the lowest was 63.7°, at Kidder. The highest afternoon temperature reported was 98°, at three stations, Mexico and Warsaw on the 2d, and Jefferson City on the 28th; the lowest reported temperature was 33°, at Unionville on the 18th; the greatest daily range was 43° at Jefferson City on the 16th. The average number of days with maximum temperature 90° or higher was 5. The extremes as recorded here approximate the usual for September.

PRECIPITATION

The monthly precipitation for the State, 95 stations reporting, was 3.20 inches, or 0.64 inch less than the 60 years' average, and 0.59 inch more than September, 1928. The greatest local monthly amount was 7.32 inches at Morehouse; and the least local monthly amount was 0.88 inch at Nevada. The greatest amount in any twenty-four consecutive hours was 4.22 inches, at Lucerne, on the 9th; the next greatest 24-hour fall was 3.31 at Koshkonong, on the 12th.

MISCELLANEOUS PHENOMENA

Fog, dense.—Columbia, 12th and 13th; Springfield, 6th, and 7th; Hannibal, 13th, and 26th, and St. Louis, 13th.

Hail.—At Arcadia and Rolla on the 13th. Reported as heavy at Arcadia, but no damage.

Halos, lunar.—None. Solar.—4th, 7th, 8th, 9th, 10th, 11th, and 16th.

Thunderstorms, local.—2d, 3d, 7th, 8th, 9th, 12th, 13th, 14th, 15th, 16th, and 18th. General.—On the 4th, 5th, 6th, 19th, and 29th.

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.03	83	68	224	60	4,021	5.6	27	sw.	4
Hannibal	30.05	84	..	...	..	4,694	6.5	31	sw.	4
Kansas City	30.01	77	57	252	67	5,723	7.9	22	nw.	9
St. Joseph	30.01	82	61	211	56	4,642	6.4	22	nw.	13
St. Louis	30.04	82	62	214	57	6,158	8.6	32	n.	29
Springfield	30.04	82	63	228	61	5,503	7.6	24	se.	19
Cairo, Ill.	30.03	88	73	...	..	3,894	5.4	28	n.	29
Keokuk, Iowa	30.05	81	63.	236	63	3,901	5.4	27	sw.	4

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	65.2	−3.7	97	28	1.11	−2.56	....	0	4	..	..	..
1889	64.7	−4.2	94	31	4.66	+0.99	....	0	11	..	..	..
1890	63.7	−5.2	98	34	3.98	+0.31	....	0	9	..	..	..
1891	70.6	+1.7	104	30	0.63	−3.04	....	0	6	..	..	..
1892	67.8	−1.1	97	32	2.39	−1.26	3.00	0	4	19	6	5
1893	69.9	+1.0	107	26	3.92	+0.25	5.20	0	6	17	7	6
1894	68.5	−0.4	101	34	4.93	+1.26	3.07	0	5	13	11	6
1895	71.8	+2.9	104	25	2.45	−1.22	6.21	0	4	19	8	3
1896	65.0	−3.9	101	28	4.17	+0.50	4.40	0	10	11	10	9
1897	74.3	+5.4	105	27	0.74	−2.93	2.13	0	2	23	5	2
1898	70.9	+2.0	103	30	6.74	+3.07	6.10	0	9	15	9	6
1899	67.4	−1.5	108	16	2.04	−1.63	3.01	0	4	20	6	4
1900	71.1	+2.2	100	29	4.81	+1.14	3.79	0	10	13	10	7
1901	68.9	0.0	103	27	2.31	−1.36	2.80	0	6	18	8	4
1902	63.2	−5.7	95	30	4.78	+1.11	6.55	0	10	15	6	9
1903	66.4	−2.5	98	32	4.41	+0.74	6.77	0	8	17	6	7
1904	69.6	+0.7	96	34	3.85	+0.18	2.46	0	3	16	8	6
1905	69.6	+0.7	98	41	7.67	+4.00	7.90	0	10	15	6	9
1906	71.9	+3.0	98	36	4.15	+0.48	4.28	0	11	15	8	7
1907	68.9	0.0	101	31	1.93	−1.74	2.25	0	6	18	7	5
1908	71.6	+2.7	99	28	1.80	−1.87	2.68	0	4	18	8	4
1909	68.7	−0.2	105	28	4.62	+0.95	4.48	0	8	18	5	6
1910	69.5	+0.6	97	34	5.53	+1.91	4.63	0	10	14	6	10
1911	73.7	+4.6	105	39	7.13	+3.46	7.75	0	11	13	7	10
1912	68.6	−0.3	105	27	3.06	−0.61	3.61	0	9	17	5	8
1913	69.4	+0.5	109	27	4.63	+0.79	4.08	0	9	13	7	10
1914	69.6	+0.5	99	35	6.27	+2.52	9.22	0	9	15	8	7
1915	70.6	+1.5	98	34	5.25	+1.51	5.91	0	7	16	7	7
1916	67.8	−1.5	101	27	2.94	+0.86	2.80	0	6	19	7	4
1917	67.9	−1.2	101	33	2.78	−1.09	4.13	0	5	19	6	5
1918	62.3	−6.7	96	29	4.73	+0.77	6.61	0	7	17	6	7
1919	71.4	+2.7	104	38	3.29	−0.54	4.93	0	5	20	6	4
1920	70.0	+1.4	100	31	4.81	+0.92	4.10	0	9	17	7	6
1921	73.4	+4.7	104	34	7.03	+3.15	5.45	0	13	13	9	8
1922	71.7	+2.6	107	34	3.31	−0.57	5.36	0	5	21	5	4
1923	68.7	−0.3	98	33	4.59	+0.86	5.26	0	11	12	9	9
1924	61.0	−5.0	96	29	3.77	+0.04	3.72	0	8	14	8	8
1925	74.6	+5.6	110	45	6.46	+2.73	8.92	0	10	14	6	10
1926	69.3	+0.3	97	27	8.79	+5.06	5.83	0	13	12	7	11
1927	71.6	+2.6	102	29	3.71	−0.02	6.37	0	8	17	7	6
1928	65.0	−4.0	95	28	2.61	−1.12	5.60	0	5	20	7	3
1929	67.4	−1.6	98	33	3.20	−0.64	4.22	0	8	13	10	7

Climatological Data for September, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	49	61.1	− 5.6	96	2	42	18	29	2.52	−1.87	1.33	0	10	15	2	13	se.	O. K. Benecke
Clifton Hill	Randolph	731	29	66.8	− 2.1	96	2	39	18	33	2.50	−2.36	0.82	0	8	18	5	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	66.9	− 1.3	96	2	44	18	29	3.06	−1.29	1.54	0	9	13	7	10	se.	U. S. Weather Bureau
Downing	Schuyler	876	7	65.3	.....	94	2	34	18	31	4.69	−0.02	2.07	0	8	15	8	7	e.	James Taylor
Fayette	Howard	661	48	65.6	− 2.7	97	2	39	18	40	1.92	−2.91	0.85	0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	67.2	− 1.7	96	2	41	15	37	3.79	−0.60	1.95	0	8	14	8	8	.....	Chamber of Commerce
Gorin	Scotland	700	41	.. .	.....	..	..	..	..	..	6.97	+2.68	2.80	0	6	12	5	13	se.	J. W. Pulliam
Hannibal	Marion	534	36	66.4	− 1.3	94	2	43	18	29	3.18	−0.79	1.44	0	8	12	9	9	s.	U. S. Weather Bureau
Jefferson City	Cole	557	40	69.1	0.0	98	28	44	15†	43	2.92	−0.36	1.35	0	9	7	18	5	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	65.0	− 1.0	93	2	37	18	30	6.21	+1.90	2.25	0	8	13	9	8	e.	Prof. J. S. Stokes
Louisiana	Pike	469	34	64.2	− 3.7	96	3	40	14†	32	3.92	−0.03	1.02	0	10	18	7	5	s.	Stark Bros. Nurseries
Macon	Macon	875	29	65.6	− 2.7	96	2	38	18	35	2.39	−1.82	0.83	0	7	12	8	10	sw.	W. C. Brown
Mexico	Audrain	800	39	66.2	− 2.4	98	2	39	18	35	2.64	−2.04	1.18	0	6	23	0	7	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	..	..	..	3.25	.....	1.36	0	6	13	9	8	ne.	J. S. Conway
St. Charles	St. Charles	456	40	69.0	+ 1.1	95	2†	41	19	38	2.36	−0.92	0.56	0	7	12	12	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	68.7	− 1.8	92	2	46	19	24	1.71	−1.75	0.61	0	11	12	9	9	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	68.4	− 1.8	92	2	46	18†	24	1.68	−2.96	0.77	0	9	13	9	8	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	..	..	..	3.54	−0.44	1.50	0	7	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	66.3	− 2.8	94	2	36	18	37	4.55	+0.36	1.80	0	7	8	13	9	s.	Frank Hall
Unionville	Putnam	1,062	35	65.0	− 2.2	92	2	33	18	34	5.10	+0.49	2.20	0	8	12	9	9	nw.	Geo. W. Davis
Warrenton	Warren	816	46	68.4	− 0.4	95	2	41	18	34	3.40	−0.64	0.90	0	9	10	13	7	se.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	65.4	− 2.1	92	2	42	18	29	4.77	+0.93	1.81	0	10	12	10	8	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	66.3	− 1.9	98	2†	33	18	43	3.50	−0.69	2.80	0	8	13	9	8	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	70.4	.....	92	1†	43	15	36	2.77	.....	0.72	0	5	16	10	4	s.	Jeff. King
Caruthersville	Pemiscot	265	32	72.6	− 0.8	91	1†	49	19	25	2.89	−0.21	1.05	0	7	11	10	9	s.	Sam Smith
Doniphan	Ripley	344	24	70.8	0.0	94	2†	41	19	38	2.71	−0.93	1.20	0	7	6	21	3	ne.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	37	67.6	− 2.3	91	1	41	15†	35	5.40	+1.85	1.42	0	10	4	10	16	s.	John G. Putz
Marble Hill	Bollinger	470	33	69.4	− 1.0	96	1	41	15†	37	5.22	+1.59	1.60	0	7	9	15	6	w.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	..	..	..	7.32	+4.46	2.75	0	8	16	8	6	se.	John A. Spence
Poplar Bluff††	Butler	339	24	70.1	− 1.2	91	29	42	19	36	3.18	−0.40	1.83	0	6	18	8	4	s.	J. H. Wolpers
Sikeston	Scott	318	23	70.8	+ 0.2	90	1†	44	19	37	6.29	+3.43	2.75	0	7	14	6	10	e.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	70.0	− 1.5	89	1	48	19	25	5.44	+2.55	2.64	0	11	9	10	11	ne.	U. S. Weather Bureau
Section means and	extremes	....	..	70.2	− 0.9	96	1	41	15†	38	4.51	+1.82	2.75	0	8	11	11	8	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	65.0	− 2.6	90	2	38	19	36	3.41	−0.23	1.23	0	8	24	1	5	e.	Arcadia College
Aurora	Lawrence	1,370	38	68.5	− 2.2	91	4	48	10	30	2.43	−1.30	1.14	0	7	15	3	12	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	68.7[a]	− 0.8	89	2†	44	19	30	3.54	−0.05	1.86	0	5	18[a]	7[a]	4[a]	se.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	..	..	..	.....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	70.2	− 0.5	95	2†	47	14	38	3.05	−0.57	1.20	0	5	8	15	7	ne.	H. E. Dean
Eldon	Miller	934	32	67.7	− 1.6	95	2†	45	18†	34	4.12	+0.32	1.71	0	6	3	18	9	sw.	E. H. Shepherd
Farmington	St. Francois	918	17	67.5	− 1.8	95	1	39	15†	44	2.90	−0.32	1.13	0	9	13	11	6	sw.	Robert Forsyth
Goodland	Iron	1,000	34	67.4	+ 0.1	90	1†	36	15	39	3.00	−0.73	1.75	0	5	13	14	3	s.	F. M Adams
Greenville	Wayne	381	6	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	..	..	..	3.80	.....	2.00	0	5	18	3	9	sw.	A. W. Madison
Koshkonong	Oregon	958	27	69.5	− 1.4	92	2	44	19	26	4.37	+0.88	3.31	0	5	11	9	10	n.	R. M. Hitt
Lebanon	Laclede	1,265	40	67.3	− 2.2	94	3†	41	11	36	1.64	−2.45	0.59	0	7	16	8	6	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	70.6	− 0.7	95	4	47	10	30	2.40	−1.60	0 82	0	6	15	9	6	ne.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	67.8	− 0.6	91	4	45	19	30	4.27	+0.23	1.71	0	8	9	14	7	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	69.4	− 0.9	96	4	44	10	37	2 72	−1.50	1.23	0	7	14	8	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	66.0	− 2.0	91	3	44	19	30	2.11	−1.73	0.52	0	9	3	10	17	se.	F. H. Lane
Salem(near)	Dent	1,173	24	66.7	− 2.8	90	2	42	19	34	2.89	−1.37	1.50	0	6	17	8	5	se.	A. C. Leech
Seligman	Barry	1,542	26	69.2	+ 0.4	92	1†	48	10†	30	3.23	−0.89	1.62	0	7	16	7	7	ne.	Floyd E. Fawver
Seymour (near)	Webster	1,612	22	67.7	− 0.9	92	4	45	11†	34	3.08	−1.50	1.70	0	5	15	6	9	se.	Ira H. Hailey
Springfield	Greene	1,324	40	68.5	− 0.4	89	2	50	10	26	2.37	−1.15	0.99	0	8	16	7	7	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	68.1	− 1.2	96	4	36	15	44	3.08	−0.76	3.31	0	7	13	9	8	se.	
Southwest Plain																				
Appleton City	St. Clair	853	34	68.7	− 1.6	94	2†	45	10	35	4.07	+0.40	2.67	0	8	8	18	4	se.	W. G Bigelow
Clinton	Henry	765	35	70.8	+ 0.6	97	2†	46	10	32	2.68	−1.14	1.72	0	7	15	9	6	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	66.9	− 1.4	95	2†	43	10	36	2.88	−1.48	2.01	0	6	6	4	20	ne.	John H. Patterson
Lamar	Barton	980	41	70.0	− 0.6	94	3†	44	10	36	0.98	−3.26	0.33	0	7	13	11	6	se.	Jesse A. Mann
Lamonte	Pettis	867	27	67.4	− 2.7	98	4	44	10	34	2.33	−2.17	1.00	0	8	20	7	3	sw.	J. E. Wheeler
Marshall	Saline	779	39	68.0	− 0.3	95	1†	43	18	30	5 05	+0 17	1.50	0	7	19	6	5	.....	Sec. Chamber of Commerce
Nevada	Vernon	862	35	69.7	+ 0.6	94	2†	43	9	35	0.88	−3.28	0.37	0	5	13	11	6	s.	George A. Kaupp
Warrensburg	Johnson	878	41	66.2[1]	− 3.9	95	2†	43	18	37	2.64	−0.95	0.91	0	8	9[j]	5[j]	6[j]	se.	E. A. Markey
Warsaw	Benton	687	28	69.6	− 0.4	98	2	46	10	35	3.86	−0.46	1.88	0	6	9	14	7	e.	Everett Martin
Section means and	extremes	.....	..	68.6	− 1.1	98	2	43	9†	37	2.82	−1.35	2.67	0	7	14	9	7	se.	
Northwest Plateau																				
Bethany	Harrison	916	36	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	M. H. Moulton
Chillicothe	Livingston	779	19	66.0	− 3.6	96	2	38	18	38	1.97	−3.77	0.49	0	12	13	9	8	e.	Wm. J. Olenhouse
Conception	Nodaway	980	39	65.0	− 2.2	90	3	40	18	33	2.56	−1.29	0.52	0	10	9	15	6	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	66.3[c]	.....	94	2	41	10	36	1.15	−2.13	0.58	0	8	18	0	12	s.	Fred L Stiff
Grant City	Worth	1,134	24	64.7	− 2.3	90	3	37	18	31	2.72	−1.27	1.42	0	8	12	13	5	se.	W. P. Spillman
Kansas City	Jackson	963	39	67.8	− 1.1	93	2	45	18	30	1.55	−3.01	0.65	0	11	12	11	7	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	63.7	− 4.0	93	2	39	18†	40	1.83	−2.41	0.65	0	11	11	11	8	s.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	..	..	..	2.50	.....	0.97	0	12	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	65.6	− 2.9	87	2†	44	18	27	1.90	−2.54	0.65	0	10	13	13	4	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	64.6	− 0.8	93	2	40	10†	32	2.08	−2.13	0.92	0	9	15	10	5	n.	J. R. Brink
Oregon	Holt	1,048	72	67.2	+ 0.2	94	2†	43	10†	37	1.38	−2.36	0.43	0	9	15	8	7	se.	Mina Wright
St. Joseph	Buchanan	967	20	66.6	− 2.2	94	2	43	18	29	1.94	−3.31	0.84	0	10	9	13	8	se.	U. S Weather Bureau
Tarkio	Atchison	916	25	64.0	− 2.6	93	2	40	18	31	3.91	+0.41	0.94	0	8	11	7	12	se.	Albert Volker
Trenton	Grundy	822	32	66.3	− 1.1	94	2	39	18	37	3.19	−1.07	0.89	0	12	17	8	5	s.	W. H. Estes
Section means and	extremes	.....	..	65.6	− 2.1	96	2	37	18	40	2.21	−2.07	1.42	0	10	13	10	7	se.	
State means and	extremes	.....	..	67.4	− 1.6	98	2†	33	18	44	3.20	−0.64	4.22	0	8	13	10	7	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for September, 1929

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville‖	Missouri					1.36		.32					.11	.07				.03		.13	.85												2.87
Brunswick‖	Grand					1.33	.05	.08					.37	.15	.05		.07			.10	.25										.07		2.52
Clifton Hill	Chariton				.65	.82	.17					T.	.48	.03			T.			.08	.08									.19			2.50
Columbia***	Missouri				.56	.98	.44	.01					.24	.01			.09			.39	.34	T.								T.			3.06
Downing	Mississippi				T.	.60	T.	.01		2.07			.36	T.			.11			1.28	.06									.20			4.69
Fayette‖	Missouri				.85		.35						.28				T.		.16	.25											.03		1.92
Fulton‖	...do					1.95	T.	.45					.18	.20				.08		.25	.65										.03		3.79
Gorin	Mississippi					2.12				2.80			.38				.08			1.48										.11			6.97
Hannibal***	...do				.43	.21	.03	T		T.			.23	.01			.03			1.44	T.					T.				.80			3.18
Hermann‖	Missouri					.60	.03	.18						.33				.11			.54					.01					.01		1.81
Jefferson City‖	...do					1.35		.56					.10	.44				.03			.35	.04	.03								.02		2.92
Kirksville	Mississippi				.01	1.65	.07			1.45			.38							2.25	.15									.25			6.21
Louisiana	...do					1.02	.25						.10	.50			.10			.80	.60					.10				.25	.20		3.92
Lucerne‖	Grand	.07				T.		.05	T.	4.22			.33	.05	T.					1.00	.77										.20		6.69
Macon ‖	Chariton					.70							.10	.16			.10			.20	.83										.30		2.39
Mexico ‖	Mississippi					1.18		.65						.25	.02			.07			.47												2.64
Milan‖	Grand					.70					.68	.14		.35			T.			1.05	1.50										.30		4.72
Monroe City	Mississippi					.86	.18						.16							1.36	.13									.56			3.25
Pacific‖	Meramec					.42		.20						.50	.02						.73				.04						.41		2.32
St. Charles	Missouri					.30	.30	T.	T.	T.			.26	T.			.22			.33	.39				T.						.56		2.36
St. Louis (1)***	Mississippi				.05	.04	.18		T.				.35	.01			.05			.09	.32				.01					.60	.01		1.71
St. Louis (2)*	...do				.04	.03	.16		T.				.20				.06			.18	.17				.02					.77	.05		1.68
Shelbina ‖‖	...do					.65	.23	.12	T.					.26						1.50	.10										.68		3.54
Steffenville	...do				T.	1.80	T.			T.			.25	.05			.10			1.75										.55	.05		4.55
Union‖	Meramec					.17	.02	.34	.02	.16	.03			.57	.03			.10			.29					.03						1.37		3.13
Unionville	Chariton				.15	.10				2.20			.45	.05						1.95	.10									.10			5.10
Warrenton	Mississippi				.10	.90	.46						.25				.09			.46	.85					.06					.23		3.40
Keokuk, Ia.***	...do				1.02	.02		T.	.06	1.75			.26	.01			.24		T.	1.15	T.					T.			T.	.25	.01		4.77
Southeast Lowlands																																	
Campbell‖	St. Francis					.31	.96	.60						.72											.18								2.77
Cape Girardeau‖	Mississippi					.55	.13	.30	.02		T.		.02	1.50	.65			.25							.26	.02					.36		4.06
Caruthersville ‖	... do				.05	.19	1.05	.20					.87	.28										.25								2.89
Dexter‖	St. Francis			.10		.06		.92					T	1.75											.02							2.85
Doniphan	Black					.50	.72	.18					1.20	.05	.04										.02							2.71
Jackson	Mississippi					1.32	.43	.07		.26			1.42	.88			.54				.03				.26						.19		5.40
Marble Hill	Mississippi					1.12	.80			.20			1.60		.95			.30							.25								5.22
Morehouse	...do					.77	2.04	.74	.02				2.75	.69	T.										.22	T.					.09		7.32
New Madrid‖	...do				.15		.35	2.40	.20	.08	.60			.68											.15	.03							4.64
Poplar Bluff‖	Black					.20		.95					.12	1.83	.03										.05								3.18
Sikeston‖	Mississippi					2.06		.74	.02	.23			.28	2.75											.21								6.29
Cairo, Ill.***	.. do			.01		.76	.20	.73	.13	.24			2.63	.06	.27		T.				T.			T.	.36	.05					T.		5.44
Ozark Plateau																																	
Arcadia ‖	St. Francis							.15			.12		.10	1.23	.23			.27							T.	.20					1.11		3.41
Aurora	Neosho				.11	.28	.30	T.				.05	1.14				.15				.40												2.43
Birchtree (near)	Black					.45	.23						1.86				.68				.32												3.54
Bolivar	Osage																																
Caplinger Mills	Osage				.08	.37	.44	.01					.12	.05							.21												1.28
Dean	Neosho				T.	.70	.65		T.	T.		T.	1.20	.26			T.				.24												3.05
Eldon‖	Missouri					1.71		.75					.34	.18							1.04	.10											4.12
Farmington	St. Francis					.52	.27	.02					1.13		.14		.27				.25				.18						.12		2.90
Fredericktown‖	... do					.45	.63					.55			.65						.05				.32			.19			.25		3.09
Galena‖	White					.72	.25						.82	.60								.10											2.49
Goodland	Black						.61						1.75		.35		.17				.12												3.00
Greenville	St. Francis																																
Hailey	White					.50	1.10						2.00	.20																			3.80
Koshkonong	Black					.43	.48						3.31	.03								.12											4.37
Lebanon ‖	Osage					.30	T.	.30	T.				T.	.59	.05			.05			.12	.23									T.		1.64
Leeper‖	Black					.30	.48				.60		.30	1.60	.27			.20				.15											3.90
Lockwood	Osage				.82	.18	.68						.46				.06				.20												2.40
Mountain Grove‖	White					.07	.05	1.71					.25	1.65				.18			T.	.34	.02								T.		4.27
Neosho	Neosho	T.			.10	.38	.40		T.	.10		T.	1.23		.33		T.				.18										T.		2.72
Owensville ‖	Gasconade					.30							T.	1.25							.30												1.85
Ozark Beach‖	White					.98	.36						1.42	.86	.07																		3.69
Rolla ‖	Meramec					.42	.12	.32					.05		.40			.13			.52	.10				T.					.05		2.11
Salem (near)	...do					.30	.58	.04					1.50				.17				.30												2.89
Seligman	Neosho				T.	1.15	.20	.02	.17	T.			1.62		.04		T.				.03										T.		3.23
Seymour (near)	White				T	.26	.70					T.	1.70				.09				.33	T.									T.		3.08
Springfield***	...do		T.		.73	.18	.25	T.		T.	T.	.04	.95				.07				.13									T.	.02		2.37
Steelville‖	Meramec					.48	.40	.46						1.20	.16						.20											.09		2.99
Stover ‖	Missouri					2.90	.06	.40					.25	.03							.68						.02						4.34
Tuscumbia ‖	Osage	.04				.70	T.	.70					.13	.34	.17			.09			.77	.13									.05		3.12
Williamsville‖	Black					.08	.05	.80		.01			.19	1.61	.04			.12				.05			.03	.03							3.01
Willow Sprgs. ‖ (near)	White					.23	.12	.38					.55	1.19				.26				.12											2.85
Southwest Plain																																	
Appleton City	Osage	T.		T.	.27	2.67	.35	T.					.38	.03	.12		T.			.07	.18										T.		4.07
Clinton	Osage				.03	1.72	.24			.04			.40							.10	.15												2.68
Concordia‖	Missouri				.90	.22	.40						.25								.11												1.88
Harrisonville‖	Osage					2.01							.11	.05	.09		.34				.28												2.88
Joplin ‖	Neosho				.45	.12	2.16					.02	.35				.03				.03												3.16
Lamar	...do					.15	.10	.33					.04	.17							.16	.03									T.		0.98
Lamonte	Missouri		.01		.15	.70	.18	.01					.23		.05						1.00												2.33
Marshall	... do					1.50	.48	.02					1.50	1.30						.15	.10												5.05
Nevada	Osage	T.			T.	.17	.22						.07							T.	.37									.05			0.88
Osceola‖	...do					.13	.15	.36					.38								.89												1.91
Warrensburg	Missouri				.50	.91	.34	.04		.18		T.	.21		.06							.40												2.64
Warsaw	Osage				.55	1.88	.53						.28	T.			T.				.14	.48												3.86
Waverly ‖	Misouri	T.	T.			2.00	T.	.14					.86	T.	.14		T				.10	.20									T.			3.44
Northwest Plateau																																	
Albany‖	Grand																																
Bethany	...do																																
Chillicothe ‖	...do	T.				.26	.02	.10		.16			.49	.04	.18		.02		T.	.15	.17	.01								T.	.37		1.97
Conception	Missouri	.52			.07				.32	.22			.49	.04			.21			.51	.05					T.	T.	T.	.13			2.56
Edgerton	...do	.08	T.		T.					.19		T.	.58	.03	.08		.09			.07	T.								T.	.03			1.15
Gallatin ‖	Grand		T.			.04	.06			.45			.74		.05		T.				.49	T.											1.83
Grant City	... do	.22			T.		.03		T.	.40			.48	.03						1.42	.02												2.72
Kansas City***	Missouri	.02	.11		.05	.01	T.		.14			T.	.65	.07		.11	T.			.33	.05					T.	T.	T.	.12				1.55
Kidder ‖	Grand	.02				.01	.05			.18			.65	.31	.07		.09			.10	.10									.25			1.83
King City	Missouri	.30	.01		.03	.02			.97				.61	.09	.01		.02			.37	.06					T.			.01				2.50
Lexington	...do					.50	.02	.11		.12			.65	.06	.06		.10			.14	.14												1.90
Maryville ‖	...do	.36			.05	T.			T.	.09			.32	.03	.09		.92				.05								T.	.17			2.08
Oregon	...do				.07				.04	.13			.43	.13	.16		.15			.22	.05									T			1.38
St. Joseph***	...do	.02	T.		.19	.03		T.	.43	T.		T.	.84	.07		.21			T.	.05	T.								.03	.07			1.94
Tarkio	...do	.23			.25				.84	.94			.45	.60			.20				.40										T.			3.91
Trenton	Grand		.01		.04	.08	.02		.08	.62			.68	.02			.06			.40	.89						T.	T.		.29			3.19

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for September, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	71	96	86	72	73	62	73	72	70	50	55	58	58	59	62	64	54	48	54	58	64	84	58	66	66	65	84	62	62	66	..	65.7
	Minimum	67	67	67	69	55	56	60	62	69	48	48	49	55	48	49	58	53	42	44	47	51	57	57	56	58	63	63	64	61	53	..	56.5
Columbia	Maximum	91	96	93	93	65	65	72	82	79	71	72	65	73	70	79	69	75	60	56	65	74	80	79	80	82	85	87	88	73	69	..	76.3
	Minimum	69	72	70	65	56	60	64	62	55	50	52	56	55	47	50	53	51	44	46	50	56	60	54	59	67	61	66	64	59	52	..	57.5
Fayette	Maximum	91	97	95	92	70	64	71	85	82	75	76	67	71	75	81	75	79	64	55	65	79	85	84	86	86	91	93	93	71	74	..	79.1
	Minimum	63	64	66	66	52	51	58	58	60	43	42	48	50	41	41	47	45	39	43	46	48	55	50	49	56	56	56	59	61	53	..	52.2
Hannibal	Maximum	89	94	92	91	68	66	76	83	83	72	73	63	71	70	79	69	72	60	51	60	71	78	78	81	78	84	87	90	77	67	..	75.8
	Minimum	66	72	73	68	55	60	61	62	57	50	48	55	56	44	50	54	53	43	45	48	52	58	53	57	67	63	62	64	57	53	..	56.9
Jefferson City§§	Maximum	95	96	97	97	66	66	81	87	87	76	76	61	87	76	87	73	87	66	62	70	88	88	88	87	87	89	96	98	88	73	..	82.5
	Minimum	62	65	68	69	57	57	60	63	67	47	50	50	56	49	44	55	51	44	45	46	49	55	51	52	59	59	60	62	62	56	..	55.7
Kirksville	Maximum	87	93	91	86	74	68	70	81	79	74	72	67	68	70	78	73	71	66	62	58	69	79	78	82	78	83	87	87	77	64	..	75.7
	Minimum	65	63	69	69	53	53	59	60	61	45	50	52	54	42	48	56	49	37	42	42	49	55	53	53	64	60	63	64	55	47	..	54.4
Louisiana	Maximum	85	93	96	90	71	70	80	85	77	70	70	67	65	70	75	70	66	68	58	60	65	80	75	70	80	83	83	90	85	65	..	75.4
	Minimum	65	65	70	70	59	57	60	65	50	50	43	50	50	40	43	43	48	40	40	40	51	55	50	54	50	60	60	59	53	50	..	53.0
Macon§§	Maximum	92	96	94	90	72	66	75	85	78	74	73	62	66	71	80	71	75	63	50	57	75	83	82	85	80	87	90	90	68	69	..	76.6
	Minimum	65	66	70	70	53	53	58	61	69	44	48	51	54	42	45	58	50	38	41	44	49	53	53	54	58	60	62	63	50	54	..	54.5
Mexico§§	Maximum	96	98	96	96	63	65	85	83	84	75	76	64	76	73	81	71	77	62	50	61	75	83	82	84	84	88	91	92	78	67	..	78.5
	Minimum	65	66	68	68	54	54	59	58	61	47	46	48	54	45	46	53	50	39	41	44	48	51	49	50	58	59	60	62	64	53	..	54.0
St. Louis(1)	Maximum	90	92	91	88	72	71	79	82	86	70	75	65	80	70	76	79	75	61	55	67	72	78	80	76	79	82	85	89	88	69	..	77.4
	Minimum	68	68	70	70	63	61	66	67	63	54	56	55	62	52	54	57	55	46	46	48	54	56	58	64	66	66	67	70	64	53	..	60.0
Unionville	Maximum	86	92	90	82	75	75	73	82	76	78	74	70	70	72	80	73	72	63	65	53	70	82	80	83	82	87	90	88	80	70	..	77.1
	Minimum	64	65	68	64	50	52	53	58	50	44	47	50	54	41	50	54	45	33	43	45	40	55	55	53	60	58	62	65	55	53	..	52.9
Warrenton	Maximum	93	95	93	93	87	63	79	80	82	77	75	67	77	69	80	72	74	72	58	67	74	81	82	81	81	84	88	90	83	81	..	79.3
	Minimum	64	67	68	68	58	58	62	62	69	48	50	55	60	46	46	58	51	41	43	47	51	56	52	60	66	63	64	65	69	55	..	57.4
Southeast Lowlands																																	
Campbell	Maximum	92	92	92	92	89	81	81	90	90	84	83	72	85	78	79	83	85	76	73	75	81	82	83	75	80	82	88	88	90	71	..	83.1
	Minimum	63	63	59	62	68	66	68	68	69	60	52	58	58	53	43	49	51	51	44	50	52	51	49	63	62	60	61	62	58	61	..	57.8
Caruthersville	Maximum	91	90	90	91	87	84	82	86	89	81	78	70	81	75	78	81	80	70	72	76	76	81	81	75	79	85	87	86	89	76	..	81.6
	Minimum	69	70	68	69	72	69	68	71	73	64	59	60	63	60	53	62	59	56	49	55	55	58	57	66	69	65	66	68	68	64	..	63.5
Doniphan	Maximum	93	94	93	91	87	78	86	87	91	82	80	70	89	79	80	86	86	73	72	71	83	83	79	76	83	90	91	89	94	83	..	84.0
	Minimum	60	62	61	63	68	67	68	68	69	59	56	56	59	54	42	47	52	50	41	53	56	53	46	63	59	56	58	58	58	64	..	57.5
Jackson	Maximum	91	90	90	89	83	74	79	81	86	79	76	71	78	75	75	78	72	75	67	68	75	78	80	77	77	81	85	86	87	79	..	79.4
	Minimum	60	61	58	63	67	61	66	70	67	54	51	51	57	52	41	47	50	46	41	51	51	48	45	62	62	59	61	60	58	56	..	55.9
Poplar Bluff	Maximum	90	90	90	89	86	76	82	85	89	80	79	67	86	83	77	84	84	74	75	73	80	82	82	74	82	87	89	86	91	70	..	82.1
	Minimum	61	62	61	63	70	67	69	64	69	59	55	57	60	54	44	48	52	49	42	51	53	54	49	64	62	61	62	62	60	59	..	58.1
Sikeston	Maximum	90	89	90	90	87	79	82	81	80	80	75	74	84	83	83	83	81	76	70	68	79	80	82	79	79	85	87	86	90	85	..	81.9
	Minimum	64	65	63	64	71	66	69	68	70	59	55	55	58	56	46	54	53	49	44	52	53	58	52	64	65	62	65	65	63	62	..	59.7
Cairo, Ill	Maximum	89	86	87	86	85	80	78	79	85	74	73	66	80	70	75	79	78	64	67	66	76	76	80	73	78	83	84	83	85	68	..	77.8
	Minimum	66	71	67	68	68	67	70	70	71	60	58	56	61	59	54	60	58	51	48	55	56	56	55	66	67	66	68	69	68	57	..	62.2
Ozark Plateau																																	
Arcadia§§	Maximum	89	90	89	87	78	68	79	80	83	73	75	63	82	72	75	80	78	65	63	71	74	76	78	71	77	82	83	85	83	67	..	77.2
	Minimum	54	56	60	63	65	60	60	64	67	51	50	51	53	52	39	45	45	45	38	42	50	50	42	45	59	54	56	56	57	56	..	52.8
Aurora	Maximum	85	89	89	91	72	79	78	80	76	69	72	73	83	71	79	71	78	71	70	72	79	80	77	77	80	82	84	85	86	77	..	78.5
	Minimum	64	66	66	66	60	62	65	65	68	48	49	56	59	51	49	60	54	50	49	53	58	65	56	59	58	57	61	61	64	57	..	58.5
Birchtree	Maximum	87	89	89	89	81	78	86	84	..	74	75	66	83	74	75	83	74	71	69	65	78	78	79	79	80	81	87	83	88	75	..	a79.3
	Minimum	60	65	65	66	72	56	63	63	..	50	45	60	59	54	48	65	54	52	44	45	57	56	57	60	63	60	64	61	62	59	..	a58.1
Eldon§§	Maximum	88	95	95	95	66	63	76	85	81	77	73	73	79	73	80	79	79	64	65	69	81	82	81	83	85	86	80	90	83	83	..	79.6
	Minimum	62	64	65	66	57	60	62	62	62	48	48	49	62	50	46	50	51	45	45	47	50	58	53	53	60	60	60	61	61	56	..	55.8
Farmington	Maximum	95	91	91	90	80	71	78	82	86	71	75	64	83	71	83	78	78	65	62	72	78	78	78	72	86	84	86	88	85	74	..	79.2
	Minimum	56	54	63	65	66	60	65	65	69	50	51	54	57	54	39	53	46	44	39	44	53	51	55	61	62	67	56	59	60	55	..	55 8
Koshkonong	Maximum	87	92	90	91	80	76	82	83	84	75	75	66	80	73	75	81	79	68	69	68	76	78	78	75	77	84	84	86	85	75	..	79.1
	Minimum	63	69	66	67	70	67	67	67	69	55	57	57	60	56	49	55	54	51	44	50	57	56	53	63	63	61	64	64	65	59	..	59.9
Lebanon§§	Maximum	90	93	94	94	71	66	75	80	80	71	77	69	83	72	79	72	79	68	72	71	82	85	87	82	85	87	90	90	91	71	..	80.2
	Minimum	60	65	65	65	61	58	58	61	63	52	41	45	55	49	45	56	53	45	44	48	49	58	52	52	57	55	54	56	56	55	..	54.4
Mountain Grove§§	Maximum	89	89	89	91	81	71	82	82	81	74	76	65	82	74	74	78	78	70	67	66	76	78	78	78	81	87	87	86	90	68	..	78.9
	Minimum	62	66	65	66	66	62	62	66	67	49	49	50	55	52	48	52	51	49	45	46	52	56	55	57	60	57	59	60	61	59	..	56.8
Neosho	Maximum	93	94	93	96	76	82	82	83	79	70	75	78	86	75	81	80	81	80	77	78	85	85	84	83	85	86	90	91	85	87	..	83.3
	Minimum	62	71	65	66	58	62	65	63	65	44	46	55	55	47	46	57	48	48	50	53	51	54	55	54	52	50	53	57	53	56	..	55.4
Rolla	Maximum	90	72	91	89	85	68	78	81	80	68	75	71	69	66	72	73	71	61	62	66	74	77	74	71	78	77	83	82	83	70	..	75.2
	Minimum	64	71	69	69	55	55	60	64	64	50	53	56	52	45	57	50	46	44	49	55	56	50	59	60	59	60	61	63	55	56	..	56.8
Springfield	Maximum	88	89	88	88	70	74	76	79	75	67	73	70	81	70	76	70	76	68	67	71	79	80	78	77	80	82	86	86	85	66	..	77.2
	Minimum	67	71	70	69	61	61	66	65	62	50	54	56	60	52	53	59	53	52	50	52	60	62	58	63	62	63	64	65	59	54	..	59.8
Southwest Plain																																	
Appleton City	Maximum	91	94	93	94	73	65	66	83	74	71	73	77	76	73	84	74	81	70	68	76	87	86	84	81	86	87	91	91	82	71	..	80.1
	Minimum	68	72	69	68	53	58	60	60	62	45	51	54	53	48	49	60	50	47	51	53	56	59	60	56	60	59	60	63	60	55	..	57.3
Clinton	Maximum	91	97	95	97	74	65	67	85	78	74	76	75	79	70	84	77	84	70	70	77	88	88	86	85	89	90	94	93	85	74	..	81.9
	Minimum	68	74	71	70	54	60	62	60	65	46	52	54	60	62	62	62	52	48	50	53	58	60	60	62	60	60	62	64	66	58	..	59.8
Harrisonville§§	Maximum	88	95	93	95	64	63	69	82	72	74	69	75	75	75	83	78	82	63	65	75	85	86	83	82	85	87	90	92	67	70	..	78.7
	Minimum	64	67	68	68	50	52	56	58	61	43	46	52	50	46	47	57	50	44	44	48	53	57	58	57	58	60	61	62	62	53	..	55.1
Lamar§§	Maximum	91	94	94	96	64	76	72	87	79	70	79	79	85	75	85	76	82	75	75	79	87	88	87	86	89	90	93	93	82	72	..	82.7
	Minimum	64	70	71	69	57	56	61	63	68	44	45	51	55	51	50	58	50	51	52	54	55	60	59	57	58	57	57	60	62	57	..	57.4
Lamonte	Maximum	79	83	97	98	64	68	68	80	75	75	75	70	67	72	78	75	75	75	66	64	78	85	83	85	82	82	89	93	84	70	..	77.8
	Minimum	67	71	71	64	54	59	61	60	54	44	47	52	53	46	50	55	49	45	48	48	64	58	58	59	64	65	61	65	57	57	..	56.9
Marshall	Maximum	95	95	93	90	83	74	69	68	80	72	75	73	72	71	81	76	75	73	65	65	78	85	81	83	81	87	89	91	84	68	..	79.1
	Minimum	68	68	68	70	53	56	60	53	66	47	48	45	47	48	60	66	52	43	46	49	58	57	58	58	64	65	63	61	58	54	..	57.0
Nevada	Maximum	91	94	92	94	72	70	68	84	78	70	78	80	79	73	85	75	81	75	72	75	87	87	84	83	87	88	91	92	82	72	..	81.3
	Minimum	69	73	71	70	54	59	61	62	43	54	55	59	53	49	51	58	51	50	54	55	59	61	59	57	61	57	57	60	65	55	..	58.1
Warrensburg	Maximum	90	95	95	95	90	64	69	85	79	72	71	72	70	73	83	79	..	72	..	..	..	85	86	..	..	..	..	91	..	..	92	b77.6
	Minimum	67	75	71	62	53	56	59	59	57	46	49	53	54	49	51	58	..	43	..	..	62	60	..	83	85	87	90	90	81	72	..	b54.9
Warsaw	Maximum	93	98	96	96	75	74	71	86	79	73	77	75	78	73	82	77	81	75	67	76	85	86	83	83	85	87	90	90	81	72	..	81.5
	Minimum	65	75	71	71	56	60	63	62	66	46	48	53	57	50	47	64	49	48	50	53	57	59	57	54	58	57	57	60	62	52	..	57.6
Northwest Plateau																																	
Chillicothe§§	Maximum	90	96	94	90	74	68	74	87	70	78	74	64	72	75	84	78	79	62	50	58	80	88	83	87	86	90	93	94	68	68	..	78.5
	Minimum	64	65	65	66	53	54	56	57	61	42	46	50	51	42	46	55	48	38	41	44	47	55	54	63	60	58	59	64	56	46	..	53.5
Grant City	Maximum	89	88	90	81	74	75	72	73	66	76	77	66	70	71	82	75	73	61	53	53	76	83	82	83	85	85	81	83	75	65	..	75.5
	Minimum	64	67	68	61	49	53	48	56	57	44	49	52	56	44	51	54	50	37	43	45	52	58	60	55	59	61	62	65	53	44	..	53.9
Kansas City	Maximum	87	93	90	85	71	65	71	82	73	73	69	72	71	72	84	74	78	60	59	62	84	85	83	82	83	87	88	90	70	66	..	77.0
	Minimum	68	74	74	55	54	58	58	63	55	49	58	54	56	51	56	58	56	45	49	49	57	63	62	62	64	65	69	72	56	50	..	58.7
Kidder§§	Maximum	88	93	91	85	73	68	73	83	69	75	72	66	70	70	82	73	75	58	50	56	80	85	84	83	84	88	89	90	61	66	..	76.0
	Minimum	62	64	66	67	50	50	53	53	59	40	40	45	51	41	42	53	48	39	39	43	46	53	56	53	55	57	58	60	55	44	..	51.4
Lexington§§	Maximum	81	87	87	73	66	67	68	79	79	66	65	67	68	65	78	78	69	69	56	60	76	77	74	76	76	79	80	83	82	62	..	73.1
	Minimum	68	73	73	73	54	59	59	62	64	45	50	54	55	49	51	59	54	44	45	55	56	60	60	58	62	64	63	63	58	51	..	58.0
Maryville	Maximum	85	93	90	82	73	75	68	71	71	75	77	67	69	72	83	75	73	63	60	56	80	86	86	84	85	84	86	88	84	77	..	76.3
	Minimum	64	69	69	54	47	50	47	59	55	40	49	52	53	42	51	50	49	40	42	40	50	59	58	56	58	61	64	63	53	43	..	52.9
Oregon	Maximum	91	94	94	84	77	77	71	79	72	80	75	72	74	74	86	78	80	65	56	55	86	89	88	87	88	90	89	89	81	71	..	79.2
	Minimum	68	72	70	54	48	52	47	59	56	43	53	54	55	44	55	52	49	43	44	46	54	62	62	60	61	62	67	65	55	44	..	55.2
St. Joseph	Maximum	90	94	92	81	75	71	73	83	69	75	73	67	70	72	85	74	75	60	53	57	83	86	86	84	85	88	88	84	64	69	..	76.9
	Minimum	68	72	73	54	51	57	55	64	51	46	50	54	54	48	56	54	54	43	45	49	55	62	62	59	62	60	67	64	55	47	..	56.4
Trenton	Maximum	90	94	93	85	76	80	79	80	76	67	74	68	72	74	83	76	75	62	59	65	78	79	85	83	84	86	89	89	78	70	..	78.3
	Minimum	65	68	69	66	53	54	57	60	60	42	46	46	53	44	46	52	59	39	44	46	53	56	57	52	54	61	61	64	58	45	..	54.3

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 10-19-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIII COLUMBIA, MO., OCTOBER, 1929 NO. 10

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GENERAL SUMMARY

While wetter than usual over most of the State, October was largely a pleasant fall month, and because of the immature state of much corn and legume crops, the absence of a general freeze or even general killing frost, resulted in great economic value.

In temperature the month was very near the normal. By sections it was slightly warmer in the southwestern plain and a little cooler in all other sections but the departures were small either way. There were no frosts until the 22d, and no frost damage until the 23-25th, and then the growing season was not generally closed; a considerable strip of territory along the Mississippi River as far north as Pike County had no killing frost. Indeed, at the very close of the month there was much green vegetation generally, and even lawn flowers continued to bloom abundantly without protection. Heretofore freezing temperatures have occurred in October as far south as the southern border counties by the 20th of the month.

The southeastern lowlands were somewhat drier than normal, but amounts in all other parts were outstandingly large. In fact, it was the wettest October since 1919, and only three other Octobers going back to 1867 have been wetter. However, owing to the lack of soil moisture the three preceding months, there were no complaints of too much rain, the ground seemed to care for all of it without any exaggerated stream flow. The rainy days were well bunched alternating with pleasant open spells.

The month was decidedly favorable for maturing late crops, and for completing the seeding of wheat, with ground well prepared and in fine condition. At the end of the month nearly all corn was safe from frost, and much cut and in shock. All farm interests were in good shape for the coming winter. There were no damaging storms of any kind.

TEMPERATURE

The monthly mean temperature for the State, as determined from the records of 65 stations, was 57.2°, or only 0 2° lower than normal, but more than 3° cooler than the same month in 1928. The highest local monthly mean was 61.6°, at Caruthersville; and the lowest was 53.4°, at Kidder. The highest temperature reported was 91°, at Clinton on the 18th; the lowest reported temperature was 23°, at Neosho on the 25th; the greatest daily range was 53° at Marble Hill on the 26th. Maximum of 90° or higher, occurred on one day at one station; minimum of 32° or lower occurred on two days. The extremes as entered here are well within those of most other Octobers.

PRECIPITATION

The monthly precipitation for the State, 95 stations reporting, was 5.54 inches, or 2.65 inches more than the 60 years' average, and 1.71 inches wetter than October a year ago. The greatest local monthly amount was 8.58 inches at Marshall; 8 inches or more fell at four stations, and more than 7 inches fell at 13 stations, pretty well distributed, not including the southeastern lowlands. The greatest amount in any twenty-four consecutive hours was 3.30 inches, at Rolla on the 13th; and the next greatest amount was 3.25 inches, at Columbia on the 9th, and 10th.

A brisk and general snow fell over central and north-central parts of the State on the 23d, but the snow melted just about as fast as it fell.

MISCELLANEOUS PHENOMENA

Fog, dense.—Local on the 5th, 11th, 15th, and 25th. General and lasting most of the forenoon over central and northern Missouri from the Missouri River to the Mississippi River, on the 29th, or 30th, or both days.
Frost, light.—22d.
Frost, heavy.—Local, 22d, and 25th.
Frost, killing.—(Not general.) On the 25th.
Hail, small.—Seligman 4th; Kansas City 20th, and Kirksville 29th.
Halos, lunar.—18th.
Halos, solar.—18th, 27th, and 29th.
Thunderstorm, more or less local.—4th, 9th, 10th, 11th, 18th, 19th, 20th, 29th, 30th, and 31st.

ERRATA.—September, 1929, highest temperature at Lamar should be 96° on the 4th. The mean temperature, Warrensburg, page 34, should read 69.4°. The mean maximum on page 36, 81.3°; mean minimum, 57.5° (nine days missing from record.)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.05	84	68	204	59	4,846	6.5	20	nw.	23
Hannibal	30.05	85	..	...	..	5,539	7.4	42	s.	31
Kansas City	30.04	79	60	211	61	6,322	8.5	32	nw.	20
St. Joseph	30.04	84	64	190	55	5,088	6.8	25	nw.	22
St. Louis	30.05	76	60	182	53	7,669	10.3	26	n.	22
Springfield	30.06	80	62	189	54	6,288	8.5	29	nw.	20
Cairo, Ill.	30.06	83	64	...	..	5,171	7.0	27	se.	31
Keokuk, Iowa	30.06	83	64	201	58	4,666	6.3	22	ne.	28

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature: Mean	Departure	Highest	Lowest	Precipitation: Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	Number of days: With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	53.6	−3.5	89	24	2.65	+0.21	....	....	7	..	..	..
1889	53.8	−3.3	91	27	2.50	+0.06	....	....	6	..	..	..
1890	54.8	−2.3	91	22	2.24	−0.20	....	....	6	..	..	..
1891	55.7	−1.4	98	19	1.11	−1.33	....	....	3	..	..	..
1892	57.5	+0.6	95	16	2.28	−0.16	2.40	0	5	16	7	8
1893	56.7	−0.4	95	16	0.99	−1.45	2.81	....	10	20	8	3
1894	57.6	+0.5	94	18	1.74	+0.70	3.52	T.	6	17	8	6
1895	54.2	−5.9	89	15	0.35	−2.09	1.20	T.	2	21	6	4
1896	54.1	−3.0	90	19	2.48	+0.04	2.68	0	5	19	6	6
1897	62.5	+5.4	99	23	0.71	−1.73	1.70	0	3	22	6	3
1898	53.5	−3.6	94	19	4.23	+1.79	4.51	1.4	8	11	7	13
1899	62.4	+5.3	100	24	2.93	+0.49	2.53	0	5	20	6	5
1900	62.4	+5.3	92	25	4.18	+1.74	4.04	0	7	17	7	7
1901	60.1	+3.0	96	24	1.64	−0.80	2.98	0	6	18	8	5
1902	59.5	+2.4	88	28	2.52	+0.08	2.69	0	5	21	5	5
1903	57.2	+0.1	90	19	2.85	+0.41	3.80	0	6	19	6	6
1904	57.6	+0.5	90	19	0.90	−1.54	2.46	0	3	20	7	4
1905	55.1	−2.0	90	20	4.64	+2.20	7.47	0.3	5	17	6	8
1906	56.3	−0.8	94	17	0.87	−1.57	1.50	0	10	15	7	9
1907	56.7	−0.4	94	18	2.90	+0.46	3.46	0	7	19	5	7
1908	56.3	−0.8	92	21	2.74	+0.30	4.90	0.8	5	18	6	7
1909	57.2	+0.1	96	20	2.77	+0.33	2.57	T	6	19	5	7
1910	59.4	+2.3	94	15	2.71	+0.27	5.50	0	5	22	4	5
1911	56.9	−0.2	96	25	3.30	+0 86	5.12	0.2	8	11	7	13
1912	59.1	+2.0	97	21	3.83	+1.39	5.12	0.7	6	20	5	6
1913	54.7	−2.5	93	11	4.46	+1.94	2.80	3.3	9	15	6	10
1914	59.2	+2.0	88	19	4.54	+2.04	5.40	0	7	14	6	11
1915	59.8	+2.9	95	22	1.19	−1.45	1.97	0	3	23	5	3
1916	58.0	+0.7	95	20	2.17	−0.54	3.90	0	6	18	5	8
1917	49.8	−7.4	93	12	1.16	−1.49	2.00	0.2	6	16	8	7
1918	60.6	+3.5	95	28	3.37	+0.71	5.61	0	7	14	6	11
1919	58.4	+1.4	98	17	6.74	+3.92	4.91	0	11	10	7	14
1920	61.3	+4.3	93	18	2.89	+0.25	2.45	T	7	17	6	8
1921	57.9	+0.8	92	24	2.19	−0.40	2.32	0	5	21	5	5
1922	59.9	+2.4	97	18	2.00	−0.77	3.00	0	5	20	5	6
1923	53.0	−4.4	89	17	3.39	+0.64	2.76	0.1	9	15	5	11
1924	61.8	+4.4	92	21	1.22	−1.53	2.73	0	4	22	5	4
1925	48.6	−8.8	92	− 3	4.85	+2.10	3.12	2.4	10	8	8	15
1926	57.3	−0.1	93	21	4.67	+1.92	3.85	0	9	14	6	11
1927	60.9	+3.5	93	26	4.72	+1.97	8.85	0	5	22	5	4
1928	60.9	+3.5	94	22	3.83	+1.08	5.23	0	8	15	8	8
1929	57.2	−0.2	91	23	5.54	+2.65	3.30	T.	10	15	6	10

Climatological Data for October, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	49	50.5	− 4.7	81	18	34	25	34	8.52	+5.79	2.49	T.	14	16	1	14	se.	O. K. Benecke
Clifton Hill	Randolph	731	29	56.6	− 0.6	83	14†	29	25	37	6.08	+3.96	1.38	T.	11	17	7	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	57.4	+ 0.8	82	16	32	25	33	6.96	+4.35	3.25	T.	11	14	8	9	sw.	U. S. Weather Bureau
Downing	Schuyler	876	7	55.2	.....	80	15	31	23	36	5.91	+3.71	1.65	T.	12	17	4	10	w.	James Taylor
Fayette	Howard	661	48	55.4	− 1.3	86	16	28	25	43	6.89	+4.41	2.12	0	12	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	57.0	− 0.7	85	16	33	24†	39	6.08	+3.33	2.00	T	11	16	6	9	.....	Chamber of Commerce
Gorin	Scotland	700	41	.....	.....	..	..	..	..	..	6.77	+4.39	1.76	T.	9	16	4	11	se.	J. W. Pulliam
Hannibal	Marion	534	36	56.1	+ 0.1	80	16	32	23	32	4.67	+2.28	1.67	0.3	10	18	1	12	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	58.4	+ 1.7	88	15†	32	25	44	5.21	+2.62	1.40	0	10	14	8	9	e.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	55.0	+ 0.3	80	16	31	23†	32	6.14	+3.41	1.50	T.	10	18	3	10	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	34	55.7	− 0.6	80	15†	33	24	34	5.60	+2.97	1.65	T.	8	18	3	10	s.	Stark Bros. Nurseries
Macon	Macon	875	29	55.0	− 1.8	80	16	30	25	38	7.94	+5.21	2.10	T.	11	16	4	11	se.	W. C. Brown
Mexico	Audrain	800	39	55.8	− 0.6	84	17	33	24†	41	5.19	+2.81	1.78	T.	12	20	0	11	s.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	.....	.....	..	..	..	..	..	5.23	.....	1.69	T.	9	15	4	12	w.	J. S. Conway
St. Charles	St. Charles	456	40	58.4	+ 0.3	85	16	33	25	33	3.63	+0.96	1.19	T.	9	14	5	12	n.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	58.4	− 0.4	81	16	35	23	26	4.99	+2.27	2.31	T.	11	14	4	13	e.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	57.7	− 1.2	80	16	34	23	28	4.91	+1.12	1.55	T.	11	16	3	12	se.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	..	..	..	5.34	+2.62	1.89	T.	12	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	30	56.2	− 1.5	84	16	31	23†	41	7.15	+5.03	1.95	T.	10	15	7	9	s.	Frank Hall
Unionville	Putnam	1,062	35	54.9	− 0.5	80	14†	32	23†	35	7.15	+4.69	1.95	T.	11	16	4	11	s.	Geo. W. Davis
Warrenton	Warren	816	46	57.8	+ 2.2	81	15†	33	23†	32	4.46	+1.60	0.89	T.	11	14	5	11	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	54.8	− 0.6	78	19	31	23	30	4.27	+2.01	1.13	0.4	11	16	3	12	e.	U. S. Weather Bureau
Section means and	extremes	.....	..	56.1	− 0.5	88	15†	28	25	44	5.87	+3.31	3.25	T.	11	16	4	11	se.	
Southeast Lowlands																				
Campbell	Dunklin	314	8	58.7	.....	85	16	29	24†	44	1.71	.....	0.69	0	8	14	9	8	n.	Jeff. King
Caruthersville	Pemiscot	265	32	61.6	− 0.1	83	16	34	24	34	2.10	−0.86	0.87	0	5	24	4	13	n.	Sam Smith
Doniphan	Ripley	344	24	59.8	+ 1.4	87	16	26	25	50	4.03	+0.98	1.40	0	6	14	10	7	ne.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	37	55.8	− 2.2	82	16	25	25	43	1.62	−1.60	0.48	0	8	9	8	15	n.	John G. Putz
Marble Hill	Bollinger	470	33	58.2	+ 0.2	84	16	27	25	53	2.72	+0.07	0.67	0	9	11	5	15	n.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	..	..	..	1.52	−1.08	0.68	0	6	17	4	10	se.	John A. Spence
Poplar Bluff††	Butler	339	24	58.8	− 1.5	85	14†	29	24†	40	2 84	−0.36	0.90	0	8	18	4	9	w.	J. H. Wolpers
Sikeston	Scott.	318	23	60.2	+ 1.4	86	16	32	24†	41	1.31	−1.29	0.50	0	5	17	4	10	w.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	59.5	− 0.9	81	16	34	25	29	1.08	−1.68	0.34	0	6	12	5	14	n.	U. S. Weather Bureau
Section means and	extremes	....	..	58.9	− 0.5	87	16	25	25	53	2.20	−0.65	1.40	0	7	14	6	11	n.	
Ozark Plateau																				
Arcadia	Iron	926	47	55.0	− 1.1	82	16	30	25	40	1.94	−1.13	1.00	0	4	15	1	15	s.	Arcadia College
Aurora	Lawrence	1,370	38	58.6	+ 0.1	82	17	30	25	32	6.76	+3.49	2.00	0	9	16	5	10	sw.	W T. Troughton
Birchtree (near)	Shannon	1,000	33	58.4	+ 0.2	82	15	30	25	41	6.48	+3.90	2.47	0	6	17	5	9	se.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean †‡	McDonald	1,000	31	59.4	− 0.5	84	17	25	25	40	7.56	+4.07	1.72	0	8	12	14	5	se.	H. E. Dean
Eldon	Miller	934	32	56.8[b]	− 0.9	83	16†	31	25†	43	6.49	+3.46	1.77	0	10	7	10	12	w.	E. H. Shepherd
Farmington	St. Francois	918	17	57.6	+ 1.2	83	16	33	24†	38	3.40	+0.51	0.78	0	10	14	8	9	ne.	Robert Forsyth
Goodland	Iron	1,000	34	56.4	+ 0.6	82	16	24	25	50	5.20	+1.98	1.37	0	9	16	7	8	s.	F. M. Adams
Greenville	Wayne	381	5	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	..	..	..	5.05	.....	2.00	0	4	19	7	5	w.	A. W. Madison
Koshkonong	Oregon	958	27	59.3	− 0.7	80	16	34	24†	33	4.55	+1.64	2.24	0	6	10	8	13	ne.	R. M. Hitt
Lebanon	Laclede	1,265	40	57.4	− 0.6	87	19	28	25	43	6.07	+2.81	1.53	0	10	17	3	11	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	59.4	+ 0.8	86	17	29	25	34	4.15	+0.70	1.50	0	6	20	3	8	se.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	57.6	0.0	80	151	30	25	38	7.28	+4.23	2.66	0	11	12	10	9	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	58.8	− 0.4	87	17	23	25	41	5.34	+1.95	1.37	0	8	19	4	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	54.1	− 1.8	76	16	31	25	27	8.28	+5.33	3.30	0	10	12	7	12	sw.	F. H. Lane
Salem(near)	Dent	1,173	24	57.4	− 0.6	82	16	29	25	38	7.59	+3.71	2.76	0	8	15	7	9	nw.	A. C. Leech
Seligman	Barry	1,542	26	59.2[a]	+ 0.9	85	17	27	25	38	8.03	+5.09	2.31	0	10	14	5	11	w.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	56.2	− 1.3	79	14	25	25	35	5.80	+2.79	2.47	0	7	14	10	7	n.	Ira H. Hailey
Springfield	Greene	1,324	40	58.6	+ 0.4	82	17	35	25	27	5.55	+2.50	2.20	0	10	13	10	8	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	57.7	− 0.2	87	17†	23	25	50	5.86	+2.77	3.30	0	8	15	7	9	se.	
Southwest Plain																				
Appleton City	St. Clair	853	34	58.7	− 0.4	84	16	35	23	35	5.10	+2.76	1.29	0	9	8	19	4	se.	W. G. Bigelow
Clinton	Henry	765	35	60.5	+ 1.9	91	18	30	25	41	5.92	+3.11	1.52	0	8	10	14	7	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	57.2	+ 1.2	86	16	29	25	46	5.12	+2.53	1.27	0	9	10	2	19	n.	John H. Patterson
Lamar	Barton	980	41	59.5	+ 0.6	88	17	26	25	43	3.40	+0.27	0.70	0	9	14	10	7	se.	Jesse A. Mann
Lamonte	Pettis	867	27	58.0	0.0	85	18	30	25	40	7.17	+4.84	1.79	0	10	17	6	8	sw.	J. E. Wheeler
Marshall	Saline	779	39	57.9	+ 1.3	84	18	32	22†	41	8.58	+6.00	1.90	T.	9	17	10	4	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	35	59.7	+ 2.4	85	17	27	25	39	3.71	+0.63	1.20	0	7	16	8	7	sw.	George A. Kaupp
Warrensburg	Johnson	878	41	58.0[b]	− 0.1	83	16†	33	25	31	6.42	+3.87	1.67	0	13	9[b]	9[b]	11[b]	sw.	E. A. Markey
Warsaw	Benton	687	28	58.4	− 0.7	84	18	28	25	37	6.12	+2.81	1.60	0	8	14	9	8	w.	Everett Martin
Section means and	extremes	.....	..	58.7	+ 0.7	91	18	26	25	46	5.73	+2.98	1.90	0	9	13	10	8	sw.	
Northwest Plateau																				
Bethany	Harrison	916	36	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	M. H. Moulton
Chillicothe	Livingston	779	19	55.2	− 3.0	85	16	28	25	42	7.78	+4.33	2.05	T.	12	15	3	13	e.	Wm. J. Olenhouse
Conception	Nodaway	980	39	56.1	+ 0.6	83	16	31	23	35	7.46	+5.01	1.65	0	11	14	4	13	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	56.4	.....	83	16	29	25	39	7.35	+5.10	2.46	0	12	18	2	11	e.	Fred L. Stiff
Grant City	Worth	1,134	24	55.0	− 0.4	80	18	31	23	36	4.68	+1.96	1.18	T.	10	14	7	10	sw.	W. P. Spillman
Kansas City	Jackson	963	39	58.8	+ 1.1	83	16	34	23	26	6.72	+3.80	2.16	0	12	15	5	11	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	53.4	− 3.0	82	18	29	25	39	7.72	+5.10	2.10	0	11	14	5	12	se.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	..	..	..	6.63	.....	1.76	T.	12	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	55.2	− 2.3	75	26	35	23†	29	7.48	+4.91	2.70	0	11	18	7	6	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	54.6	+ 1.3	81	14	29	25	40	6.43	+3.76	1.02	0	11	11	8	12	n.	J. R. Brink
Oregon	Holt	1,048	72	57.2	+ 2.3	88	16	32	23	37	7.08	+4.52	1.82	0	12	14	6	11	sw.	Mina Wright
St. Joseph	Buchanan	987	20	56.8	+ 0.1	82	16	34	23	33	6.05	+3.33	1.35	0	11	15	6	10	se.	U. S. Weather Bureau
Tarkio	Atchison	916	25	54.6	− 0.9	80	14†	30	25	39	6.72	+4.15	1.47	0	10	13	5	13	se.	Albert Volker
Trenton	Grundy	822	32	56.2	− 0.1	82	16	30	25	38	7.82	+5.26	1.77	0	12	18	3	10	s.	W. H. Estes
Section means and	extremes	.....	..	55.8	− 0.4	88	16	28	25	42	6.92	+4.27	2.70	T.	11	15	5	11	e.	
State means and	extremes	.....	..	57.2	− 0.2	91	18	23	25	53	5.54	+2.65	3.30	T.	10	15	6	10	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for October, 1929

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville‡‡	Missouri				.46	.40				.53	2.45		.17								.80				T.				.20	1.40		.25	6.66
Brunswick‡‡	Grand				.47	.20	.17			1.10	2.49	.06	.75								1.04	.03		T.	.03				.64	.87	.15	.52	8.52
Clifton Hill	Chariton				.42				T.	1.17	1.05	.32									1.38			.08	.03				1.27	.15	.11	.10	6.08
Columbia***	Missouri				.86				.20	2.97	.39	.19	.01								.40			.01					1.34		.01	.58	6.96
Downing	Missouri				.06					.15	1.30	.32	.32							.08	.67			.16				1.65		.34	.61	.25	5.91
Fayette‡‡	Missouri				.50	.32				.65	2.12	.03	.21								.81				.02				.15	1.69	.03	.36	6.89
Fulton‡‡	....do				.42	.54					2.00	.46	.38								.28	.03			.02				.32	.81	T.	.82	6.08
Gorin	Mississippi				.02					.26	1.00	.94								.70				.26				1.76	1.22		.61	6.77
Hannibal***	....do				.06				T.	.60	1.15	.35								T.	.25		.07	.61				1.15	.09	T.	.34	4.67
Hermann‡‡	Missouri				.05	.72				.30	1.32	.25	.88								.01	.05		T.	.05				.06	.79		1.28	5.76
Jefferson City‡‡	....do				.40	.40				.25	1.40	.10	.35								.37								.24	1.10		.60	5.21
Kirksville	Mississippi				.41					.37	.92	.72								.25		.57		.20				1.50	1.15	.05		6.14
Louisiana	....do				.30					.70	1.65	.30									.25			.60				1.60			.20	5.60
Lucerne‡‡‡	Grand	.28			.15	.30				.33	1.24		.09							.13	.80				T.					1.45		.03	4.80
Macon ‡‡	Chariton				.30	.22				.26	2.10		1.50								1.05				.10				.10	1.90	.04	.37	7.94
Mexico ‡‡	Mississippi				.27	.46				.29	1.78	.03	.18								.20			.02					.34	1.32	.05	.25	5.19
Milan‡‡	Grand				.10		.20			.25	1.75			.15							.25				.20					1.02	.73	.35	5.00
Monroe City	Mississippi				.19					.22	1.69	.16									.23			.36				1.29	.51	T.	.58	5.23
Pacific‡‡	Meramec				.02	.53				.24	.71	.53	2.97								.12	.07		.02				T.	.68	T.	.66	6.55
St. Charles	Missouri				.36	.03				.30	.56	.75	1.19								.11			T.				.18	.15		T.	3.63
St. Louis (1)***	Mississippi				.44				.01	.43	.49	.50	1.82							T.	.13	T.	T.	.14				.74	.02	T.	.27	4.99
St. Louis (2)*	....do				.43				.01	.40	.40	78	1.55							.02	.16	T.	T.	.08				.73	T.		.35	4.91
Shelbina ‡‡‡	....do					.38				.14	1.80	.01	.16								.46			.08	.08				.04	1.89	.02	.28	5.34
Steffenville	....do				.05					.50	1.95	.15	.25							T.	1.05			.25					1.60	.70		.65	7.15
Union‡‡	Meramec				.03	.76				.34	1.15	.40	1.92									.01		.17	.02				.06	.83	.01	.65	6.35
Unionville	Chariton				.40					.35	1.25	.20	1.75							T.	.65			.10					.90	.75	.55	.25	7.15
Warrenton	Mississippi				.50	.07				.65	.89	.40	.10								.14			.06	T.				.55	.28		.82	4.46
Keokuk, Ia.***	....do	T.								.25	.64	.62	.04							.17	.27		.12	.24					1.05	.31	T.	.56	4.27
Southeast Lowlands																																	
Campbell‡‡	St. Francis				.25	.69					.08											.30							.06	.08	.05	.20	1.71
Cape Girardeau‡‡	Mississippi					.32				.01			.09	.01								.03							.02	.09	.02	.31	0.90
Caruthersville ‡‡	.... do				.87																	.25						.25		.05	.68	2.10
Dexter‡‡	St. Francis	.04				.70					T.			T.								1.06						T.	.25	.06	.28	2.39
Doniphan	Black				.90	.03				T.			T.								.95	T.						.70	T.	.05	1.40	4.03
Jackson	Mississippi				.48					.08			.13								.21							.40	.04	.05	.23	1.62
Marble Hill	Mississippi				.56	.10						.08	.06								.48							.20	.45	.12	.67	2.72
Morehouse	....do				.55	.05																.68						.14		.04	.06	1.52
New Madrid‡‡	....do	.02				.75	.05				.05											.50						.10	.05	.14	.10	1.76
Poplar Bluff‡‡‡	Black	.03			.26	.55							T.									.90						.11	.37	.04	.58	2.84
Sikeston‡‡	Mississippi				.07	.50								.04								.43						.17		.10		1.31
Cairo, Ill.***	. . do				.25	T.				T.	T		.10				T.				.34							.13		.07	.19	1.08
Ozark Plateau																																	
Arcadia ‡‡	St. Francis				T.	.44	T.						1.00	.40															T		T	.10	1.94
Aurora	Neosho				.94					T.	.55	2.00	.65								.09	.06						1.79		.21	.47	6.76
Birchtree (near)	Black				.95							1.70	.55								.11							.70			2.47	6.48
Bolivar	Osage																																
Caplinger Mills	Osage				.49					.52	.06	.30	.43								.50	.06						1.30		.38	.52	4.56
Dean	Neosho				.85						.72	1.68	1.34							.45		T.					T	1.72		.35	.45	7.56
Eldon‡‡‡	Missouri				.65	.12				.19	1.05	.12	.45								1.00							.53	1.77		.61	6.49
Farmington	St. Francis				.51	.03				.12	.21	.07	.78								.59							.36		.35	.38	3.40
Fredericktown‡‡‡	.... do																																
Galena‡‡‡	White				.78	.28					.33	.33	1.35									.20							.78	.98		1.07	6.10
Goodland	Black				.62					.11	.22	.82	1.09								.52							.21	.24		1.37	5.20
Greenville	St. Francis																																
Hailey	White																2.00	.30										1.80			.95	5.05
Koshkonong	Black				1.23							.35	.25								T.							.43		.05	2.24	4.55
Lebanon ‡‡	Osage	T.			.82	.14				.03	.09	.42	1.53									.21						.30	1.19	T	1.34	6.07
Leeper‡‡‡	Black				.36	.78						T.	.11								.20	.30						.20	.25	.20	.71	3.11
Lockwood	Osage				.62					T.	.18	1.20																1.50		.20	.45	4.15
Mountain Grove‡‡	White				.70	.06				T.	.02	1.15	1.70								.10	.10						.40	.38	.01	2.66	7.28
Neosho	Neosho			T.	.95	T.				T	.53	1.10	.68									.28						1.37		.07	.36	5.34
Owensville ‡‡	Gasconade				.48	.40				.25	1.02	.20	.27									.20						.15	.27	1.25		4.49
Ozark Beach‡‡‡	White				.36						.11	2.10										.16						1.04	.38		2.76	6.91
Rolla ‡‡	Meramec				.77	.09					1.00	.42		3.30							.08	.10						.11	.31	T.	2.10	8.28
Salem (near)	....do				.75	T.				T.	.28	1.34	1.82								.19							.42	.03	T.	2.76	7.59
Seligman	Neosho				1.57	.04				.04	.51	2.31	.53								.20						T.	1.51		.81	.51	8.03
Seymour (near)	White				.92	T.				T.	.25	.97	.94								T.	.13							.12	T.	2.47	5.80
Springfield**	....do				1.03	.04			T.	.01	.08	1.95	.30							T.	.08						T.	1.12		.38	.56	5.55
Steelville‡‡	Meramec				.47	.25				.20	.64	.28	3.30									.20						.10	.42		1.45	7.31
Stover‡‡	Missouri				.55	.16				.28	.98	.04	.22								.99							.82	.95		.70	5.69
Tuscumbia ‡‡	Osage				.49	.20				.17	.90	.11	.24									.46						.40	1.44	T.	.88	5.29
Williamsville‡‡‡	Black	.02				.81	.01		.01				.11								.04	.31								.71	.02	1.17	3.21
Willow Sprgs. ‡‡‡ (near)	White				.75	.17					.05	.77	.89								T.	.22						.28	.37		2.72	6.22
Southwest Plain																																	
Appleton City	Osage				.90				T.	.86	T	.04	.20							.04	1.18							1.29		.29	.30	5.10
Clinton	Osage				.94					1.17		.11								.34	1.00							1.52		.38	.46	5.92
Concordia‡‡‡	Missouri				.58	.16				.58	1.53		.40								1.25								1.16		.65	6.31
Harrisonville‡‡	Osage				.53					.81	1.27		.37								.16	.04						.72	.54		.68	5.12
Joplin‡‡‡	Neosho				1.00				.05	.04	.05	1.30	T.							T.	.15						T.	1.40		.07	.43	4.49
Lamar‡‡	....do				.65					.14	.33		.28								.14	.08						.63	.45		.70	3.40
Lamonte	Missouri				.90	.02				1.79	.85	.12								.70	.80							1.44		.20	.35	7.17
Marshall	.... do				.70					1.90	1.09	1.16	.19								1.65			T.				1.26		.12	.51	8.58
Nevada	Osage				.62					.29	.04		.53															1.20		.53	.50	3.71
Osceola‡‡‡	....do				.72	.04				.24	.20		.23								.98							.71	.91		1.13	5.16
Warrensburg	Missouri				.72	.03			.10	1.67	.87	.12	.04							.12	.62							1.35	.02	.25	.51	6.42
Warsaw	Osage				1.01	T.				.70	1.05		.18								.98							1.60		.25	.35	6.12
Waverly ‡‡	Missouri				.54	.16				.95	2.72		.62								1.05	T.			T.			.55	.92	T.	.67	8.18
Northwest Plateau																																	
Albany‡‡‡	Grand																																
Bethany	....do																																
Chillicothe‡‡‡	....do				.54	.26				1.12	2.05	.01	.97								69				.03				.31	1.03	.41	.36	7.78
Conception	Missouri				.81				.10	.93	.79	.63							T.	.65	.06								1.65	.14	.22	1.48	7.46
Edgerton	....do				.47				.25	1.26	.63	2.46	.05							.44	.34								1.06	.06	.04	.29	7.35
Gallatin ‡‡	Grand				.33	T.				.71	1.39		2.26							.17	92								.79	.71	.23	.28	7.79
Grant City	.... do								.06	1.16	1.18	.22							.05	.70	T			T				.38	.24	.33	.36	4.68
Kansas City***	Missouri				.52				.51	.84	1.48	.83	.02								.53	.03							1.44	.05	.06	.41	6.72
Kidder ‡‡	Grand				.32	.07				.75	1.62		2.10								.18	.65							.45	1.14	.10	.34	7.72
King City	Missouri				.34				.08	.95	.77	.78	.04							1.10	.25			T.				1.76	.18	.05	.33	6.63
Lexington	....do				.70	.14				1.03	2.70	.04	.43								.20							.77	.70	.10	.67	7.48
Maryville ‡‡	....do				.61	.38				.96	.97	.02								.65	.54							.29	1.02	.14	.85	6.43
Oregon	....do				.49				.07	.70	1 82	.38							.13	.48	.07							1.18	.14	.14	1 48	7.08
St. Joseph***	....do				.32				.64	.88	.46	.60							.22	.80	T			T.				1.20	.21	.27	.45	6.05
Tarkio	....do				1.47				.29	.64	.34	.35								1.42								1.18	.14	.42	.47	6.72
Trenton	Grand				.91				T.	1.77	.97	.22	1.36							.12	.63			.02				.92	.38	.23	.29	7.82

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of obse - vation. ‡‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for October, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	55	58	58	50	63	60	50	64	51	59	59	54	57	60	65	80	73	81	73	70	58	45	43	52	64	71	67	52	62	64	55	60.4
	Minimum	49	43	46	50	45	47	47	44	49	48	51	48	45	49	51	56	51	52	59	55	40	39	36	35	34	37	45	45	43	52	53	46.6
Columbia	Maximum	66	68	75	62	65	77	71	64	52	64	66	71	75	78	80	82	72	76	78	67	58	51	42	53	65	74	68	56	70	68	65	67.1
	Minimum	46	44	51	50	50	50	48	45	48	51	58	50	46	48	52	55	52	52	59	52	42	39	35	35	32	46	51	44	50	56	44	47.8
Fayette	Maximum	71	73	80	52	66	80	80	64	51	67	67	74	78	81	83	86	76	82	.80	70	61	54	41	56	65	74	71	54	71	65	62	68.9
	Minimum	41	37	38	43	45	42	47	36	41	45	47	43	39	40	45	47	47	48	49	52	37	34	34	31	28	31	43	43	41	50	53	41.8
Hannibal	Maximum	64	67	73	55	68	77	70	66	55	62	66	70	72	78	80	80	69	75	79	66	57	45	40	52	64	73	67	51	60	64	68	65.6
	Minimum	46	43	49	49	46	49	46	41	51	50	60	47	44	46	51	58	47	48	54	52	44	40	32	35	34	44	51	43	47	52	45	46.6
Jefferson City§§	Maximum	71	73	86	57	61	87	74	66	53	66	68	77	87	87	88	88	76	81	88	70	60	52	43	55	68	78	74	54	70	73	66	70.9
	Minimum	44	43	45	48	50	48	48	45	46	47	48	52	46	52	50	54	50	48	52	55	41	37	37	34	32	34	38	46	46	47	57	45.8
Kirksville	Maximum	64	63	72	61	69	74	72	65	58	62	70	65	73	79	77	80	77	75	75	70	60	49	44	55	63	72	65	62	52	61	62	66.0
	Minimum	43	41	47	45	38	49	44	43	47	47	55	45	39	48	53	57	43	46	56	52	35	35	31	32	31	43	45	38	40	50	46	44.0
Louisiana	Maximum	70	70	68	69	75	78	72	60	65	65	65	70	75	75	80	80	77	70	80	72	56	43	40	50	55	70	60	50	60	60	65	66.0
	Minimum	49	46	49	49	50	55	45	35	50	50	50	50	49	42	46	46	55	45	42	40	36	33	38	40	40	38	40	40	38	40	50	45.4
Macon§§	Maximum	68	70	76	52	70	76	72	67	52	70	70	69	75	70	79	80	74	79	74	69	59	47	41	52	64	72	70	50	58	64	61	66.1
	Minimum	42	42	47	42	40	43	43	43	48	47	49	47	44	49	50	52	46	46	54	53	39	37	33	32	30	34	44	43	41	48	55	44.0
Mexico§§	Maximum	66	70	77	50	69	80	73	67	52	64	66	73	78	82	82	73	84	73	80	65	59	51	42	55	65	74	68	54	69	65	64	67.4
	Minimum	40	40	44	47	47	44	44	39	47	48	50	49	42	45	49	52	47	46	55	54	39	36	34	33	33	33	46	43	42	51	54	44.3
St. Louis(1)	Maximum	65	66	74	57	62	70	70	68	57	67	67	72	69	76	79	81	70	72	78	68	58	50	42	51	65	73	68	54	67	68	68	66.2
	Minimum	46	48	52	49	51	52	54	51	52	52	60	57	54	55	56	60	53	49	54	57	45	41	35	36	39	50	54	45	51	58	55	50.7
Unionville	Maximum	68	70	75	65	70	70	70	67	70	60	68	67	73	80	80	79	74	80	74	70	65	50	45	54	66	74	67	56	50	60	57	66.9
	Minimum	42	42	42	45	35	48	40	43	47	46	53	45	36	45	52	55	40	47	56	50	35	42	32	32	33	40	42	40	40	40	45	42.9
Warrenton	Maximum	66	66	74	71	60	78	72	69	62	64	63	71	74	77	81	81	79	77	80	73	60	54	42	50	64	74	70	63	72	68	65	68.4
	Minimum	42	42	48	47	50	50	48	43	49	49	59	54	49	52	54	56	47	45	53	55	41	39	33	33	33	45	51	43	45	50	59	47.2
Southeast Lowlands																																	
Campbell	Maximum	69	71	76	67	64	69	74	71	66	76	79	79	77	82	81	85	76	79	83	78	65	62	56	55	67	74	80	64	68	72	71	72.1
	Minimum	46	41	39	50	51	50	46	40	50	54	55	56	43	44	44	43	53	43	38	52	46	36	36	29	29	30	41	50	52	58	60	45.3
Caruthersville	Maximum	70	71	75	64	62	71	73	72	70	76	77	78	74	81	79	83	77	78	82	77	64	61	57	54	66	74	80	66	71	72	70	71.8
	Minimum	52	47	45	54	54	56	52	50	52	60	59	59	56	52	53	52	57	52	48	56	52	42	39	34	35	41	49	54	55	61	62	51.3
Doniphan	Maximum	74	76	79	63	64	67	77	74	67	75	78	77	77	85	84	87	80	80	82	75	68	64	56	59	71	78	82	70	77	72	70	73.8
	Minimum	48	38	41	49	49	55	46	39	48	53	61	62	42	44	43	44	49	41	42	55	49	38	41	28	26	28	37	52	56	54	61	45.8
Jackson	Maximum	65	65	72	68	60	66	71	63	62	72	70	70	74	68	77	82	73	75	79	66	56	54	54	51	61	65	77	68	68	69	67	67.4
	Minimum	42	42	37	48	50	53	47	38	49	54	56	57	40	41	40	42	45	35	36	52	47	38	34	33	25	31	40	51	53	58	59	44.3
Poplar Bluff	Maximum	72	74	76	56	61	64	77	72	66	72	77	73	75	85	80	85	77	77	80	75	67	63	56	55	68	75	80	60	72	73	70	71.4
	Minimum	45	42	41	50	45	56	48	42	48	54	58	60	45	45	45	45	52	47	41	40	48	38	40	29	29	30	41	53	55	57	61	46.1
Sikeston	Maximum	67	67	75	71	61	71	74	70	68	76	76	75	77	82	80	86	80	77	84	77	60	59	57	53	67	75	78	75	75	76	74	72.4
	Minimum	46	43	41	51	51	51	50	44	51	56	58	59	43	46	48	49	51	43	43	58	51	40	37	32	32	35	45	53	54	60	63	47.9
Cairo, Ill	Maximum	65	66	71	58	61	71	72	68	64	73	74	70	73	77	76	81	71	73	78	73	56	54	52	50	63	71	76	61	74	70	69	68.1
	Minimum	49	47	49	54	54	57	53	50	54	59	60	58	52	52	51	52	52	46	49	54	47	42	39	37	34	43	50	54	57	61	63	50.9
Ozark Plateau																																	
Arcadia§§	Maximum	64	67	71	54	58	66	75	64	58	65	70	68	72	78	79	82	70	72	76	67	58	56	52	50	68	74	77	57	72	66	65	66.8
	Minimum	43	40	39	43	50	51	50	35	41	48	54	36	40	43	41	44	45	36	40	45	44	38	38	34	30	34	45	52	50	53	58	43.2
Aurora	Maximum	68	70	74	69	62	75	69	68	68	68	63	69	71	73	77	77	77	82	80	78	70	56	53	48	51	62	70	71	66	74	73	64	68.4
	Minimum	48	42	52	55	52	49	51	49	53	53	57	56	45	49	49	57	52	54	55	57	40	36	36	34	30	43	51	49	53	56	47	48.8
Birchtree	Maximum	68	68	75	66	68	67	71	69	67	67	75	69	72	79	82	80	75	77	77	70	59	59	51	52	59	72	77	63	73	68	63	69.0
	Minimum	43	42	59	52	53	54	49	42	52	57	57	59	45	47	48	48	46	44	48	55	45	37	40	32	30	31	48	52	55	53	58	47.8
Eldon§§	Maximum	69	72	77	54	52	..	79	61	52	58	59	74	77	80	82	83	76	83	82	..	66	57	45	45	66	74	72	56	70	70	61	[b]67.3
	Minimum	43	43	43	46	51	45	..	47	49	49	53	53	47	47	50	50	51	50	50	55	..	36	36	36	31	31	42	48	47	52	59	[b]46.2
Farmington	Maximum	65	68	76	68	58	70	72	66	61	65	69	68	74	77	80	83	74	75	77	68	66	54	48	50	69	75	75	62	75	69	66	68.5
	Minimum	47	41	38	48	51	54	51	38	49	50	56	59	43	45	47	53	45	39	47	53	43	37	38	33	33	39	51	49	53	56	59	46.6
Koshkonong	Maximum	66	68	73	66	62	65	71	69	64	69	75	71	73	76	77	80	76	75	77	71	60	59	51	50	65	73	74	65	73	72	68	68.8
	Minimum	47	45	47	54	52	54	51	47	49	51	58	60	51	55	52	56	58	48	53	54	46	38	39	34	34	40	46	52	55	59	58	49.8
Lebanon§§	Maximum	69	71	79	60	67	77	72	70	59	67	65	71	75	79	80	80	80	81	87	85	60	55	45	51	65	71	75	69	70	73	59	69.9
	Minimum	39	36	36	47	50	45	46	43	49	48	55	54	42	46	46	48	51	43	54	54	50	32	32	32	28	30	44	50	50	55	55	44.8
Mountain Grove§§	Maximum	71	72	74	55	65	73	73	67	63	63	65	70	71	78	80	78	80	78	75	60	62	57	50	50	67	70	74	57	70	70	62	67.7
	Minimum	44	38	40	50	52	48	51	46	50	51	53	58	45	51	50	52	54	51	50	54	42	37	36	31	30	42	47	50	51	56	58	47.4
Neosho	Maximum	74	75	77	72	61	80	77	70	72	69	68	74	71	77	81	86	87	84	80	74	67	57	52	53	64	72	72	64	77	75	65	71.8
	Minimum	40	39	44	55	51	41	49	45	54	56	53	56	43	50	45	50	50	53	58	55	41	31	37	32	23	34	41	50	49	51	44	45.8
Rolla	Maximum	63	65	69	59	59	72	64	60	50	63	63	66	57	67	70	76	71	70	71	61	53	45	42	49	58	67	67	56	65	66	57	62.0
	Minimum	45	45	45	45	45	48	52	50	40	49	53	53	46	57	50	53	52	47	56	47	41	35	31	35	31	40	48	45	45	55	47	46.2
Springfield	Maximum	68	70	73	68	59	75	69	67	64	64	63	67	71	75	77	78	82	78	74	65	56	53	46	48	61	69	71	59	70	70	62	66.8
	Minimum	47	46	52	54	51	48	54	53	54	55	60	56	50	51	54	58	59	56	60	50	41	37	36	36	35	43	51	49	58	58	46	50.3
Southwest Plain																																	
Appleton City	Maximum	69	73	76	69	59	79	72	68	58	75	67	72	78	76	80	84	79	83	80	72	59	56	48	53	65	74	68	62	74	70	67	69.8
	Minimum	45	45	50	54	49	44	46	53	49	50	54	48	44	53	50	54	54	55	61	51	39	38	35	37	39	39	44	50	51	52	44	47.6
Clinton	Maximum	74	80	84	65	60	78	80	70	60	70	68	78	78	80	87	90	83	91	80	75	62	58	48	56	57	72	71	70	76	70	65	72.1
	Minimum	58	43	64	54	43	43	60	53	50	50	55	55	54	53	48	49	53	51	60	54	42	40	38	38	30	40	44	50	51	52	40	48.9
Harrisonville§§	Maximum	67	78	77	56	67	80	75	64	53	75	66	75	80	80	80	86	78	84	78	75	64	58	50	58	69	76	68	56	72	65	60	70.0
	Minimum	45	43	44	52	46	45	45	47	47	46	50	44	44	48	50	50	52	53	55	51	36	36	34	33	29	30	39	44	46	52	43	44.5
Lamar§§	Maximum	72	76	80	72	69	80	74	70	62	76	68	72	78	79	81	85	88	86	82	72	60	57	51	54	66	73	75	62	77	72	60	71.9
	Minimum	47	42	42	55	52	48	49	50	52	52	56	53	44	47	47	47	53	55	57	56	41	36	38	38	26	30	42	50	52	54	48	47.1
Lamonte	Maximum	68	72	81	72	59	77	74	72	69	70	70	70	76	78	80	84	75	85	81	70	58	54	43	55	70	74	69	58	72	66	63	69.8
	Minimum	45	41	49	52	49	47	45	45	48	48	55	46	45	45	50	54	52	53	61	54	39	36	36	36	30	42	44	46	49	50	43	46.3
Marshall	Maximum	68	72	78	73	64	76	74	69	68	70	69	76	78	80	83	74	84	77	74	66	64	53	52	64	73	68	54	69	66	67	70.1	
	Minimum	48	43	47	51	47	47	46	48	47	47	48	49	46	48	50	50	50	52	52	55	45	32	36	34	33	32	44	44	46	52	49	45.7
Nevada	Maximum	71	73	73	71	65	80	73	68	62	74	68	78	77	72	79	83	85	84	80	72	59	56	49	53	66	74	74	66	75	71	67	70.9
	Minimum	44	41	55	55	50	45	56	54	50	54	56	48	45	55	46	57	52	58	60	51	40	38	36	40	27	41	47	51	52	51	47	48.5
Warrensburg	Maximum	..	..	78	68	62	78	71	64	58	72	69	71	77	80	78	83	79	83	78	74	60	54	49	51	64	72	70	64	72	67	64	[b]69.8
	Minimum	44	..	52	51	47	47	48	51	47	47	55	47	47	52	54	56	50	53	60	54	38	39	35	38	33	42	40	34	45	51	45	[a]46.7
Warsaw	Maximum	70	74	77	69	61	59	74	67	60	70	69	72	78	78	79	80	80	84	80	75	59	56	50	56	65	74	73	72	75	69	68	70.1
	Minimum	42	39	45	54	50	44	45	48	49	50	52	49	42	49	45	52	52	52	60	54	40	36	38	38	28	44	50	50	52	53	48	46.8
Northwest Plateau																																	
Chillicothe§§	Maximum	69	76	81	58	72	78	76	70	53	66	65	70	78	84	80	85	83	84	70	72	61	51	43	55	68	75	71	49	58	64	55	68.4
	Minimum	46	39	42	47	36	43	39	41	46	45	50	43	41	42	49	54	48	45	42	50	36	35	32	32	28	34	41	42	[illegible]	46	48	42.0
Grant City	Maximum	66	75	75	63	69	72	72	61	52	57	61	64	75	79	76	78	74	80	66	67	58	52	43	53	68	73	64	54	47	58	58	61.8
	Minimum	48	45	48	48	51	54	39	47	47	47	55	43	46	47	51	52	46	51	56	47	37	41	31	37	32	39	45	44	44	44	41	45.3
Kansas City	Maximum	65	74	72	64	70	77	73	62	51	68	68	70	76	79	77	83	77	81	76	70	59	53	45	54	67	73	66	57	66	66	63	67.8
	Minimum	50	50	58	50	48	52	52	48	48	50	56	49	54	58	58	60	56	59	56	49	41	40	34	41	41	48	52	45	47	53	43	49.9
Kidder§§	Maximum	65	72	76	65	70	74	73	63	50	61	63	62	74	78	75	78	73	82	72	67	57	51	43	51	65	72	66	47	56	62	52	65.0
	Minimum	44	42	45	48	37	38	42	44	46	44	48	43	43	48	50	51	45	45	49	47	34	34	30	30	29	33	41	42	39	44	45	41.9
Lexington§§	Maximum	58	68	68	68	58	69	66	65	54	64	65	64	67	70	69	69	65	73	64	60	52	52	46	48	60	75	60	60	61	63	63	62.7
	Minimum	47	44	51	53	44	49	46	51	48	48	54	48	47	54	55	58	55	55	54	54	38	39	35	37	35	46	47	45	46	52	46	47.8
Maryville	Maximum	69	75	79	68	68	70	71	66	52	57	61	63	75	81	78	79	77	79	63	66	64	52	43	52	69	74	68	59	48	59	60	66.0
	Minimum	47	43	47	49	38	49	41	46	47	46	54	39	41	45	47	53	48	51	58	44	34	38	31	35	29	38	43	39	39	44	39	43.3
Oregon	Maximum	73	78	81	66	72	77	68	61	53	59	61	70	80	83	80	88	83	79	67	71	64	53	45	58	70	77	74	56	51	66	61	68.5
	Minimum	47	46	59	50	40	52	44	51	46	47	54	42	48	52	53	57	47	55	57	46	36	39	32	36	33	40	44	42	41	47	39	45.9
St. Joseph	Maximum	67	75	74	63	71	74	73	60	50	61	63	67	76	80	78	82	78	81	73	68	60	51	44	54	69	75	69	54	59	65	62	67.0
	Minimum	50	46	50	46	42	52	44	48	48	49	53	44	46	52	55	58	49	55	56	47	39	38	34	39	36	46	44	43	45	52	38	46.6
Trenton	Maximum	68	75	73	65	69	73	70	58	58	61	64	69	72	76	78	82	76	78	74	70	66	57	40	51	68	74	68	58	52	63	62	66.7
	Minimum	46	54	58	56	49	43	44	45	48	47	54	45	46	43	51	53	43	48	54	51	36	38	34	34	30	44	44	42	41	51	41	45.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 11-23-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIII COLUMBIA, MO., NOVEMBER, 1929 No. 11

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GENERAL SUMMARY

November of 1929, in Missouri, unlike November, 1928, which was wet and mild, was relatively dry and cold, the closing two or three days being marked by a general snowstorm and zero cold.

Taking the month generally it was about the coldest November of record, being 0.1° colder than the same month in 1917, which had the record in actual temperature up to the present. However, from the physiological side there probably was no difference in the two months. In comparing with the other Novembers in regard to the absolute minimum values, we find that the minimum of 8° below zero this current November was equaled in the same month of 1898; but in that month of that year but nine stations reported zero or lower, while the current November had about 19 stations with zero or lower readings. Also, in 1898 only two stations had temperatures as low or lower than 5° below zero; during the current month there were six stations with equally low values; and the zero cold occurred farther south this time, going as far as St. Francois County.

Further comparisons show only five Novembers, records beginning in 1888, have experienced a mean temperature below 40°; and only eight with zero or lower cold. The current month opened cold, and quite marked negative departures persisted for eight days; this was followed by a four-day mild spell; the remainder of the month, save a few days with slight alternating temperatures, was cold, the 29th, and 30th averaging about 25° colder than normal, which is real winter.

There was ample moisture for needs, but comparing with the usual the month was relatively dry, the driest November since 1920. Only four stations in the State received more than normal moisture. Of these, two in the southeast, received the larger part in one rain, on the first day.

Winter wheat made good growth, and it had a good snow cover during the zero cold spell. About half the corn crop had been cribbed. The most general rain prevailed for several days beginning about the 19th. There were some open periods favorable for outdoor occupations. Livestock did well and there was generally sufficient rough feed for all needs.

TEMPERATURE

The monthly mean temperature for the State, based upon the records of 65 stations, was 39.0°, or 5.4° colder than the normal. The cold was not uniformly distributed, most of the Ozarks and southwestern plains being more than 6° colder, while the southeastern lowlands averaged about 3° colder than normal. The highest local monthly mean was 46.8°, at Caruthersville; and the lowest was 33.5°, at Kidder. The highest temperature reported was 78°, at Caruthersville on the 12th. The lowest reported was 8° below zero, at Clifton Hill on the 30th. The greatest daily range was 44° at Sikeston on the 29th. Minimum temperatures of 32° or lower occurred on 17 days; zero or lower at about 19 stations on one day, the 30th.

PRECIPITATION

The average monthly precipitation for the State, 95 stations reporting, was 1.46 inches, or 0.96 inch less than the 60 years' average, and 3.64 inches less than November, 1928. The greatest local monthly amount was 4.47 inches at Sikeston; and the greatest fall in any twenty-four consecutive hours also occurred at Sikeston, on the 1st. The most general rainy period probably was from the 9th and 10th to the 13th, and 14th.

A general snow occurred on the 28th, with some additional snow flurries on the following two dates. The total fall for the State, was 2.1 inches, and about one inch more than normal. Some of the lower Missouri River Counties received from 6 to 8 inches, 9.5 inches, at Macon was deepest. Much of the central and northern parts of the State were snow covered at the close of the month.

MISCELLANEOUS PHENOMENA

Fogs dense.—2d, 9th, 11th, 12th, 13th, 14th, 16th, and 17th. Rather general and persistent during day in the central-east and northeast counties on most of these dates.

Halos, lunar.—11th, 15th, and 18th.

Halos, solar.—3d, 6th, 11th, 18th, 21st, 23d, and 25th.

Sleet, light, without damage.—13th, 14th, 16th, and 19th, Kansas City, and St. Joseph.

Thunderstorms and high winds.—None reported.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind		Max. velocity		
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Miles per hour	Direction	Date
Columbia	30.15	82	66	150	50	5,088	7.1	34	w.	27
Hannibal	30.15	82	..	...	..	5,700	7.9	28	nw.	27
Kansas City	30.16	81	65	162	54	6,921	9.6	35	nw.	27
St. Joseph	30.16	84	68	147	49	5,355	7.4	35	nw.	27
St. Louis	30.14	75	63	126	42	6,981	9.7	37	nw.	27
Springfield	30.17	84	67	114	37	6,075	8.4	27	se.	9
Cairo, Ill.	30.15	85	67	...	..	5,537	7.7	25	n.	28
Keokuk, Iowa	30.16	78	66	149	50	5,183	7.2	37	w.	27

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	41 6	−2.0	87	15	3.26	+0.94	....	....	11	..	..	..
1889	39.9	−3.7	73	8	3.43	+1.11	....	....	7	..	..	..
1890	46.5	+2.9	80	20	2.31	−0.01	....	....	5	..	..	..
1891	39.6	−4.0	82	− 2	3.60	+1.28	....	....	5	..	..	..
1892	40.1	−3.5	79	9	2.60	+0.28	....	1.0	6	11	7	12
1893	40.9	−2.7	79	− 1	1.54	−0.73	4.86	0.3	4	14	9	7
1894	41.0	−2.6	80	3	1.58	−0.74	2.20	T.	4	15	9	6
1895	41.6	−2.0	82	2	3.37	+1.05	2.98	3.2	8	10	7	13
1896	42.3	−1.3	82	5	2.18	−0.14	4.00	0.2	6	11	7	12
1897	43.4	−0.2	82	− 3	2.40	+0.08	3.39	T.	6	13	8	9
1898	39.9	−3.7	79	− 8	2.28	−0.04	2.75	2.3	6	14	8	8
1899	49.5	+5.9	82	16	1.90	−0.42	2.66	0.2	7	11	9	10
1900	43.7	+0.1	84	7	2.58	+0.26	4.55	0.2	6	15	7	8
1901	43.6	0.0	84	9	1.38	−0.94	1.90	0.3	4	17	7	6
1902	50.1	+6.5	85	18	3.62	+1.20	2.14	0.4	9	8	9	13
1903	40.9	−2.7	79	2	1.24	−1.08	2.44	1.1	5	13	8	9
1904	46.3	+2.7	83	11	0.22	−2.10	0.68	T.	2	21	5	4
1905	45.8	+2.2	83	2	1.94	−0.38	2.49	T.	6	18	6	6
1906	42.5	−1.1	88	− 3	2.60	+0.28	3.60	5.0	8	12	6	12
1907	43.8	+0.2	88	5	2.52	+0.20	3.00	T.	4	19	4	7
1908	47.6	+4.0	87	9	4.14	−1.82	4.00	0.2	8	15	7	8
1909	53.6	+10.0	87	11	4.43	+2.11	6.18	0.4	8	12	7	11
1910	42.0	−1.6	83	11	0.38	−1.94	0.70	0.1	3	15	8	7
1911	39.1	−4.5	93	− 3	2.55	+0.23	2.15	1.1	7	13	6	11
1912	45.9	+2.3	88	12	1.52	−0.80	2.37	0.1	3	20	5	5
1913	51.7	+7.4	80	11	2.73	+0.35	2.50	T.	7	10	8	12
1914	48.6	+4.0	89	2	0.65	−1.84	1.90	0.1	3	19	6	5
1915	49.5	+4.9	87	12	2.76	+0.33	2.62	0.1	5	16	7	7
1916	49.6	+5.9	85	3	2.49	+0.14	2.53	0.1	4	19	4	7
1917	46.1	+1.5	80	E	1.05	−1.46	3.26	T.	3	14	5	11
1918	44.9	+0.5	85	12	3.18	+0.79	4.60	1.2	6	15	4	11
1919	42.2	−2.2	78	2	3.62	+1.40	3.36	1.0	6	15	5	10
1920	40.9	−3.5	82	6	1.21	−1.09	1.89	T.	6	12	5	12
1921	45.6	+1.2	84	10	2.82	+0.40	4.29	0.4	5	13	7	10
1922	47.8	+2.9	84	15	3.82	+1.45	3.40	T.	7	16	6	8
1923	45.1	+0.6	79	14	2.15	−0.20	2.30	3.0	6	15	6	9
1924	46.7	+2.2	88	4	1.72	−0.63	1.68	0.5	4	15	8	7
1925	42.8	−1.7	80	− 2	2.99	+0.64	3.20	2.0	6	16	6	8
1926	39.6	−4.9	78	0	2.98	+0.63	2.25	4.2	7	11	7	12
1927	46.8	+2.3	89	12	3.55	+1.20	3.41	0.9	7	6	9	15
1928	44.6	+0.1	79	9	5.10	+2.75	6.52	0.5	10	13	4	13
1929	39.0	−5.4	78	− 8	1.46	−0.96	2.45	2.1	6	11	8	11

Climatological Data for November, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	49	35.9	− 5.6	66	11	0	30	32	0.88	−1.09	0.33	3.0	5	12	1	17	ne.	O. K. Benecke
Clifton Hill	Randolph	731	29	36.5	− 7.3	67	11	− 8	30	35	1.33	−0.58	0.62	7.0	5	9	7	14	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	38.1	− 5.2	68	11	− 3	30	37	1.23	−0.97	0.44	3.0	6	9	7	14	nw.	U. S. Weather Bureau
Downing	Schuyler	876	7	36.6[f]	.....	60	11	− 2	30	31	1.50	−0.13	0.85	0.5	5	11	9	10	w.	James Taylor
Fayette	Howard	661	48	36.3	− 6.0	69	11	− 7	30	42	1.09	−0.91	0.46	4.0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	38.4	− 6.1	69	11	− 7	30	41	1.35	−0.90	0.30	6.0	8	11	10	9	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	1.75	−0.21	0.97	0.4	3	9	6	15	nw.	J. W. Pulliam
Hannibal	Marion	534	36	37.8	− 4.3	62	11	− 1	30	28	1.43	−0.63	0.63	2.0	5	9	10	11	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	39.0	− 5.1	74	11	1	30	39	1.46	−0.81	0.48	7.0	5	9	13	8	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	35.8	− 4.7	60	11	− 4	30	34	1.45	−0.31	0.58	1.5	5	11	3	16	w.	Prof. J. S. Stokes
Louisiana	Pike	469	34	37.8	− 6.4	65	1†	− 1	30	35	1.70	−0.58	0.90	0.6	3	12	13	5	n.	Stark Bros. Nurseries
Macon	Macon	875	29	36.7	− 6.7	65	11	− 3	30	38	1.78	−0.15	0.71	9.5	5	16	5	9	w.	W. C. Brown
Mexico	Audrain	800	39	36.9	− 6.1	67	11	− 4	30	37	2.14	−0.18	0.52	8.0	7	18	0	12	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	1.98	.....	1.01	0.8	3	14	7	9	s.	J. S. Conway
St. Charles	St. Charles	456	40	41.0	− 4.5	71	12	− 4	30	30	1.55	−0.99	0.60	6.0	5	3	15	12	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	41.5	− 3.9	69	12	3	30	23	1.41	−1.42	0.65	6.5	5	9	9	12	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	41.0	− 5.5	67	12	2	30	26	2.16	−0.15	0.89	8.0	6	12	7	11	w.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	2.08	0.00	0.80	4.0	8	..	..	..	.....	J C Jewett
Steffenville	Lewis	650	30	37.6	− 6.2	64	11†	− 4	30	33	1.35	−0.58	0.82	2.0	5	10	9	11	n.	Frank Hall
Unionville	Putnam	1,062	35	36.3	− 3.9	62	9†	− 5	30	35	1.05	−0.77	0.55	1.0	6	16	2	12	sw.	Geo. W. Davis
Warrenton	Warren	816	46	40.2	− 2.7	66	11†	− 3	30	32	1.51	−1.08	0.74	6.0	4	7	15	8	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	36.6	− 4.5	60	11	2	29	27	1.51	−0.43	0.84	0.4	6	12	4	14	sw.	U. S. Weather Bureau
Section means and	extremes ...	.....	..	37.9	− 5.3	74	11	− 8	30	42	1.53	−0.61	1.01	4.0	5	11	8	11	w.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	43.6	.....	74	10	8	30	36	2.15	.....	0.77	T.	4	9	9	12	n.	Jeff. King
Caruthersville	Pemiscot	265	32	46.8	− 3.1	78	12	14	30	25	3.08	−0.77	1.35	1.0	6	4	11	15	n.	Sam Smith
Doniphan	Ripley	344	24	45.2	− 2.4	72	10	10	30	38	1.48	−1.64	0.60	T.	6	9	15	6	ne.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	37	40.8	− 5.9	64	9†	2	30	38	2.38	−0.75	0.95	T.	7	7	3	20	n.	John G. Putz
Marble Hill	Bollinger	470	33	42.9	− 1.5	73	10	1	30	38	1.58	−1.59	0.74	0.0	4	8	5	17	n.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	4.32	+0.67	2.44	T.	6	11	7	12	nw.	John A. Spence
Poplar Bluff‡‡	Butler	329	24	44.2	− 3.2	75	10	9	30	36	2.07	−1.19	0.95	0.0	5	13	7	10	w.	J H. Wolpers
Sikeston	Scott.	318	23	45.4	− 2.0	73	11	6	30	44	4.47	+0.82	2.45	0.0	6	12	5	13	n.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	44.6	− 2.7	72	10	9	30	23	2.51	−1.17	1.06	T.	6	7	6	17	n.	U. S. Weather Bureau
Section means and	extremes	....	..	44.2	− 3.0	78	12	1	30	44	2.67	−0.70	2.45	0.1	6	9	8	14	n.	
Ozark Plateau																				
Arcadia	Iron	926	47	38.4	− 5.6	70	12	2	30	39	2.16	−1.46	0.86	T.	4	3	18	9	w.	Arcadia College.
Aurora	Lawrence	1,370	38	40.3	− 5.7	71	11	14	22	31	1.25	−1.54	0.38	T.	6	10	4	16	nw.	W T. Troughton
Birchtree (near)	Shannon	1,000	33	44.1	− 2.4	72	12	9	30	39	1.01	−1.88	0.46	0.0	4	14	10	6	n.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ††	McDonald	1,000	31	39.9	− 9.8	74	11	10	22	40	2.38	−0.66	1.10	0.5	4	9	12	9	sw.	H. E. Dean
Eldon	Miller	934	32	37.6[d]	− 7.6	71	10	7	30	35	1.09	−1.12	0.60	2.0	4	3[d]	18[d]	5[d]	n.	E. H. Shepherd
Farmington	St. Francois	918	17	40.6	− 3.7	70	12	− 3	30	36	1.34	−2.62	0.50	2.8	8	11	12	7	nw.	Robert Forsyth
Goodland	Iron	1,000	34	40.3	− 4.3	71	12	2	30	39	1.05	−1.84	0.45	0.2	5	13	11	6	n.	F. M. Adams
Greenville	Wayne	381	6	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	0.11	.....	0.10	0.1	2	22	5	3	w.	A. W. Madison
Koshkonong	Oregon	958	27	43.6	− 5.8	72	12	11	30	30	1.11	−1.91	0.71	T.	4	6	11	13	w.	R. M. Hitt
Lebanon	Laclede	1,265	40	37.4	− 8.6	69	11	7	30	33	0.52	−2.02	0.34	T.	4	13	5	12	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	40.8	− 6.9	73	11	13	22	32	0.74	−1.47	0.41	T.	2	13	4	13	nw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	40.0	− 6.6	67	11	10	30	29	0.93	−1.50	0.37	T.	5	9	16	5	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	40.2	− 7.0	76	11	13	21†	40	1.74	−1.32	0.52	T.	4	12	7	11	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	37.6	− 7.3	59	9	7	30	26	0.79	−1.52	0.33	0.2	9	5	14	11	nw.	F. H. Lane
Salem(near)	Dent	1,173	24	39.7	− 7.1	68	11	5	30	36	0.86	−1.45	0.43	T.	4	14	7	9	nw.	A. C. Leech
Seligman	Barry	1,542	26	40.9	− 6.3	74	11	11	22	31	1.38	−0.98	0.52	0.1	7	10	5	15	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	40.2	− 5.9	67	12	13	23	34	1.15	−1.18	0.43	T	4	9	13	8	nw.	Ira H. Hailey
Springfield	Greene	1,324	40	39.7	− 6.0	67	11	14	22	26	1.10	−1.69	0.36	T.	7	7	8	15	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	40.1	− 6.3	76	11	− 3	30	40	1.15	−1.54	1.10	3.3	5	10	10	10	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	38.4	− 7.7	72	11	10	30	36	0.62	−1.51	0.34	T.	6	7	14	9	nw.	W. G. Bigelow
Clinton	Henry	765	35	40.0	− 7.3	70	11	12	22	38	1.58	−0.30	1.00	T.	3	9	10	11	sw.	A, E. Derwent, M. D.
Harrisonville	Cass	904	51	36.6	− 5.8	63	5	7	22	35	0.76	−1.19	0.36	T.	5	9	5	16	n.	John H. Patterson
Lamar	Barton	980	41	39.9	− 6.7	74	11	14	22†	34	1.16	−1.08	0.40	0.0	6	9	10	11	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	37.9	− 6.5	70	11	9	30	33	1.23	−0.67	0.23	0.8	9	12	8	10	sw.	J. E. Wheeler
Marshall	Saline	779	39	38.6	− 7.0	67	10	7	29	32	0.83	−1.25	0.50	5.0	5	17	3	10	ne.	Soc. Chamber of Commerce
Nevada	Vernon	862	35	39.8	− 4.6	73	11	11	22	34	0.78	−1.10	0.42	T.	4	12	4	14	s.	George A. Kaupp
Warrensburg	Johnson	878	41	38.3	− 6.6	69	11	9	22†	32	0.94	−0.84	0.25	0.6	10	12	4	14	sw.	E. A. Markey
Warsaw	Benton	687	28	40.1	− 7.4	72	11	8	30	42	0.51	−1.90	0.30	T.	3	11	7	12	n.	Everett Martin
Section means and	extremes	.....	..	38.8	− 6.6	74	11	7	22†	42	0.93	−1.09	1.00	0.7	6	11	7	12	sw.	
Northwest Plateau																				
Bethany	Harrison	916	36	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	M. H. Moulton
Chillicothe	Livingston	779	19	35.0	− 7.6	66	11	− 5	30	40	1 03	−1.30	0.52	4.0	5	12	4	14	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	39	36.0	− 5.4	60	12	1	30	34	1.40	+0.04	0.30	3.0	8	7	14	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	36.5[b]	.....	65	11	8	22	35	1.21	−0.26	0.33	1.5	9	15	2	13	nw.	Fred L. Stiff
Grant City	Worth	1,134	24	35.2	− 7.2	61	11	− 5	30	34	1.46	−0.15	0.50	7.0	7	13	15	2	sw.	W. P. Spillman
Kansas City	Jackson	963	39	38.6	− 5.1	64	11	11	22	25	1.09	−0.74	0.40	0.1	7	9	9	12	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	33.5	− 8.9	60	11	− 1	30	36	1.16	−0.68	0.44	3.0	5	13	7	10	nw.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	1.42	.....	0.64	6.6	7	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	38.8	− 5.2	69	12	9	22	36	1.32	−0.53	0 36	4.0	10	12	9	9	nw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	35.2	− 3.8	61	11	− 1	30	34	1.25	−0.40	0.40	4.5	6	12	8	10	n.	J. R. Brink
Oregon	Holt	1,048	72	37.2	− 3.1	68	11	7	22†	34	1.43	−0.26	0.40	4.0	7	13	8	9	nw.	Mina Wright
St. Joseph	Buchanan	967	20	36.1	− 7.5	64	11	10	22	29	1.62	−0.07	0.54	3.2	6	10	7	13	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	25	34.2	− 6.4	59	11	1	30	31	1.70	+0.25	0.61	7.0	7	14	7	9	nw.	Albert Volker
Trenton	Grundy	822	32	35.7	− 6.7	59	11	1	30	28	1.45	−0.35	0.41	4.0	7	12	7	11	n.	W. H. Estes
Section means and	extremes	.....	..	36.0	− 5.6	69	12	− 5	30	40	1.35	−0.37	0.64	4.0	7	12	8	10	nw.	
State means and	extremes	.....	..	39.0	− 5.4	78	12	− 8	30	44	1.46	−0.96	2.45	2.1	6	11	8	11	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for November, 1929

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville‡‡	Missouri	.03		.08							.11			.01	.34	.02		.03											.43	.10			1.15
Brunswick‡‡	Grand										.18			.10	.15			.12											.33				0.88
Clifton Hill	Chariton		.02								.08			.55			.06											.62		T.		1.33
Columbia***	Missouri		.03								.39		.01	.44	T.		.03		T.		T.						.01	.33		T.		1.23
Downing	Mississippi										.39		.18	.85							T.							.07				1.50
Fayette‡‡	Missouri			.04							.12			.05	.46			.06										.30	T.	.06		1.09
Fulton‡‡	....do	.10		.02							.08			.30	.22	.03	T.	T.										.30	.30			1.35
Gorin	Mississippi										.97			.74													.04					1.75
Hannibal***	....do		T.						T.		.62		.03	.63	.01		T.		T.	T.	T.						T.	.14		T.		1.43
Hermann‡‡	Missouri	.06									.63			.08	.33	T					T.							.17	.26			1.53
Jefferson City‡‡	....do	.13		.04							.35			.20	.13	.04												.48	.09			1.46
Kirksville	Mississippi			.30							.30		.12	.58					T.	T.	T.							.15				1.45
Louisiana	....do										.75			.90														.05				1.70
Lucerne‡‡	Grand										.04			.35	.32					T	T.							T.	T.			0.71
Macon ‡‡	Chariton	.05									.12			.25	.65													.71				1.78
Mexico ‡‡	Mississippi	.38		.04							.52			.30	.40													.20	.30			2.14
Milan‡‡	Grand									.33				.10	.42					T.								.30				1.15
Monroe City	Mississippi										1.01			.79			T.											.18				1.98
Pacific‡‡	Meramec	.28	.12								.46		.21	.22	.15	T.							T.					.34	.02			1.80
St. Charles	Missouri	.12								.37			.20	.26														.60				1.55
St. Louis (1)***	Mississippi	.14	T.								.28	T.	.14	.20	T.		T.		T.	T.	T.							.65		T.		1.41
St. Louis (2)*	....do	.12									.34	.11	.40	.30			T.				T.							.89				2.16
Shelbina ‡‡	....do	.33		.02							.31			.20	.80			.02			T.						.02	.38				2.08
Steffenville	....do		T.								.25		.05	.82	.08		T.				T.							.15		T.		1.35
Union‡‡	Meramec	.40	.07								.32		.10	.12	.20	.01		.01										.22	.22			1.67
Unionville	Chariton			.10							.25		.25	.30	.05		T.											.10	T.			1.05
Warrenton	Mississippi										.74		T.	.24	.03						T.							.50				1.51
Keokuk, Ia.***	....do		T.	T.						.01	.42		T.	.84	T.		T.		T.	T.	T.						.01	.03		.20		1.51
Southeast Lowlands																																	
Campbell‡‡	St. Francis	.75									.43		.77		.20								T.										2.15
Cape Girardeau‡‡	Mississippi	.80	.79					.04	.02		.06	.24	.12	.20	.18			.02					T.				.10		T.			2.57
Caruthersville ‡‡	.... do	.57									.17			1.35	.76								.10	T.			.13					3.08
Dexter‡‡	St. Francis	.70	.58								.12	.14	.56	.35	.21													.22				2.88
Doniphan	Black	.60									.30		.15	.22	.03		T.						T.					.18				1.48
Jackson	Mississippi	.95									.80		.10	.22	.13													.09		.09		2.38
Marble Hill	Mississippi	.74						.24			.40		.20																				1.58
Morehouse	....do	2.44									.48		.48	.46	.30													.16	T.				4.32
New Madrid‡‡	....do	.80	.85					.02	.03		.01	.40		1.00	.65	.03							.05					.10	.02				3.96
Poplar Bluff‡‡	Black	.95									.28		.46	.24														.14					2.07
Sikeston‡‡	Mississippi	2.45									.45		.53	.48	.38												.18						4.47
Cairo, Ill.***	.. . do	1.02	T.					T.			.46		.10	.47	.32		T.	T.					T.				.14		T.				2.51
Ozark Plateau																																	
Arcadia ‡‡	St. Francis	.86	.38								.20			.72									T	T.					T.				2.16
Aurora	Neosho						.21	.25		T.	.38			.18	T.		.20	.03				T.							T.				1.25
Birchtree (near)	Black	.46									.23			.20			.12																1.01
Bolivar	Osage								T.		.22						.23																0.45
Caplinger Mills	Osage										.75						.48					.05											2.38
Dean	Neosho						T.	1.10		T.	.60			.26															.14	.09			1.09
Eldon‡‡	Missouri										.32		.10	.15	.02		.04						.04						.17				1.34
Farmington	St. Francis	.50																															
Fredericktown‡‡	.... do													.23			.18																1.14
Galena‡‡	White							.73						.45			.03						.02										1.05
Goodland	Black	.32									.23																						
Greenville	St. Francis																	.01															0.11
Hailey	White				.10									.17			.06						T.				T.						1.11
Koshkonong	Black	.71									.17			.17			.10	T.			T.									T.			0.52
Lebanon ‡‡	Osage	T.					T							.34	.04	.04	T.										T.					1.35
Leeper‡‡	Black	.40	T.								.75		T.	.20	T.		T.													T.			0.74
Lockwood	Osage										.41		T.				.33																0.93
Mountain Grove‡‡	White	.15	.02	T.							.33		T.	.37	T.		.06	T.					T.							T.			1.74
Neosho	Neosho		T.				.28	.52		T.	.49		T.	T.	T.		.45	T.					T.							T.	.30		1.22
Owensville ‡‡	Gasconade	.12									.45		.05	.10	.05	.15																	1.97
Ozark Beach‡‡	White							.72			.41		.58				.24	.02					T.										0.79
Rolla ‡‡	Meramec	.11	.02								.33	.10		.11	.05	.02		.03						T.					.02				0.86
Salem (near)	....do	.10									.43			.30	.03								T.										1.38
Seligman	Neosho						.18	.21			.52			.17			.04	.11					.15										1.15
Seymour (near)	White								.14		T.	.39		T.	.43	T		.19	T.					T.									1.10
Springfield***	....do		T.				.24			.09	.27		.30	.02	T.		.12	.06		T.									T.				1.47
Steelville‡‡	Meramec	.51									.49		.03	.17	.06								T.							.21	T.		0.39
Stover ‡‡	Missouri										.22				.05				.12											T.			0.71
Tuscumbia ‡‡	Osage	.04									.35			.23	.09	T.	T.	T.			T.		T.				.16					1.50
Williamsville‡‡	Black	.48	.38					.03			.19		.10	.13	.03								.01							T.			0.83
Willow Sprgs. ‡‡ (near)	White	.26									.30			.26																			
Southwest Plain																																	
Appleton City	Osage		.03					.04		.01	.15		T.	.05	T.		.34	T.				T.					T.			T.			0.62
Clinton	Osage		1.00						.28								.30														T.		1.58
Concordia‡‡	Missouri																												.42				0.42
Harrisonville‡‡	Osage							.04			.36				.07		.12	.17												T.			0.76
Joplin‡‡	Neosho						.30			.31	.15	T.					.32																1.08
Lamar ‡‡	....do							.17	T.	.03	.40			.05		T.	.30	.21															1.16
Lamonte	Missouri		.20					.09		.10			.15	.23	.03		.20	.03											.20				1.23
Marshall	.... do		.06										.04	.12			.11												.50				0.83
Nevada	Osage		T.					.12	T	.14	.10				T.		.42					T.											0.78
Osceola‡‡	....do							.08									.32	.13												T.			0.53
Warrensburg	Missouri		.01					.07		.05	.22		.15	.08	.05		.25												.02	.04			0.94
Warsaw	Osage		.03							T.	.18		T.	T.	T.		.30				T.									T.			0.51
Waverly ‡‡	Missouri										.29			T.	.10			.18											T.	.46			1.03
Northwest Plateau																																	
Albany‡‡	Grand																																
Bethany	....do																																
Chillicothe‡‡	....do			T.							.21		T.	.06	.17	T.		.07		T.	T.	T.							.52				1.03
Conception	Missouri			T.						.10	.20		24	.28	.16		.10	.02	T.										.30		T.		1.40
Edgerton	....do									.11	.33		.02	.21	.22		.08	.06	.02		T.	T.							.16	T.			1.21
Gallatin ‡‡	Grand										.25			.59	.19			.11											.30				1.44
Grant City	... do									.07	.21		.23	.24	.11		T		T.										.50		.10		1.46
Kansas City***	Missouri			T.			T.	.01		.37	T.		T.	.36	.04		.29				T.	T.					T.	.01	.01				1.09
Kidder ‡‡	Grand										.44		T.	.12	.23			.07											.30				1.16
King City	Missouri			T.						.07	.23		.07	.22			.18	.01											.64				1.42
Lexington	....do			.04				.04			.29		.01	.04	.20		.07	.12	.12										.36				1.32
Maryville ‡‡	....do										.26		.07	.21	.26														.40	.05			1.25
Oregon	....do									.12	.13		.11	.40	.11		.16					T.							.40				1.43
St. Joseph***	....do			T.				T.	T.	.27			.34	.54	.01		.11					T.					T.	.35	T.	T.			1.62
Tarkio	....do									.61	.12		.19	.17			.10					T.							.41		.10		1.70
Trenton	Grand			.01							.32		.31	.41	.05		.09		T.										.26		T.		1.45

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‡‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for November, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	41	51	44	46	60	50	46	52	50	54	66	49	46	43	52	43	46	38	40	34	23	29	35	44	50	42	48	27	14	32	..	43.2
	Minimum	35	32	36	32	30	32	35	36	33	37	35	39	38	39	29	33	34	35	36	24	19	9	13	16	26	30	33	26	6	0	..	28.6
Columbia	Maximum	54	53	52	47	60	53	48	49	58	57	68	58	46	44	52	46	47	45	41	34	26	31	39	43	52	42	56	38	16	34	..	46.3
	Minimum	38	33	39	32	32	35	36	35	34	39	39	41	38	40	33	39	38	36	29	25	18	11	25	19	29	35	38	15	0	− 3	..	29.9
Fayette	Maximum	57	55	57	50	61	54	49	50	60	58	69	53	52	43	54	44	50	47	41	38	26	33	32	44	52	43	58	42	29	35	..	47.9
	Minimum	33	27	28	29	24	27	34	32	26	31	28	32	35	36	29	30	28	31	33	21	15	7	10	12	23	28	34	26	0	− 7	..	24.7
Hannibal	Maximum	52	53	54	44	58	51	49	49	58	58	62	58	49	43	51	49	47	46	41	34	25	28	40	43	50	50	54	33	14	27	..	45.7
	Minimum	40	34	39	34	32	36	36	34	30	40	35	45	43	40	33	34	36	38	27	25	17	10	24	18	29	36	33	14	3	− 1	..	29.8
Jefferson City§§	Maximum	57	58	56	50	62	60	52	55	62	62	74	67	50	43	55	50	45	48	43	37	37	33	42	43	55	45	60	40	17	34	..	49.7
	Minimum	41	33	36	31	30	32	34	32	33	35	35	36	38	38	34	35	35	35	36	24	18	11	12	15	21	23	32	30	4	1	..	28.3
Kirksville	Maximum	51	53	54	48	57	50	43	48	57	52	60	51	45	42	50	47	48	41	57	34	29	22	32	42	48	51	53	39	11	22	..	44.6
	Minimum	32	46	37	31	29	28	29	32	30	44	33	41	39	35	30	28	36	33	30	23	12	4	19	12	14	30	36	15	2	− 4	..	26.9
Louisiana	Maximum	65	65	60	50	60	50	55	50	55	53	60	60	50	43	50	50	48	43	42	36	26	25	30	40	40	50	45	39	26	20	..	46.2
	Minimum	45	30	30	36	26	30	35	30	26	46	30	39	35	40	33	40	35	38	33	25	20	10	20	25	30	30	37	24	6	− 1	..	29.4
Macon§§	Maximum	52	55	54	47	59	52	45	52	60	53	65	49	47	42	54	46	46	45	41	35	23	28	37	42	51	44	54	30	10	35	..	46.8
	Minimum	34	32	35	30	32	31	32	31	30	35	34	39	39	36	28	31	35	33	35	23	15	7	8	14	18	31	34	20	0	− 3	..	26.6
Mexico§§	Maximum	56	55	55	50	59	53	47	49	59	57	67	60	47	42	51	46	47	46	42	32	28	31	40	42	51	44	57	28	16	33	..	46.3
	Minimum	40	32	36	32	28	32	31	31	28	34	35	34	40	39	31	32	33	34	35	24	26	9	9	17	19	28	33	24	2	− 4	..	27.5
St. Louis(1)	Maximum	55	56	54	47	56	56	54	53	59	63	64	69	53	48	48	48	47	46	45	36	30	34	41	40	54	57	57	37	15	26	..	48.3
	Minimum	48	45	40	38	36	42	41	38	39	48	44	52	47	45	40	40	38	37	36	27	22	16	23	24	32	40	37	15	8	3	..	34.7
Unionville	Maximum	55	52	57	50	60	57	46	46	62	52	62	58	45	45	50	48	50	45	38	36	30	28	28	45	50	55	56	43	30	25	..	46.8
	Minimum	32	31	43	28	28	27	26	34	30	42	32	35	36	33	30	26	35	35	30	23	10	2	10	10	25	34	35	20	− 3	− 5	..	25.8
Warrenton	Maximum	59	57	54	50	59	57	53	50	59	61	66	66	64	47	51	49	46	46	42	40	34	34	43	42	55	54	56	50	27	26	..	49.9
	Minimum	44	36	38	33	27	35	38	31	32	47	38	48	41	41	34	36	36	33	36	24	17	10	17	18	26	36	37	23	3	− 3	..	30.4
Southeast Lowlands																																	
Campbell	Maximum	62	65	67	63	57	62	57	60	61	74	70	67	58	50	49	57	59	56	53	48	37	35	40	42	50	47	65	50	42	35	..	54.6
	Minimum	52	53	42	33	23	26	40	39	35	40	35	52	45	43	42	35	29	28	28	29	17	22	22	25	22	35	30	29	18	8	..	32.6
Caruthersville	Maximum	68	62	67	55	56	60	61	65	63	74	66	78	61	50	50	56	50	52	50	45	41	38	42	48	47	45	63	55	35	35	..	54.6
	Minimum	53	49	48	40	37	38	48	41	46	52	47	59	50	47	47	46	38	33	33	34	28	27	23	28	34	38	38	32	21	14	..	39.0
Doniphan	Maximum	68	66	70	58	60	60	58	63	69	72	67	67	61	57	52	60	56	57	57	44	38	40	47	51	50	59	68	59	36	39	..	57.0
	Minimum	50	47	36	31	22	27	45	34	43	57	36	55	45	44	43	44	31	25	31	28	15	22	12	19	22	38	33	33	20	10	..	33.3
Jackson	Maximum	54	59	62	56	55	63	55	59	64	64	61	63	61	50	49	52	51	48	47	42	36	33	42	44	48	48	60	55	32	30	..	51.4
	Minimum	46	42	34	32	21	25	41	31	32	52	32	52	45	43	41	39	26	27	35	27	15	19	12	20	19	34	31	25	9	2	..	30.3
Poplar Bluff	Maximum	67	63	69	57	58	63	60	65	65	75	70	66	58	51	50	53	57	57	54	46	38	39	45	50	50	52	69	53	33	36	..	55.6
	Minimum	50	46	37	35	24	27	43	39	36	41	36	52	47	45	44	46	30	27	29	29	17	22	14	20	22	37	34	31	18	9	..	32.9
Sikeston	Maximum	69	62	65	55	57	63	57	62	64	70	73	70	65	54	50	57	54	55	49	45	39	36	43	47	49	45	64	64	60	34	..	55.9
	Minimum	50	47	41	34	27	33	45	36	38	55	40	56	48	46	45	44	34	32	30	31	21	23	19	25	27	35	35	28	16	6	..	34.9
Cairo, Ill	Maximum	67	61	62	50	53	60	56	60	63	72	68	66	57	50	49	55	53	51	46	40	36	34	41	44	47	44	61	44	30	29	..	51.6
	Minimum	49	48	46	40	34	39	45	40	40	56	46	56	49	48	46	45	37	34	37	32	28	24	25	27	34	38	38	29	11	9	..	37.7
Ozark Plateau																																	
Arcadia§§	Maximum	51	59	63	50	56	63	55	59	62	67	67	70	47	48	49	51	50	51	41	40	34	33	45	43	50	58	62	35	23	6	..	49.6
	Minimum	48	40	29	33	20	24	29	29	30	33	30	32	43	40	40	37	26	28	33	26	12	14	9	10	22	26	34	32	9	2	..	27.3
Aurora	Maximum	56	55	55	47	60	55	55	53	57	63	71	63	42	41	44	44	46	45	41	38	33	37	41	43	50	45	59	52	39	34	..	48.8
	Minimum	41	34	33	31	29	37	41	38	37	45	41	40	33	34	37	38	36	33	29	24	18	14	17	23	28	33	36	38	19	17	..	31.8
Birchtree	Maximum	58	66	63	59	57	63	59	61	62	70	68	72	64	48	48	54	59	54	57	48	36	36	48	63	55	56	62	63	35	35	..	56.0
	Minimum	48	40	35	30	23	30	40	38	42	56	35	46	42	42	42	37	29	31	27	29	16	17	13	24	23	36	35	35	17	9	..	32.2
Eldon§§	Maximum	57	57	55	38	61	61	52	52	60	71	58	62	..	..	..	53	..	49	43	38	29	24	41	42	54	44	58	32	20	37	..	[a]48.0
	Minimum	41	33	33	32	26	26	32	33	35	35	35	36	37	..	..	..	35	..	35	21	17	11	11	18	18	26	36	32	10	7	..	[a]27.3
Farmington	Maximum	53	62	61	49	58	64	54	56	65	66	68	70	60	47	46	49	47	47	40	38	31	32	45	43	52	58	61	52	24	29	..	50.9
	Minimum	46	40	33	32	22	33	38	22	34	49	36	52	41	41	40	36	29	29	36	27	15	14	12	27	25	36	36	24	8	− 3	..	30.3
Koshkonong	Maximum	61	60	64	56	56	58	59	61	62	61	69	72	52	48	48	54	52	50	49	41	33	36	43	46	50	55	64	55	38	38	..	53.0
	Minimum	48	44	39	35	31	34	45	37	43	56	42	46	41	39	42	41	35	32	30	28	20	18	18	27	29	36	34	30	19	11	..	34.3
Lebanon§§	Maximum	55	55	55	45	59	60	55	56	60	61	69	61	38	41	50	50	45	47	40	36	33	36	40	42	50	41	50	34	10	40	..	47.1
	Minimum	38	30	30	28	26	29	36	28	31	39	39	41	34	34	36	36	29	33	32	19	14	9	9	19	23	28	34	34	10	7	..	27.8
Mountain Grove§§	Maximum	58	57	61	49	56	59	60	61	60	64	67	64	39	44	50	49	48	47	40	37	33	36	41	42	48	45	57	52	27	35	..	49.5
	Minimum	45	36	32	30	29	35	38	32	32	42	42	44	38	36	37	39	36	32	32	23	17	14	14	18	26	26	32	36	15	10	..	30.6
Neosho	Maximum	58	55	58	51	61	51	58	56	61	65	76	65	44	42	47	46	48	48	45	42	35	36	41	44	51	48	61	57	42	37	..	51.0
	Minimum	34	30	27	27	24	30	42	41	42	42	36	41	33	35	38	39	35	32	26	23	13	13	15	19	22	29	33	30	21	13	..	29.5
Rolla	Maximum	50	53	50	40	50	56	50	50	59	59	51	58	54	44	43	46	46	44	42	42	33	29	30	36	37	45	44	53	52	27	33	45.0
	Minimum	40	35	32	30	26	34	41	34	36	44	44	44	31	31	32	35	33	32	28	22	20	13	20	23	28	37	36	27	11	7	..	30.2
Springfield	Maximum	55	53	54	46	57	55	56	54	57	61	67	58	37	41	46	45	44	46	38	34	31	32	39	40	48	41	57	51	27	34	..	46.8
	Minimum	43	37	38	31	31	39	41	38	43	48	46	37	33	35	37	38	37	33	29	23	20	14	22	24	28	35	40	25	17	16	..	32.6
Southwest Plain																																	
Appleton City	Maximum	55	52	51	46	60	55	51	50	58	58	72	61	39	41	50	45	44	44	43	36	30	31	39	44	49	46	59	50	31	33	..	47.4
	Minimum	36	32	34	29	28	33	34	34	35	41	36	39	33	36	30	38	31	33	32	21	21	11	20	18	24	31	35	31	15	10	..	29.4
Clinton	Maximum	54	57	54	57	62	58	50	56	58	60	70	57	45	43	52	45	47	50	45	40	30	32	37	43	52	45	60	52	30	35	..	49.2
	Minimum	35	32	32	30	32	32	32	35	37	46	32	38	35	32	35	40	42	32	35	23	22	12	25	25	35	35	30	23	16	13	..	30.8
Harrisonville§§	Maximum	57	53	56	52	63	53	46	50	53	58	61	45	41	41	52	42	49	45	40	40	25	34	36	47	52	52	60	35	29	36	..	46.8
	Minimum	30	30	34	27	28	31	32	32	34	35	35	37	31	31	25	25	32	31	32	18	18	7	9	14	20	26	31	30	15	10	..	26.3
Lamar§§	Maximum	56	54	52	50	62	60	54	51	59	61	74	55	38	43	53	43	48	49	43	39	31	36	40	44	50	48	60	50	33	37	..	49.1
	Minimum	36	32	34	31	30	32	36	38	38	44	40	41	34	34	37	36	35	34	34	23	19	14	14	21	21	28	35	36	18	15	..	30.7
Lamonte	Maximum	52	54	51	48	60	54	46	50	55	57	70	55	42	42	48	52	48	45	39	36	25	33	37	43	51	43	56	40	29	35	..	46.5
	Minimum	36	32	36	31	30	31	36	33	34	40	37	38	36	38	38	30	32	33	31	22	19	11	21	17	26	30	36	26	10	9	..	29.3
Marshall	Maximum	53	52	53	52	60	53	48	49	55	67	64	52	44	43	51	49	48	44	42	41	35	32	37	44	51	47	56	50	29	32	..	47.8
	Minimum	32	35	33	34	31	34	35	34	33	35	35	40	37	38	31	32	33	35	31	22	19	19	22	18	28	32	32	25	7	9	..	29.4
Nevada	Maximum	54	54	52	49	61	59	52	51	58	59	73	63	40	42	51	44	47	49	44	39	29	34	42	44	50	47	60	46	36	35	..	48.8
	Minimum	36	32	34	30	31	35	37	36	37	43	39	39	33	37	31	39	33	35	32	22	21	11	22	19	28	34	35	34	19	14	..	30.9
Warrensburg	Maximum	55	50	54	51	59	55	48	49	55	56	69	62	43	42	50	47	48	46	40	35	35	32	38	42	49	45	56	44	34	32	..	47.4
	Minimum	35	35	37	30	31	33	35	34	31	43	37	39	35	37	28	37	31	30	28	21	18	9	20	18	27	31	36	26	14	9	..	29.2
Warsaw	Maximum	67	59	52	52	63	58	56	53	59	60	72	63	53	42	53	47	48	46	47	40	35	35	40	44	53	47	58	55	28	35	..	50.7
	Minimum	35	30	31	30	26	28	35	32	36	48	30	42	36	37	32	39	30	36	35	23	15	11	19	19	27	33	37	31	15	8	..	29.5
Northwest Plateau																																	
Chillicothe§§	Maximum	54	54	55	50	62	53	45	51	59	53	66	43	45	45	56	43	52	41	39	35	22	31	34	46	52	50	55	31	14	35	..	45.7
	Minimum	30	31	33	30	29	28	28	31	27	32	31	32	34	35	27	27	33	32	31	20	13	4	5	12	18	27	29	22	− 1	− 5	..	24.2
Grant City	Maximum	51	52	49	46	57	49	41	47	51	51	61	52	39	41	49	47	50	44	36	33	25	26	26	45	51	53	52	39	22	23	..	43.6
	Minimum	31	32	37	31	31	28	27	34	30	43	43	33	30	33	30	31	34	34	29	22	10	4	21	11	27	28	39	20	2	− 5	..	26.7
Kansas City	Maximum	53	52	52	48	61	48	43	48	52	56	64	53	43	42	49	42	46	43	38	35	26	31	35	44	50	52	56	44	24	37	..	45.6
	Minimum	39	41	39	35	38	35	33	38	39	44	43	34	34	35	33	38	36	36	26	25	14	11	23	20	32	33	40	19	17	16	..	31.5
Kidder§§	Maximum	50	53	52	46	58	48	44	43	49	52	60	54	42	42	51	41	46	40	37	32	19	37	33	44	50	48	53	30	13	35	..	43.4
	Minimum	30	29	30	28	27	28	28	29	29	32	30	30	32	33	26	28	30	31	29	18	13	5	5	11	16	27	28	23	3	− 1	..	23.6
Lexington§§	Maximum	63	49	44	45	47	62	67	50	53	54	55	69	57	44	44	53	43	48	44	40	37	30	25	31	45	43	49	46	49	29	..	47.2
	Minimum	35	36	40	32	33	34	34	36	33	44	35	39	36	37	28	36	33	35	32	22	19	9	23	17	30	32	40	27	13	10	..	30.3
Maryville	Maximum	50	57	51	48	60	49	40	50	49	51	61	54	36	43	53	42	52	42	35	32	28	26	32	46	50	55	52	41	24	25	..	44.5
	Minimum	28	28	36	28	31	28	28	34	28	42	31	33	31	32	27	33	33	33	27	20	12	5	22	12	27	25	35	22	4	− 1	..	25.8
Oregon	Maximum	56	55	54	52	63	57	42	49	48	57	68	52	36	41	59	43	51	42	37	36	26	30	32	43	54	57	54	41	27	29	..	46.4
	Minimum	30	32	39	28	41	28	30	35	33	41	34	33	31	33	28	30	36	35	29	20	14	7	23	14	30	28	40	24	11	7	..	28.1
St. Joseph	Maximum	52	52	51	47	61	51	42	47	49	54	64	45	38	40	53	41	46	41	35	32	20	29	33	44	50	51	54	37	19	37	..	43.8
	Minimum	35	37	35	31	36	32	32	36	35	39	35	32	32	31	30	32	36	34	24	20	12	10	19	17	32	31	37	17	12	12	..	28.4
Trenton	Maximum	43	51	50	45	56	48	44	48	57	57	59	55	40	40	49	48	43	40	36	32	30	25	30	41	46	49	51	46	28	23	..	43.7
	Minimum	33	30	36	30	29	30	30	36	29	44	32	38	35	33	29	30	34	35	31	24	14	7	20	19	28	31	39	23	2	1	..	27.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 12-27-29—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIII COLUMBIA, MO., DECEMBER, 1929 No. 12

GENERAL SUMMARY

December, 1929, in Missouri, was mainly a relatively mild month, with less than the normal precipitation except in the southeastern lowlands. The month was characterized by quite distinct warm and cold periods, and while the former dominated most of the time the positive departures were less pronounced in values than the negative departures.

The first week was made up of some warm days and some real winter days. At Columbia, about the center of the State, there were 19 days with above normal temperature, and 12 days with below normal temperature, and this is a fair representation for all other sections. There were two periods of zero cold, the 3d, and 18-20th, the latter being the more widespread, St. Louis, and Caruthersville, being the only two stations not getting so low value. During the warmest days the early afternoon maxima ranged into the 70's, values quite usual for this winter month in Missouri.

Except the first day, there was little precipitation during the first week anywhere, and there was not much during the last ten days of the month. The main precipitation period prevailed generally from about the 7th or 8th to and including the 18th, the heaviest amounts falling on and after the 13th. Two stations Doniphan and Poplar Bluff, both in the southeastern lowlands, had a monthly total of more than 5 inches, 4 inches being the average for that part of the State. The northwestern plateau got about 0.40 inch, about one-half the normal.

The nine to eleven consecutive days beginning about the 8th, of dense fog that practically blanketed the State was perhaps the real outstanding feature; not so much for the disagreeable physiological side, as for the almost complete suspension of highway bus-line and airship traffic, and for the numerous automobile accidents in cities and on highways. Nowhere in the State did the air temperature approximate the freezing value during the foggy spell; but the surface of the ground remained at or below the freezing value, ideal conditions for dense fog, or what is called advective fog, built up from the ground.

The snowfall was moderate for December, and at no time interferred with public traffic. It had some economic value by furnishing moisture to the soil gradually, and covered wheat to some extent during the coldest spell. The ground was covered on an average of from five to eight days over the northern half of the State, amounts being heavier over the eastern than western areas. About the usual farm activities were kept up, in addition some plowing under of sod was done. Much corn, however, was still in the fields. Livestock kept in good condition, rough feed being plentiful.

TEMPERATURE

The monthly mean temperature for the State, 65 stations reporting, was 35.2°, or 1.3° warmer than normal. All sections were warmer than usual, the Ozark region being somewhat more outstanding in this respect. The highest local monthly mean was 43.5°, at Caruthersville; and the lowest was 27.1°, at Brunswick. The highest temperature reported was 76°, at Rolla on the 11th; and the lowest reported was 9° below zero, at Jackson on the 3d. Minimum temperatures of 32° or lower occurred on 20 days; zero or lower occurred at several stations widely distributed on 3 to 6 days. The greatest daily range was 55°, at Jefferson City on the 5th.

PRECIPITATION

The average monthly precipitation for the State, based upon the reports of 93 stations, was 1.66 inches, or 0.41 inch less than the 60 years' average, and the least December precipitation since 1925. The greatest local monthly amount was 5.46 inches, at Poplar Bluff; and the least local monthly amount was 0.15 inch at Oregon. The greatest fall during any twenty-four consecutive hours was 1.75 inches, at Sikeston on the 17th. From about the 7th or 8th to the 18th was the most continuous wet spell.

The snowfall for the State was 3.7 inches, or about one inch less than normal. At a few stations over the eastern half total monthly amounts were 8 inches or more.

MISCELLANEOUS PHENOMENA

Fogs, dense.—General and persistent for 9 days beginning on the 8th or 9th, locally for 11 consecutive days,
Halos, lunar.—12th, 18th, and 19th.
Halos, solar.—3d, 5th, 6th, 21st, 24th, 26th, and 31st.
Sleet.—7th, 17th, 18th; no damage.
Thunderstorms.—Local on the 13th, 15th, and 17th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.10	85	77	138	47	5,077	6.8	24	n.	18
Hannibal	30.10	86	..	....	..	5,981	8.0	29	n.	18
Kansas City	30.12	82	69	165	56	6,869	9.2	32	n.	18
St. Joseph	30.11	87	75	150	52	5,197	7.0	28	nw.	18
St. Louis	30.09	78	72	117	40	8,374	11.3	41	sw.	13
Springfield	30.12	84	70	172	57	6,762	9.1	26	nw.	18
Cairo, Ill.	30.14	85	76	..	..	6,407	8.6	29	n.	18
Keokuk, Iowa	30.10	84	78	130	45	5,263	7.1	25	nw.	28

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	35.9	+1.7	70	0	2.29	+0.24	....	....	6	..	..	..
1889	46.8	+12.6	78	2	0.96	−1.09	....	....	5	..	..	..
1890	36.0	+1.8	76	− 3	1.03	−1.02	....	....	3	..	..	..
1891	39.8	+5.6	72	− 1	1.90	−0.15	....	....	6	..	..	..
1892	29.4	−4.8	75	−22	2.38	+0.33	3.08	4.8	6	8	7	16
1893	35.2	+1.0	76	7	0.95	−1.10	2.95	2.7	5	11	11	9
1894	36.7	+2.5	75	− 7	2.13	+0.08	3.01	1.3	5	14	8	9
1895	34.3	+0.1	69	− 8	6.13	+4.08	6.95	3.4	8	9	8	14
1896	38.6	+4.4	79	− 5	0.93	−1.12	2.25	T.	3	13	8	10
1897	29.3	−4.9	74	−14	2.80	+0.75	2.70	6.3	7	8	8	15
1898	28.7	−5.5	74	−20	1.69	−0.36	2.50	5.1	5	17	6	8
1899	30.4	−3.8	72	−13	2.11	+0.06	1.70	6.6	9	12	9	10
1900	35.6	+1.4	68	− 3	0.69	−1.36	1.08	0.6	4	14	8	9
1901	28.5	−5.7	71	−29	2.93	+0.88	4.43	6.9	8	11	7	13
1902	30.7	−3.5	68	− 7	2.91	+0.06	2.50	3.1	8	10	4	17
1903	30.2	−4.0	65	11	1.51	−0.54	1.80	2.3	5	16	7	8
1904	32.9	−1.3	75	−10	1.50	−0.55	1.55	6.0	5	16	7	8
1905	33.3	−0.9	66	− 2	1.45	−0.60	2.24	1.7	4	18	6	7
1906	36.1	+1.9	73	0	2.27	+0.22	2.85	0.6	8	8	6	17
1907	37.7	+3.5	76	3	1.84	−0.21	1.78	3.7	7	11	7	13
1908	38.4	+4.2	80	− 4	0.85	−1.20	1.35	T.	3	16	7	8
1909	24.9	−9.3	76	−17	2.86	+0.81	2.50	7.7	8	12	6	13
1910	31.2	−3.0	67	− 5	1.25	−0.80	2.85	2.4	4	16	5	10
1911	36.7	+2.5	74	−11	2.80	+0.70	2.00	5.1	7	13	6	12
1912	36.5	+2.3	72	2	0.59	−1.46	0.91	0.6	3	19	5	7
1913	38.3	+4.9	74	− 3	2.27	+0.19	2.25	6.6	7	9	4	18
1914	26.8	−7.1	68	−18	2.48	+0.31	2.30	6.6	9	7	5	19
1915	34.7	+1.3	84	−13	2.77	+0.55	3.20	7.8	6	12	6	13
1916	31.3	−2.3	82	−29	1.85	−0.29	3.40	4.4	6	15	6	10
1917	25.5	−8.7	82	−23	0.74	−1.40	2.51	7.3	5	11	7	13
1918	40.0	+6.6	83	−12	3.21	+1.14	5.50	7.8	7	13	6	12
1919	28.5	−4.5	74	−22	0.69	−1.50	2.65	0.7	3	12	4	15
1920	35.6	+2.6	77	−10	1.93	−0.22	2.30	2.3	5	13	7	11
1921	36.9	+3.8	74	− 8	1.86	−0.23	1.91	1.9	6	13	7	11
1922	36.3	+2.9	75	− 6	2.11	−0.14	3.04	0.2	6	15	6	10
1923	41.0	+7.1	82	− 4	3.06	+1.03	2.23	0.8	8	11	6	14
1924	27.7	−6.2	80	−28	3.43	+1.40	4.20	4.6	7	13	6	12
1925	31.6	−2.3	80	−10	1.45	−0.58	2.81	4.8	4	13	7	11
1926	32.6	−1.3	75	−12	2.18	+0.15	2.00	2.4	6	11	5	15
1927	29.9	−4.0	74	−11	2.68	+0.65	5.65	2.9	6	15	5	11
1928	36.2	+2.3	81	0	2.24	+0.21	3.10	1.4	5	14	6	11
1929	35.2	+1.3	76	− 9	1.66	−0.41	1.75	3.7	6	13	5	13

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Climatological Data for December, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	552	49	27.1	− 3.5	52	5	− 2	19†	36	0.82	−0.80	0.50	8.0	4	15	0	16	sw.	O. K. Benecke
Clifton Hill	Randolph	731	29	30.7	− 0.4	58	30†	− 6	2†	38	1.13	−0.27	0.36	6.0	8	13	3	15	.....	Dr. A. J. Bradsher
Columbia	Boone	784	38	34.4	+ 1.2	68	11	0	19	35	0.88	−0.98	0.44	3.5	10	7	10	14	sw.	U. S. Weather Bureau
Downing	Schuyler	876	7	29.6	.....	62	30	− 4	3	37	0.72	−0.74	0.28	5.0	6	9	9	13	w.	James Taylor
Fayette	Howard	661	48	32.6	+ 1.4	60	5†	− 5	3	45	0.53	−1.10	0.25	2.5	4	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	40	34.8	+ 1.1	69	11	0	2	45	0.75	−1.17	0.31	3.2	6	10	7	14	.....	Chamber of Commerce
Gorin	Scotland	700	41	.....	.....	..	..	....	..	..	0.70	−0.99	0.41	2.5	3	9	8	14	sw.	J. W. Pulliam
Hannibal	Marion	534	36	32.0	+ 0.5	60	30	1	3	30	0.66	−0.88	0.31	2.7	10	8	5	18	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	40	34.2	+ 1.4	71	11	− 1	20	55	1.56	−0.29	0.74	2.5	7	14	4	13	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	39	29.3	− 0.3	58	30	− 5	3	34	0.43	−1.21	0.30	3.0	4	13	17	1	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	34	32.1	+ 0.6	61	31	− 1	3	35	1.60	−0.09	0.50	1.6	4	15	2	14	s.	Stark Bros. Nurseries
Macon	Macon	875	29	30.0	− 0.4	63	31	− 3	19†	43	1.06	−0.34	0.61	8.0	4	14	5	12	w.	W. C. Brown
Mexico	Audrain	800	39	32.9	+ 1.1	63	31	− 2	20	46	1.14	−0.86	0.50	3.8	9	13	0	18	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	7	....	.....	..	..	....	..	..	0.33	.....	0.21	2.5	4	10	5	16	se.	J. S. Conway
St. Charles	St. Charles	456	40	37.0	+ 2.1	70	11	0	3	35	1.66	−0.21	0.45	7.0	6	11	6	14	w.	L. C. Saeger
St. Louis (1)	St. Louis City	568	54	37.5	+ 2.6	69	11	6	20	23	3.07	+0.86	1.26	6.7	11	10	6	15	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	16	36.9	+ 2.6	68	11†	4	20	28	2.94	+0.84	1.26	5.5	10	11	4	16	w.	St. Louis University
Shelbina	Shelby	779	35	....	.....	..	..	....	..	..	0.87	−0.74	0.39	4.8	9	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	30	31.2	+ 0.6	56	13†	− 5	2†	35	0.86	−0.70	0.30	2.5	5	12	8	11	s.	Frank Hall
Unionville	Putnam	1,062	35	29.7	+ 2.3	62	31	− 5	19	40	0.78	−0.86	0.50	5.5	4	13	4	14	sw.	Geo. W. Davis
Warrenton	Warren	816	46	36.9	+ 4.9	70	13	0	3†	32	1.21	−0.92	0.39	5.0	7	9	8	14	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	56	30.0	+ 0.4	59	30	− 1	3	31	0.69	−0.76	0.65	7.7	4	6	6	19	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	32.6	+ 1.0	71	11	− 6	2†	55	1.11	−0.58	1.26	4.5	6	11	6	14	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	3	39.9	.....	73	15	− 6	3	37	4.93	.....	1.10	5.0	9	11	1	19	s.	Jeff. King
Caruthersville	Pemiscot	265	32	43.5	+ 3.5	73	15	5	3	34	3.36	−1.08	1.10	4.0	7	12	6	13	s.	Sam Smith
Doniphan	Ripley	344	24	40.5	+ 3.1	73	30	− 1	3	38	5.16	+1.83	1.47	5.6	7	10	7	14	sw.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	37	36.0	− 0.6	65	11†	− 9	3	37	1.82	−1.38	0.64	3.5	9	8	3	20	s.	John G. Putz
Marble Hill	Bollinger	470	33	39.2	+ 3.0	70	13†	− 8	3	38	4.57	+1.24	0.95	5.0	9	11	1	19	w.	R. A. DeWitt
Morehouse	New Madrid	289	27	....	.....	..	..	....	..	..	4.37	+0.36	1.60	4.5	8	10	5	16	sw.	John A. Spence
Poplar Bluff††	Butler	339	24	40.2	+ 3.4	69	12	− 1	3	39	5.46	+1.28	1.50	8.5	10	16	1	14	s.	J. H. Wolpers
Sikeston	Scott.	318	23	40.7	+ 3.2	72	15	0	3	38	4.35	+0.34	1.75	6.8	8	13	3	15	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	53	40.3	+ 2.5	68	15	5	20	30	4.12	+0.72	1.43	6.6	12	9	4	18	s.	U. S. Weather Bureau
Section means and	extremes	....	..	40.0	+ 2.6	73	15†	− 9	3	39	4.24	+0.41	1.75	5.5	9	11	3	17	s.	
Ozark Plateau																				
Arcadia	Iron	926	47	36.2	+ 1.9	71	30	− 4	4	51	2.33	−0.65	1.00	1.8	6	17	0	14	sw.	Arcadia College
Aurora	Lawrence	1,370	38	40.2	+ 5.1	74	11†	− 2	19	35	0.69	−1.95	0.26	2.2	6	13	9	9	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	33	42.2	+ 6.4	72	12	0	8	38	3.17	+0.60	0.80	1.5	9	16	2	13	sw.	V. H. Kirkendall
Bolivar	Polk	1,071	34	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Southwest Baptist College
Dean ‡‡	McDonald	1,000	31	39.6	+ 2.2	75	11	− 2	20	40	1.40	−0.72	0.55	0.8	4	19	4	8	sw.	H. E. Dean
Eldon	Miller	934	32	35.3	+ 1.0	68	11	0	19†	49	2.18	+0.02	1.02	3.0	6	10	9	12	sw.	E. H. Shepherd
Farmington	St. Francois	918	17	38.6	+ 1.6	74	12	− 1	20	34	2.25	−0.46	0.57	5.2	9	10	9	12	sw.	Robert Forsyth
Goodland	Iron	1,000	34	38.2	+ 3.8	72	12†	− 7	3	49	3.20	+0.72	1.47	8.0	7	11	5	15	n.	F. M. Adams
Greenville	Wayne	381	6	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	Wm. P. Owens
Hailey	Barry	1,350	3	....	.....	..	..	....	..	..	1.58	.....	1.00	0.6	4	17	5	9	w.	A. W. Madison
Koshkonong	Oregon	958	27	41.5	+ 3.9	71	11†	2	19†	38	4.56	+1.40	1.02	6.0	9	11	3	17	sw.	R. M. Hitt
Lebanon	Laclede	1,265	40	34.6	− 0.4	72	11	− 4	20†	51	1.02	−1.58	0.30	3.5	7	12	5	14	w.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	22	39.4	+ 3.9	75	11	− 1	19	38	0.77	−1.17	0.33	1.0	5	16	6	9	se.	C. S. Crow
Mountain Grove(near)	Wright	1,463	27	37.6	+ 3.3	72	11	− 1	20	46	2.02	−0.21	0.52	1.5	10	14	5	12	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	40	40.9	+ 4.2	76	11	− 2	20	42	0.98	−1.56	0.42	1.5	5	22	1	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	28	37.7	+ 4.1	65	12	− 2	20	30	2.00	−0.07	0.38	4.0	10	7	9	15	s.	F. H. Lane
Salem(near)	Dent	1,173	24	38.8	+ 3.6	71	12	− 5	21	40	3.48	+1.47	1.03	6.0	10	13	6	12	sw.	A. C. Leech
Seligman	Barry	1,542	26	40.0[b]	+ 3.4	73	11	− 3	19	33	2.08	−0.49	0.82	1.5	6	19	3	9	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	22	39.6	+ 5.2	74	10	− 4	21	40	2.52	+0.47	0.71	3.0	8	15	5	11	s.	Ira H. Hailey
Springfield	Greene	1,324	40	39.6	+ 3.4	72	11	− 2	19	35	1.61	−0.70	0.62	4.6	9	16	6	9	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	38.8	+ 3.3	76	11	− 7	3	51	2.10	−0.29	1.47	3.9	7	14	5	12	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	34	36.3	+ 2.0	72	11	− 2	19	36	0.84	−0.80	0.24	1.1	7	9	13	9	sw.	W. G. Bigelow
Clinton	Henry	765	35	36.1	+ 1.7	67	11	− 1	19	40	1.75	+0.02	0.52	2.0	6	11	9	11	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	51	33.0	+ 1.8	66	30	− 3	19	48	0.31	−1.47	0.14	3.5	3	13	3	15	nw.	John H. Patterson
Lamar	Barton	980	41	37.6	+ 2.4	75	11	− 1	19†	46	0.83	−1.12	0.55	T.	2	17	4	10	sw.	Jesse A. Mann
Lamonte	Pettis	867	27	33.4	− 0.8	62	13	− 1	3†	36	1.78	+0.12	0.81	3.8	11	17	6	8	sw.	J. E. Wheeler
Marshall	Saline	779	39	34.7	+ 3.1	61	31	− 3	19	35	1.14	−0.52	0.55	7.5	3	18	5	8	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	35	37.7	+ 3.8	73	11	− 1	19	35	0.45	−1.41	0.30	1.5	3	21	0	10	s.	George A. Kaupp
Warrensburg	Johnson	878	41	34.6	+ 1.2	61	13†	− 3	19	35	0.45	−1.35	0.20	3.0	5	15	5	11	sw.	E. A. Markey
Warsaw	Benton	687	28	38.2	+ 3.4	75	11	0	19†	37	0.69	−1.63	0.29	1.0	5	10	7	14	w.	Everett Martin
Section means and	extremes	.....	..	35.7	+ 2.1	75	11	− 3	19	48	0.92	−0.91	0.81	2.6	5	14	6	11	sw.	
Northwest Plateau																				
Bethany	Harrison	916	36	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	M. H. Moulton
Chillicothe	Livingston	779	19	29.2	− 6.4	62	30	− 6	19	53	0.39	−1.26	0.26	6.0	2	14	2	15	e.	Wm. J. Olenhouse
Conception	Nodaway	980	39	29.8	+ 0.5	60	30	− 7	19	41	0.20	−0.79	0.20	2.0	1	14	3	14	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	8	30.9[b]	.....	61	30	− 7	17	52	0.67	−0.66	0.49	3.7	5	16	1	14	s.	Fred L. Stiff
Grant City	Worth	1,134	24	29.3	+ 1.6	61	31	− 6	19	38	0.22	−0.94	0.11	1.0	4	13	7	11	sw.	W. P. Spillman
Kansas City	Jackson	963	39	34.8	+ 2.3	63	30	− 2	19	31	0.65	−0.68	0.41	2.7	5	11	6	14	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	35	28.0	− 1.7	58	30	− 7	20	46	0.83	−0.47	0.25	3.5	6	10	6	15	n.	Linn Terry
King City	Gentry	1,095	3	....	.....	..	..	....	..	..	0.28	.....	0.12	1.5	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	43	34.0	+ 2.5	64	31	− 2	19	31	0.51	−1.21	0.25	4.5	6	15	7	9	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	38	29.1	+ 2.8	57	30	− 5	19	41	0.28	−0.77	0.10	2.0	7	11	6	14	n.	J. R. Brink
Oregon	Holt	1,048	72	31.8	+ 3.3	65	30	− 4	19	42	0.15	−1 29	0.04	1.0	5	16	4	11	nw.	Mina Wright
St. Joseph	Buchanan	967	20	31.6	+ 1.4	59	30	− 4	19	37	0.18	−0.84	0.08	1.3	7	13	7	11	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	25	28.8	+ 2.9	59	30	− 5	19	37	0.37	−0.55	0.10	1.0	4	13	5	13	nw.	Albert Volker
Trenton	Grundy	822	32	30.6	+ 1.0	60	30	− 4	19	37	0.44	−0.91	0.16	2.0	5	15	4	12	s.	W. H. Estes
Section means and	extremes	.....	..	30.6	+ 0.9	65	30	− 7	20	53	0.40	−0.86	0.49	2.5	5	13	6	12	nw.	
State means and	extremes	.....	..	35.2	+ 1.3	76	11	− 9	3	55	1.66	−0.41	1.75	3.7	6	13	5	13	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for December, 1929

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville‖	Missouri	T.	.10						T.					.10	.02	.01	.02	.01	.33	.01										T.			0.60
Brunswick‖	Grand	.50												.04				.03	.25														0.82
Clifton Hill	Chariton	.36								.18	T.	.02	T.	.16		.04	.02	.15	.20										.01				1.13
Columbia***	Missouri	.12						.03				.01	.01	.17	.01	.05	T.	.35	.12	T.			T.						T.				0.88
Downing	Mississippi	.28									.02				.02	.09	.03	.28	T.	T.									T.				0.72
Fayette‖	Missouri												T.	.21	T.	.04	.03	T.	T.	.25									T.				0.53
Fulton‖	....do	T.	.03					.10	T.		T.			.25	T.	.03		T.	.31	.03										T.			0.75
Gorin	Mississippi	.25									T.	.04	T.					.41															0.70
Hannibal***	....do	.11						T.		.01	T.	.02	.01	.11	T.	.03	.02	.31	T.	.01			T.		T.				.03				0.66
Hermann‖	Missouri		.01					.23	.01		T.			.40	.03	.03	T.	T.	.43	.04										.01			1.19
Jefferson City‖	....do							.25						.74	.06	.05	.04		.30	.12													1.56
Kirksville	Mississippi	.30								T.		.05			T.	T.	T.	.05	.03														0.43
Louisiana	....do	.30						.30						.50					.50														1.60
Lucerne‖	Grand																																
Macon ‖	Chariton	.61															.05	.05	.35	T.													1.06
Mexico ‖	Mississippi	T.	.10					.20					.03	.10		.06	.05	.05	.50	.05			T.						T.				1.14
Milan‖	Grand	.10								.07		.15		.25			.08												T.				0.65
Monroe City	Mississippi								T.	.03			.02	.07				.21															0.33
Pacific‖	Meramec		.10					.29	.14		T.	T.		.40	.10		.25	.72	.40	.14									T.				2.54
St. Charles	Missouri	.25						.30		T.	T.		T.	.16			.25	.25	.45										T.				1.66
St. Louis (1)***	Mississippi	.09						.41	T.	T.	T.		.01	.48	T.	.05	.39	1.01	.51	.03			T.	.01					T.			.08	3.07
St. Louis (2)*	....do	.19						.41		.01	T.		T.	.43		.05	.28	1.26	.27	.03									.01				2.94
Shelbina ‖	....do								.06		.19	.01	.01	.11			.05	.01	.39											.04			0.87
Steffenville	....do	.15								T.	T.		.10			.21	T.	.30	.10					T.					T.				0.86
Union‖	Meramec		.04					.25	.05					.42	.10	.02	.07	.30	.42	.07										.02			1.76
Unionville	Chariton	.50								T.	.03					T.	T.	.10	.15										T.				0.78
Warrenton	Mississippi	.15						.20					.04	.39				.08	.30	.05									T.				1.21
Keokuk, Ia.***	....do	.45		T.						T.	T.	T.	T.	T.	T.	.02	T.	.21	T.	T.			T.		T.				.01				0.69
Southeast Lowlands																																	
Campbell‖	St. Francis	.30	T.					1.00						.67	.21	.20	.22	.73	1.10	.50													4.93
Cape Girardeau‖	Mississippi		.17					.23	.39		.01				.60	.75	.42	.48	1.03	.14													4.22
Caruthersville ‖	....do	T.	.25					.69						.33		.15		.46	1.10									.38					3.36
Dexter‖	St. Francis		.21					.10	.27						.76	.82	.21	.82	1.32	.20									.03				4.74
Doniphan	Black	.10	.05						T.					1.00		1.47	.85		.48	1.21													5.16
Jackson	Mississippi	T.	.30					.60			.03	.02		.64	.04	.08	.06		.05														1.82
Marble Hill	Mississippi		.45					.75		.08		T.			.60	.12	.70	.95	.20	.72													4.57
Morehouse	....do	T.	.09					.43						.82		.45	.63	1.60	.15	.20								T.					4.37
New Madrid‖	....do		.50					.10	.40		.02	.01			.62	.15	.35	.25	1.10	.53	.01								.10				4.14
Poplar Bluff‖	Black		.25		.16		.15		.28						.69	1.05	.22	.86	1.50	.30													5.46
Sikeston‖	Mississippi	.20						.50		.03				.65		.92		1.75	.05	.25													4.35
Cairo, Ill.***	.. do	.17					T.	.59	T.	T.	.01		T.	.39	.05	1.12	.14	.65	.88	.08				T.	T.			.03	.01			T.	4.12
Ozark Plateau																																	
Arcadia ‖	St. Francis		.12					.44	T.					T.	T.		.29	.42	1.00	.06				T	T.								2.33
Aurora	Neosho	.02						.03						.16	.06	T.	T.	.16	.26														0.69
Birchtree (near)	Black		.02					.55			.05			.62		.80	.18	.55	.25	.15													3.17
Bolivar	Osage																																
Caplinger Mills	Osage	.10						T.					.03	.10	.05	.04	T.	.25	.20														0.77
Dean	Neosho	T.												T.	.55	.32		.45	T.	.08													1.40
Eldon‖	Missouri							.11					.05	1.02	.14			.03	.83										T.				2.18
Farmington	St. Francis	.28						.46		.02		T.		.37	.03	.03	.28	.57	.21														2.25
Fredericktown‖	... do																																
Galena‖	White							.28						.18	.12	.14	.28																1.00
Goodland	Black	.02	.22					.45						.60				1.47	.20	.24													3.20
Greenville	St. Francis																																
Hailey	White	.03										1.00			.50				.05														1.58
Koshkonong	Black	.20	.10					.64						1.02	.08	.76	.33	.42	1.01														4.56
Lebanon ‖	Osage		.10		.04			.14			T.		T.	.30	.04	T.	T.		.25								.15						1.02
Leeper‖	Black		.23					.15	.33			T.		T.	.10	.40	.60	T.	.78														2.59
Lockwood	Osage	.06									T.	T.	T.	.22	.08		T.	.33	.08														0.77
Mountain Grove‖	White		.05					.18	.18					.04	.44	.21	.05	.52	.25	.10													2.02
Neosho	Neosho	.05						T.					T.	.42	.09			.32	.10														0.98
Owensville ‖	Gasconade							.35	.15					.75	.10				.20	.10										.15			1.80
Ozark Beach‖	White							.37						.18	.48	.13	.13	.05	.22														1.56
Rolla ‖	Meramec	.08					.28	.17			T.			.28		.21	.38	.10	.34	.15				T.				.01	T.				2.00
Salem (near)	....do	.20	.05					.49		T.	T.			.85	.27	.03	.46	.77	.26	.10													3.48
Seligman	Neosho	T.						.23					T.	**	.62	.82		.21	.20														2.08
Seymour (near)	White	.10						.27		T.		T.	.62	.09	.26	.71	.22	T.	.25													T.	2.52
Springfield***	....do	.07					.03	.17					T.	.62	.21	.01	.01	.38	.11														1.61
Steelville‖	Meramec		.10					.45	.15					.20	.15		.25	.57	.43	.18													2 48
Stover ‖	Missouri		.02						.08				.01	.55			.02	.02	.25	.04													0.99
Tuscumbia ‖	Osage		.18					.10	.02				T.	.26	.10	T.	T.	.02	.50	.02	T.													1.20
Williamsville‖	Black		.16					.13	.38		.02	.02			.11	.46	1.36	.69	.52	.82	.02													4.69
Willow Sprgs. ‖ (near)	White		.09					.46							.73	.64	.07	.40	.16	.02														2.57
Southwest Plain																																	
Appleton City	Osage	.06						.19		T.	T.	T.	.06	.20	T.	.04		.24	.05														0.84
Clinton	Osage		.10											.11		.17		.52	.10													.75	1.75
Concordia ‖	Missouri	.27																															0.27
Harrisonville‖	Osage	.14												.10					.07														0.31
Joplin ‖	Neosho						.08							.42	.07			.60															1.17
Lamar ‖	....do			T.				T.						.55		T.			.28														0.83
Lamonte	Missouri	.81	.15					.05				.05	.05	.04	.02	.06	.01	.10	.44														1.78
Marshall	.... do	.20										T.	T.					.39	.55														1.14
Nevada	Osage	.05												.30				T.	.10														0.45
Osceola‖	....do		T.											.45				.04	T.	T.													0.49
Warrensburg	Missouri	.20							.02			.08		T.				.07	.08										T.				0.45
Warsaw	Osage	.05						T.					.18	.29			T.	.12		.05													0.69
Waverly ‖	Misouri	T.	.13											T.															.28				0.41
Northwest Plateau																																	
Albany‖	Grand																																
Bethany	....do																																
Chillicothe‖	....do	.13	T.								T.	T.	T.	T.					26	T.													0.39
Conception	Missouri												T.						20														0.20
Edgerton	....do	T.	.12							T.	T.	T.	T.	T.	.01	T.		.03	.02	.49													0.67
Gallatin ‖	Grand	.01	T.	T.							T.	T.	T.	T.	.01	T.	.02	.03	.05	.04	T.													0.16
Grant City	.... do	T.									T.		.11		.02	.03				.06													0.22
Kansas City***	Missouri	.08								T.	T.	T.	T.	T.	.03	T.	T.	.01	.40	.13									T.				0.65
Kidder ‖	Grand	.20									T.	.25						.02	.03	.23				.10									0.83
King City	Missouri	.03								T.	.01	T.	.02	.01	T.	T.	.03	.01	.05	.12														0.28
Lexington	....do	.09											.02	.05					.05	.05	.25													0.51
Maryville ‖	....do	.10	T.							.01			T.	.02	T.	.01	.02	.02		.10	T.													0.28
Oregon	....do	T.											.03	.01			.03		.04	.04														0.15
St. Joseph***	....do	.03								T.	T.	T.	.01	T.	T.	.01	.03	.01	.01	.08									T.					0.18
Tarkio	....do	T.									.10							.10	.10	.07														0.37
Trenton	Grand	.16									T.	T.	T.				.06	.02	.09	.11									T.					0.44

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for December, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	32	4	17	37	52	32	30	36	42	48	48	50	50	46	46	41	41	17	5	8	8	8	32	32	39	39	34	33	31	36	41	32.7
	Minimum	12	0	0	2	16	28	28	22	30	36	42	42	41	34	35	38	38	17	−2	−2	4	6	5	8	23	27	31	25	23	29	31	21.5
Columbia	Maximum	35	17	34	50	62	55	37	36	44	55	68	58	58	48	56	50	48	27	9	18	24	21	28	40	46	51	41	43	52	62	61	43.0
	Minimum	15	5	3	15	36	32	26	28	36	42	50	46	44	39	48	44	24	8	0	2	6	3	7	25	24	40	26	26	27	37	34	25.7
Fayette	Maximum	35	22	34	47	60	57	34	37	43	53	55	49	51	50	54	49	45	45	25	21	25	26	32	41	48	51	41	45	59	60	62	43.7
	Minimum	20	−1	−5	8	34	26	27	18	29	33	38	41	41	34	39	38	42	0	−2	2	1	2	3	16	24	29	29	23	24	25	26	21.4
Hannibal	Maximum	36	16	31	44	57	53	36	34	38	47	44	49	58	41	47	44	42	29	10	18	22	19	26	41	42	52	42	42	51	60	58	39.6
	Minimum	16	4	1	14	37	33	24	24	32	38	40	42	39	34	39	37	26	9	3	4	7	11	9	19	27	38	30	29	28	35	31	24.5
Jefferson City§§	Maximum	35	19	35	51	67	60	34	41	46	60	71	66	71	60	66	52	50	30	8	20	26	24	30	47	50	57	43	43	56	67	66	46.8
	Minimum	3	4	4	3	12	15	22	29	33	35	41	45	47	42	42	44	44	20	1	−1	2	3	4	5	9	14	31	27	28	32	33	21.7
Kirksville	Maximum	33	23	28	44	49	47	41	31	36	45	44	41	47	40	44	40	40	27	8	15	22	22	26	41	42	53	44	41	50	58	55	38.0
	Minimum	19	−2	−5	10	35	27	22	20	29	34	36	35	39	31	35	31	26	5	−4	−1	4	2	3	17	19	31	29	27	24	33	29	20.6
Louisiana	Maximum	33	16	22	45	55	47	35	35	45	45	50	60	55	50	50	52	40	29	19	15	20	18	25	35	45	50	40	45	47	60	61	40.1
	Minimum	19	5	−1	10	39	30	30	16	30	37	40	40	40	35	40	40	30	20	7	4	4	0	9	10	28	33	34	25	30	36	26	24.1
Macon§§	Maximum	35	17	29	44	51	50	31	35	41	50	42	50	54	47	49	42	49	23	10	16	20	23	32	41	44	52	38	41	50	55	63	39.5
	Minimum	3	−2	−2	1	16	28	26	21	30	34	40	38	39	32	33	34	35	20	−3	−3	0	2	3	5	20	30	29	37	25	34	31	20.5
Mexico§§	Maximum	35	35	32	44	61	55	33	36	42	54	58	57	58	57	54	47	46	26	10	13	20	25	31	45	45	51	38	41	50	59	63	42.6
	Minimum	24	2	1	5	15	33	30	23	29	35	42	47	44	35	35	39	40	23	1	−2	−1	5	6	7	24	34	30	26	27	30	30	23.2
St. Louis(1)	Maximum	33	22	28	43	62	60	46	36	43	55	69	69	66	54	57	48	51	33	14	19	24	22	28	41	40	56	45	42	54	66	58	44.6
	Minimum	22	10	6	20	39	44	31	30	35	43	51	55	54	42	48	44	33	14	8	6	11	15	17	20	28	36	33	30	32	44	42	30.4
Unionville	Maximum	32	22	30	50	52	48	41	36	38	45	46	44	42	41	44	40	41	30	9	17	22	22	30	48	47	50	50	44	54	60	62	39.9
	Minimum	18	−2	−4	10	32	25	20	18	30	35	35	33	34	30	34	30	26	8	−5	−2	2	−2	0	16	16	30	28	26	24	32	27	19.5
Warrenton	Maximum	34	32	28	46	65	64	54	35	41	55	68	64	70	61	60	53	48	43	20	20	26	23	28	41	43	56	53	39	53	65	65	46.9
	Minimum	21	3	0	14	40	37	30	26	33	40	50	51	49	39	43	41	42	19	3	0	5	7	11	16	24	33	32	25	27	39	35	26.9
Southeast Lowlands																																	
Campbell	Maximum	33	29	29	42	61	63	56	54	54	68	70	66	70	70	73	63	65	53	33	25	28	30	32	45	52	63	55	51	57	55	65	51.9
	Minimum	15	9	−6	6	28	34	34	35	32	43	45	55	57	50	52	58	51	16	6	1	4	4	9	16	32	33	34	21	27	31	34	27.9
Caruthersville	Maximum	34	30	30	42	55	63	57	43	54	65	70	67	65	66	73	65	65	60	27	26	33	32	29	41	52	60	53	51	56	65	65	51.4
	Minimum	28	28	5	18	33	43	42	36	40	48	57	61	57	60	59	59	58	26	13	7	15	25	15	23	30	40	40	29	30	35	43	35.6
Doniphan	Maximum	35	31	34	48	62	67	54	41	53	63	72	70	67	68	69	65	60	43	20	30	31	37	39	42	44	64	50	59	61	73	63	52.1
	Minimum	29	12	−1	10	48	35	36	35	39	39	55	59	60	48	60	60	30	16	8	2	2	5	12	15	15	35	20	21	28	35	27	28.9
Jackson	Maximum	35	30	28	41	54	56	51	39	45	55	65	65	61	58	64	63	53	49	24	23	25	26	31	39	45	55	44	45	51	56	59	46.3
	Minimum	21	5	−9	2	21	31	33	30	33	40	51	56	55	52	53	53	48	19	5	−2	−1	8	5	6	20	30	31	20	22	32	28	25.7
Poplar Bluff	Maximum	33	31	30	44	62	65	56	42	48	61	67	69	65	66	68	65	65	55	30	32	30	35	35	40	53	62	49	55	59	66	65	51.7
	Minimum	30	9	−1	9	23	26	38	36	39	46	48	52	59	54	59	60	55	21	9	0	3	16	8	13	20	26	28	20	21	33	27	28.6
Sikeston	Maximum	34	33	28	41	59	63	59	41	47	59	67	69	65	65	72	68	67	60	26	25	27	26	29	38	44	61	54	50	54	65	63	50.3
	Minimum	24	10	0	10	27	34	39	35	36	44	51	59	56	55	62	58	55	24	11	4	9	19	14	20	26	33	40	24	23	27	34	31.1
Cairo, Ill	Maximum	32	28	25	39	58	61	53	38	47	60	66	68	63	62	68	63	63	49	19	21	28	26	24	38	44	60	52	47	53	62	63	47.7
	Minimum	27	11	6	15	32	41	35	35	36	46	56	61	57	58	59	58	49	19	7	5	14	17	14	19	31	39	34	29	30	39	42	32.9
Ozark Plateau																																	
Arcadia§§	Maximum	30	19	30	47	62	63	46	38	44	60	64	70	64	60	67	68	59	29	11	23	27	30	30	38	50	58	49	52	57	71	63	47.7
	Minimum	3	8	−4	−4	17	36	35	29	29	35	42	56	59	57	54	54	48	23	3	−2	−2	−3	5	11	19	27	34	20	21	28	27	24.7
Aurora	Maximum	37	29	40	56	66	65	54	52	61	72	74	74	66	63	62	62	58	33	11	25	25	27	28	42	51	50	48	38	50	54	60	49.5
	Minimum	27	8	9	21	40	44	31	31	36	41	57	60	61	58	58	52	32	8	−2	3	4	5	10	25	28	45	32	30	30	40	35	30.9
Birchtree	Maximum	33	29	33	52	65	62	56	59	59	57	70	72	65	64	64	62	59	58	20	25	29	32	33	43	54	64	58	53	68	70	62	52.6
	Minimum	29	9	0	17	30	36	36	35	36	44	55	55	59	55	55	57	53	20	5	1	3	9	13	19	21	36	38	40	38	39	39	31.7
Eldon§§	Maximum	35	20	37	53	57	61	35	40	44	68	65	65	65	58	55	49	49	20	10	20	28	26	33	43	54	57	45	44	51	65	54	45.4
	Minimum	9	5	3	4	20	32	32	32	32	38	44	55	49	44	44	47	47	20	0	0	0	5	6	8	28	29	33	27	27	29	31	25.2
Farmington	Maximum	30	28	31	46	66	64	54	38	44	53	65	74	65	62	60	60	51	49	20	22	28	26	30	39	50	58	51	51	57	70	62	48.5
	Minimum	22	8	0	15	32	37	34	30	30	42	52	59	59	51	55	48	47	20	5	−1	1	6	9	16	26	35	37	21	26	42	29	28.8
Koshkonong	Maximum	36	31	33	50	65	64	52	40	47	66	71	71	65	61	63	60	62	56	21	24	27	30	34	42	49	65	56	53	58	68	61	51.0
	Minimum	28	9	7	21	34	27	37	34	37	46	54	58	59	56	58	55	50	18	2	2	11	14	12	20	31	37	40	28	27	42	38	32.0
Lebanon§§	Maximum	37	20	37	53	65	62	36	45	51	67	72	70	68	61	65	54	60	20	15	15	20	29	27	32	45	57	59	48	45	57	62	46.9
	Minimum	10	4	0	2	15	39	31	29	30	38	45	53	54	49	48	49	47	10	−3	−4	−4	−2	−2	0	3	9	26	33	28	25	28	22.3
Mountain Grove§§	Maximum	32	20	36	52	64	63	40	40	49	63	72	69	63	65	61	56	59	19	9	22	27	30	32	42	54	62	50	47	54	67	58	47.6
	Minimum	13	6	5	6	18	35	36	30	32	39	49	55	59	58	58	54	54	17	0	−1	3	4	8	9	24	28	36	27	27	30	38	27.6
Neosho	Maximum	38	32	43	55	67	65	65	66	62	71	76	70	68	67	70	65	60	34	18	30	28	29	38	52	63	58	52	49	57	68	67	54.3
	Minimum	30	8	5	16	34	33	31	31	27	34	55	52	60	58	57	47	32	9	−1	−2	1	2	4	21	21	41	31	21	22	34	37	27.5
Rolla	Maximum	29	30	33	47	54	54	51	40	48	60	64	63	65	63	61	60	50	40	18	20	22	21	28	40	46	52	52	39	51	60	59	45.8
	Minimum	29	6	3	17	36	37	31	30	36	44	54	58	59	49	56	48	40	17	0	−2	5	5	11	21	26	39	34	26	27	41	31	29.5
Springfield	Maximum	35	19	38	53	64	61	51	45	54	70	72	67	65	61	63	57	57	22	9	23	23	24	32	45	59	56	46	43	55	66	60	48.2
	Minimum	16	6	9	24	40	43	31	31	38	43	55	60	61	59	57	53	22	5	−2	2	10	11	10	24	30	43	35	30	31	41	44	31.0
Southwest Plain																																	
Appleton City	Maximum	35	25	40	54	62	58	48	38	45	64	72	55	68	56	64	57	49	29	14	23	27	27	36	44	55	54	47	46	60	63	64	47.7
	Minimum	24	4	5	18	34	29	28	28	30	34	39	41	44	40	47	44	29	8	−2	−1	6	7	6	25	23	34	29	27	25	32	36	24.9
Clinton	Maximum	35	20	38	45	63	57	45	38	45	60	67	57	64	54	59	57	55	32	12	21	25	26	34	43	55	54	48	44	57	60	64	46.3
	Minimum	25	6	6	20	23	34	30	27	32	40	40	35	45	40	49	45	32	9	−1	3	5	8	8	22	25	35	28	28	35	35	34	25.9
Harrisonville§§	Maximum	32	26	38	54	58	61	37	37	42	54	56	49	58	50	56	48	48	11	14	18	26	25	38	47	57	55	49	49	59	66	59	44.4
	Minimum	11	0	0	6	20	26	26	23	27	34	39	41	40	37	37	41	40	10	−3	−2	1	5	5	6	25	25	27	28	25	33	34	21.5
Lamar§§	Maximum	37	25	42	54	68	59	35	49	50	71	75	64	69	60	66	58	55	15	15	28	28	26	37	45	57	55	49	47	58	63	66	49.2
	Minimum	15	8	7	11	22	30	30	31	33	35	44	49	49	47	46	50	51	13	−1	−1	5	6	8	9	25	29	33	27	25	29	37	25.9
Lamonte	Maximum	35	18	33	50	59	57	44	36	45	58	57	54	62	47	55	49	49	26	12	19	26	23	33	40	48	51	48	43	59	60	59	43.7
	Minimum	13	2	−1	14	36	29	24	23	31	36	41	41	43	38	46	42	25	9	−1	2	4	6	6	25	22	23	23	28	26	26	33	23.1
Marshall	Maximum	36	26	34	48	57	56	53	36	43	57	57	52	56	54	52	50	47	35	20	21	24	23	34	43	51	50	46	43	55	59	61	44.5
	Minimum	25	3	−1	15	36	31	28	25	32	32	44	41	43	35	41	40	30	12	−3	2	10	13	7	24	26	22	32	29	29	34	34	24.9
Nevada	Maximum	37	27	42	54	63	59	45	43	48	66	73	54	66	62	62	57	53	29	13	30	26	26	37	45	54	54	46	47	58	62	64	48.5
	Minimum	26	7	10	24	38	32	29	31	31	33	38	44	46	42	49	46	28	8	−1	3	7	8	8	29	26	34	30	27	29	35	37	26.9
Warrensburg	Maximum	37	25	33	51	58	56	52	44	52	58	58	55	61	55	55	53	48	28	12	10	24	23	36	43	53	49	44	42	55	60	61	44.9
	Minimum	9	−1	2	16	35	29	27	25	29	40	43	39	41	37	43	41	25	9	−3	−1	4	4	18	26	25	36	28	29	27	33	34	24.2
Warsaw	Maximum	37	32	35	53	67	60	55	40	58	65	75	69	68	64	62	62	57	38	14	22	27	26	35	44	58	56	52	45	59	66	62	50.4
	Minimum	29	6	5	17	37	24	30	31	32	35	38	44	46	42	51	48	40	10	0	1	0	2	3	24	23	42	29	23	27	37	27	25.9
Northwest Plateau																																	
Chillicothe§§	Maximum	33	16	34	51	53	55	38	34	42	47	46	45	46	48	49	42	36	14	11	14	29	27	33	45	50	55	45	44	54	62	59	40.5
	Minimum	8	−1	−2	−2	14	26	22	16	19	32	37	38	38	31	32	31	33	11	−6	−4	−2	−1	−2	−1	18	21	29	28	25	33	30	17.8
Grant City	Maximum	29	18	30	53	50	46	36	33	34	44	43	38	39	37	45	39	37	19	8	17	23	27	30	46	48	54	46	43	48	60	61	38.1
	Minimum	16	2	−1	15	29	28	18	19	29	36	35	35	35	30	36	31	19	4	−6	−2	3	0	0	20	20	31	31	29	28	35	29	20.5
Kansas City	Maximum	37	20	40	56	54	56	34	36	43	52	53	47	54	46	51	45	46	15	12	20	22	23	38	48	56	56	44	45	57	63	56	42.7
	Minimum	14	9	13	27	40	33	27	27	33	40	42	39	38	35	42	38	15	3	−2	4	9	7	12	29	32	39	35	36	34	41	40	26.8
Kidder§§	Maximum	30	15	32	50	49	52	28	33	40	45	47	43	55	45	47	42	42	11	8	16	19	20	31	47	49	55	40	42	53	58	54	38.6
	Minimum	5	0	−3	4	16	25	20	20	24	30	36	35	35	31	30	33	32	8	−6	−7	−3	−3	0	1	20	21	27	27	25	27	31	17.5
Lexington§§	Maximum	31	35	23	38	48	46	57	46	45	42	52	54	55	58	48	53	50	43	23	10	20	24	19	35	45	53	53	46	46	57	64	42.5
	Minimum	22	5	6	20	38	30	27	25	34	38	41	39	44	36	42	39	27	12	−2	2	6	7	8	19	27	36	33	32	29	38	33	25.6
Maryville	Maximum	25	23	30	53	49	45	38	33	38	44	43	40	40	38	44	38	39	19	9	16	20	20	33	48	51	54	45	42	54	57	52	38.1
	Minimum	17	1	−3	12	33	27	17	20	29	35	37	35	34	30	36	31	18	4	−5	−3	2	0	1	23	20	29	32	29	23	29	30	20.1
Oregon	Maximum	36	20	36	62	54	47	37	33	40	44	43	43	40	40	44	42	41	17	13	22	26	24	37	54	57	58	48	47	57	65	54	41.3
	Minimum	15	5	4	20	34	29	19	21	30	36	37	35	35	31	38	33	16	3	−4	−2	2	1	5	27	25	33	34	33	29	35	32	22.3
St. Joseph	Maximum	37	17	34	59	51	50	29	32	42	46	45	42	43	43	45	42	42	14	11	19	22	19	35	51	52	56	43	45	56	59	54	39.8
	Minimum	10	6	8	22	35	29	20	25	32	39	40	36	35	33	37	36	14	1	−4	1	4	3	6	30	27	36	35	31	29	36	34	23.4
Trenton	Maximum	28	20	29	49	50	46	38	31	41	44	44	43	43	40	43	42	40	28	10	18	19	21	26	46	45	58	50	40	54	60	57	38.8
	Minimum	20	1	−1	12	36	28	22	19	31	36	40	38	40	33	36	34	28	9	−4	0	4	6	3	19	23	31	32	26	28	38	30	22.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 2-5-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIII COLUMBIA, MO., YEAR, 1929 No. 13

GENERAL SUMMARY

The year 1929, as a whole, was somewhat cooler and decidedly wetter than normal in all sections of Missouri. Notwithstanding it was relatively a cool year, it had one of the longest growing seasons of record. The last general killing frost occurred about the middle of March, and there was no general injurious frost until the last week in October.

The mean annual temperature was 53.5°, or 1.3° below the normal. There were minus departures in all sections, ranging from 1° in the Ozark Plateau and southwestern plain, to 1.5° and 2° in northeastern plain and northwestern plateau, respectively. In the southeastern lowlands the minus departures averaged about 0.7°. The highest temperature for the year was 105°, August 1. The lowest was —23°, February 10. Temperatures reached 90° or higher, on five days in June, fifteen in July, fourteen in August, and five days in September. Values were zero or lower three days in January, five during February, one in November, and three in December. Considering the steady and persistent type of cold weather January and February made one of the coldest two-month periods in nearly thirty years. The temperature fell to the freezing point (32°) or lower on one hundred and ten days. Thirty of those days occurred in January, twenty-seven in February, ten in March, two (locally) each in April and May, two in October, seventeen in November, and twenty in December.

The total precipitation (rain and melted snow) for the year was 46.61 inches, and 7.14 inches more than the sixty years average. All parts of the State were much wetter than normal. The wettest month of the year was May, with 7.52 inches. The four months from March to June, inclusive, were noticeably wet, resulting in frequent river floods, causing much loss, and long delays in putting lands to any crop whatever. For most of Missouri the season for farming operations was the most backward in thirty years or more. Most of July, practically all of August, and most of September, were abnormally dry, the sharp reaction from cool and wet, to sunshiny and hot, adversely affected most growing crops, and farm work. The early part of the autumn was favorable for sowing and germinating winter grains; and the long and open growing and maturing season helped much late corn and legumes. Save unusually fine hay crops of all kinds, it was all in all rather a hard year on the farmer.

THE WEATHER BY MONTHS

JANUARY.—As a future record this month will flock with the relatively few real cold Januarys. The month was mainly cold and wet, the wetness being mostly snow, which accumulated to considerable depths over the northern parts. Minimum temperatures were 32° or lower on thirty days, but the absolute minimum, —13°, fell quite short of low values of some other Januarys. In spite of snow cover the ground was deeply frozen. Outside of the usual chores there was no farm activitiy and little outdoor work of any kind. Ice covered streets and highways caused many accidents and otherwise hampered traffic.

FEBRUARY.—In all outstanding features this month was as much like January as a twin sister. Considering persistent as well as widespread cold, January and February made one of the coldest two-month periods in nearly thirty years. Snows were frequent and deep. Zero and subzero temperatures occurred on five days, the minimum, —23°, being quite well along side of values in other Februarys. In spite of snow cover, the ground froze to unusual depths, in some localities 24 to 36 inches, and 18 inches as a rule. There were no farm activities and up to the 25th little outdoor work of any kind. Peach buds in parts of the Ozark hills were seriously hurt by low temperatures. Wheat was not injured to any extent. Livestock did well as a rule.

MARCH.—In contrast to the outstanding cold weather of the preceding two months, March averaged high in warmth. During the third and fourth weeks summer heat prevailed, the day temperatures going well into the 90's. There was no freezing of consequence after the 18th. Wheat and grass responded quickly to the warmth and moisture. Most fruits were unfavorably, at least unseasonably, advanced. Sowing oats was delayed because of the large surplus of soil moisture given by January and February. There was some local storm damage in the southeast part of the State.

APRIL.—Uuusually wet month, running close to the record in this respect. Mainly mild, with no injurious frosts after the 12th. The Missouri and Mississippi Rivers and most of their tributaries were in flood, resulting in much lowland damage. Wheat and all grasses made fine growth; but farm operations made almost no progress. Thunderstorms with attending squalls were frequent. Tornadoes, doing considerable damage, occurred on two days in the southwest part of the State.

MAY.—The outstanding wet weather of April continued during May; the month also was unseasonably cool, home heating being steadily necessary, adding much to the cost of living. A real snowstorm over the Ozark region on the second day was a noticeable feature. There was too much rain for wheat, the crop being in the blooming stage was adversely affected. The farmer had a hard time of it. Not more than half the corn crop had been planted and much ground not even plowed. There was much damage by flooded streams and by washing away the soil. There was some local hail and wind damage.

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JUNE.—Decidedly unseasonably cool and wet for the first summer month except in the southeastern lowlands where conditions were satisfactory. Elsewhere generally unfavorable and discouraging weather for the farmer. Corn planting continued under wet weather handicaps to the close of the month. Considerable land first intended for corn was put to forage crops. Owing to frequent floods much bottom lands were abandoned. Wheat deteriorated; but hay as well as pastures were above the normal. Nearly all fruits were unfavorably affected by the wet, cool weather. There were a few damaging hail and wind storms.

JULY.—A month of rather unseasonable extremes, running from cool and wet to hot and dry. The first half was made up of wet weather, with river floods, starting back in the spring, while a transition to droughty conditions with almost uninterrupted sunshine prevailed generally after the 16th. The ground soon ran to-gether and got hard on top, unfavorably affectiug pastures and truck crops. Corn was in all stages of growth, from a few inches to knee-high or more, at the same time planting was still going on. The Grand River, for the fourth or fifth time since February, was out of banks. The last half of the month was good harvesting weather. A few local storms.

AUGUST.—One or two short hot spells but rather pleasant from the temperature side. Much sunshine, and persistent and ever spreading drought and low state of humidity were the outstanding features. There were only a few localities that got as much or more than the normal amount of rain. All growing crops everywhere, save in the southeastern lowlands, suffered from lack of rain. Much corn especially, caught in the critical stage of silk and tassel, was seriously iujured. The ground was too hard to plow.

SEPTEMBER.—Except for one or two warm spells, the month

(Continued on Page 53.)

Climatological data for Year, 1929

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain.																				
Brunswick	Chariton	652	51	50.5	100	Aug. 2†	−12	Feb. 10	51	43.92	8.52	Oct.	0.82	Dec.	36.4	116	171	16	178	se.
Clifton Hill	Randolph	731	31	51.5	100	July 24	−16	Feb. 10	21	41.56	6.57	May	1.13	Dec.	33.6	115	164	82	119	.....
Columbia	Boone	784	40	53.2	100	Aug. 2	− 5	Feb. 10	40	46.40	11.98	May	0.40	Aug.	14.7	125	116	110	139	s.
Downing	Schuyler	878	9	50.1	98	Aug. 22	−12	Jan. 7†	21	48.31	9.60	July	0.72	Dec.	32.9	113	159	93	113	sw.
Fayette	Howard	661	50	51.4	100	Aug. 22	−13	Feb. 10	47	41.89	10.03	May	0.53	Dec.	19.5	104	....	....	....	.....
Fulton	Callaway	818	41	52.9	100	Aug. 22	− 7	Nov. 30	38	48.30	11.69	May	0.58	Feb.	16.5	121	163	106	96	.....
Gorin	Scotland	700	..	....	....	.....	....	.....	43	49.02	9.08	July	0.70	Dec.	18.5	93	132	83	150	se.
Hannibal	Marion	534	38	52.0	98	Aug. 2	− 6	Feb. 10	46	40.28	6.15	July	0.66	Dec.	16.9	128	123	96	146	sw.
Jefferson City	Cole	557	42	54.6	100	Aug. 2†	− 6	Feb. 10	46	45.25	10.10	May	0.62	Feb.	17.6	113	149	109	107	s.
Kirksville	Adair	969	41	49.9	95	Aug. 2†	−10	Jan. 7†	48	45.31	6.21	Sept.	0.43	Dec.	32.1	93	158	61	146	nw.
Louisiana	Pike	469	36	52.1	100	Aug. 2	− 8	Feb. 10	49	.....	9.10	July	0.53	Feb.	....	....	195	82	88	s.
Macon	Macon	875	31	50.9	99	Aug. 2	−10	Feb. 9	37	42.89	9.96	April	0.53	Feb.	27.5	105	165	86	114	se.
Mexico	Audrain	800	41	51.5	102	Aug. 2	− 4	Nov. 30	52	45.14	8.91	May	0.83	Feb.	27.3	121	246	2	117	se.
Monroe City	Monroe	748	..	....	....	.....	....	.....	10	44.54	6.67	May	0.33	Dec.	17.2	87	166	84	115	ne.
St. Charles	St. Charles	456	42	55.0	100	Aug. 2	− 4	Nov. 30	52	41.68	11.81	May	1.13	Feb.	26.6	87	113	119	133	s.
St. Louis (1)	St. Louis City	717	56	55.2	99	Aug. 2	3	Jan. 13†	93	46.30	10.09	May	0.88	Feb.	26.2	131	140	100	125	s.
St. Louis (2)	.....do	578	18	54.6	99	Aug. 2†	2	Feb. 9	18	44.38	8.44	May	0.78	Feb.	25.1	128	169	89	107	se.
Shelbina	Shelby	779	..	....	....	.....	....	.....	37	48.50	7.80	April	0.87	Dec.	....	....	....	....	....	.....
Steffenville	Lewis	650	32	51.2	97	Aug. 2	−13	Feb. 10	37	53.22	9.07	July	0.86	Dec.	26.5	103	133[a]	134[a]	97[a]	s.
Unionville	Putnam	1,062	37	49.6	100	Aug. 22	−15	Feb. 9	37	46.27	7.96	July	0.78	Dec.	42.5	92	150	81	134	sw.
Warrenton	Warren	816	48	54.6	100	Aug. 22	− 3	Feb. 9†	40	42.72	8.79	May	0.66	Feb.	22.0	103	119	138	108	sw.
Keokuk, Iowa	Lee, Iowa	574	58	50.6	97	Aug. 22	− 6	Feb. 9	58	38.77	5.75	July	0.69	Dec.	23.7	119	106	90	169	s.
Section means and	extremes	.....	..	52.2	102	Aug. 2	−16	Feb. 10	..	44.98	11.98	May	0.33	Dec.	25.2	110	152	89	124	s.
Southeast Lowlands.																				
Campbell	Dunklin	314	4	59.0	99	Aug. 2	− 6	Dec. 3	4	58.92	8.57	Aug.	1.71	Oct.	11.6	96	177	72	116	s.
Caruthersville	Pemiscot	265	34	60.2	100	Aug. 2†	5	Dec. 3	34	48.17	6.38	July	2.10	Oct.	9.5	93	129	109	127	s.
Doniphan	Ripley	344	26	57.0	99	Aug. 1	− 4	Feb. 10	26	54.80	7.92	Jan.	1.48	Nov.	20.2	94	150	123	92	sw.
Jackson	Cape Girardeau	428	39	54.1	98	Aug. 1	−10	Feb. 10	40	52.30	6.84	May	1.62	Oct.	12.6	112	87	75	203	s.
Marble Hill	Bollinger	470	35	55.9	98	Aug. 2	− 8	Dec. 3	36	62.27	10.08	May	1.58	Nov.	26.0	101	133	96	136	w.
Morehouse	New Madrid	289	..	....	....	.....	....	.....	9	58.12	7.75	Jan.	1.52	Oct.	15.3	101	178[d]	81[d]	102[d]	sw.
Poplar Bluff	Butler	339	26	57.0	98	Aug. 1	− 1	Dec. 3	26	62.34	8.61	Jan.	2.07	Nov.	19.7	106	202	74	89	s.
Sikeston	Scott	318	29	58.1	100	Aug. 1	− 1	Feb. 10	29	55.30	8.73	May	1.31	Oct.	17.2	89	173[a]	56[a]	135[a]	sw.
Cairo, Ill	Alexander, Ill.	359	55	57.4	96	July 28†	5	Feb. 10†	58	42.36	5.44	Sept.	1.08	Oct.	18.1	120	99	92	174	s.
Section means and	extremes	.....	..	57.3	100	Aug. 1†	−10	Feb. 10	..	54.95	10.08	May	1.31	Oct.	16.7	101	148	86	131	s.
Ozark Plateau.																				
Arcadia	Iron	926	49	52.1	94	Aug. 2	− 9	Feb. 10	52	45.22	9.56	May	1.87	Feb.	13.2	91	236	38	91	w.
Aurora	Lawrence	1,370	29	55.7	95	Aug. 1†	−11	Feb. 10	40	46.44	8.06	May	0.69	Dec.	12.0	95	167[c]	69[c]	122[c]	sw.
Birchtree(near)	Shannon	1,000	35	56.2	98	Aug. 1	−12	Feb. 10	36	51.58	7.80	May	1.01	Nov.	16.5	82	197	65	92	se.
Dean	McDonald	1,000	27	56.9	104	July 31†	− 2	Jan. 6†	31	57.29	12.33	May	1.37	Aug.	22.1	73	164	123	78	sw.
Eldon	Miller	934	34	53.1	101	Aug. 2	− 8	Feb. 10†	30	45.32	9.70	May	0.80	Feb.	15.0	93	71[a]	171[a]	104[a]	sw.
Farmington	St. Francis	918	19	54.5	98	July 31	− 7	Feb. 10	33	49.41	12.12	May	1.34	Nov.	18.5	113	139	141	85	sw.
Goodland	Iron	1,000	36	53.6	97	A ug. 1	−17	Feb. 10	37	44.54	9.32	May	1.05	Nov.	22.1	95	182	85	98	s.
Hailey	Barry	1,350	..	....	....	.....	....	.....	5	46.17	8.50	April	0.11	Nov.	18.3	72	198	74	93	w.
Koshkonong	Oregon	958	29	57.0	100	Aug. 1	− 4	Feb. 10	29	50.66	6.92	April	1.11	Nov.	27.5	96	133[c]	79[c]	150[c]	se.
Lebanon	Laclede	1,265	42	52.5	104	Aug. 1	−16	Feb. 10	43	47.90	12.91	May	0.52	Nov.	25.0	96	176	75	114	se.
Lockwood	Dade	1,078	24	56.0	99	Aug. 21†	−12	Feb. 10	34	44.94	9.81	May	0.74	Nov.	15.7	84	187	69	109	ne.
Mountain Grove(near)	Wright	1,463	29	53.8	100	Aug. 1	−12	Feb. 10†	31	45.65	7.28	Oct.	0.93	Nov.	16.1	114	143	128	94	se.
Neosho	Newton	1,011	42	56.2	99	Aug. 1	−20	Feb. 10	47	48.62	9.12	April	0.32	Aug.	22.0	85	215	64	86	sw.
Rolla	Phelps	1,099	30	53.6	98	Aug. 2†	− 8	Feb. 10	46	47.17	8.65	May	0.79	Nov.	18.7	128	....	....	....	s.
Salem(near)	Dent	1,173	26	54.0	97	Aug. 1	−23	Feb. 10	29	51.11	8.21	May	0.86	Nov.	18.4	110	171	89	105	se.
Seligman	Barry	1,542	17	56.3	100	Aug. 6	− 7	Feb. 9	27	57.19	9.95	May	1.38	Nov.	21.8	94	159[d]	100[d]	102[d]	sw.
Seymour(near)	Webster	1,642	24	54.4	98	Aug. 1	−23	Feb. 10	24	48.58	9.40	May	1.15	Nov.	19.0	82	161	100	104	s.
Springfield	Greene	1,350	42	54.8	97	Aug. 1	− 3	Feb. 10	42	40.15	9.77	May	1.01	July	22.3	121	178	89	98	s.
Section means and	extremes	.....	..	54.8	104	July 31†	−23	Feb. 10	..	48.22	12.91	May	0.11	Nov.	19.1	96	169	93	103	sw.
Southwest Plain.																				
Appleton City	St. Clair	853	36	54.3	100	Aug. 1†	− 7	Feb. 10	38	41.47	8.00	May	0.62	Nov.	7.3	101	97[d]	190[d]	74[d]	sw.
Clinton	Henry	765	37	55.7	104	Aug. 1	−10	Feb. 10	43	47.24	12.32	May	1.04	Feb.	16.0	77	164	101	100	sw.
Harrisonville	Cass	904	53	51.8	103	Aug. 24	− 9	Feb. 9	55	41.94	9.19	June	0.31	Dec.	17.5	93	66	66	233	n.
Lamar	Barton	980	43	55.0	100	July 30	−13	Feb. 10	49	40.55	11.89	May	0.83	Dec.	16.6	97	164	100	101	sw.
Lamonte	Pettis	867	29	53.5	105	Aug. 1	−12	Feb. 10	43	51.56	13.68	May	1.23	Nov.	24.6	111	203	86	76	sw.
Marshall	Saline	779	40	....	99	Aug. 1	−14	Feb. 10	40	.....	.....	.....	0.83	Nov.	28.0	....	....	....	....	.....
Nevada	Vernon	862	37	55.3	100	Aug. 21	− 7	Feb. 9	38	41.84	12.09	May	0.45	Dec.	11.6	79	174	78	113	s.
Warrensburg	Johnson	878	43	53.8	103	Aug. 1	− 8	Feb. 9	50	53.40	10.53	May	0.45	Dec.	16.3	100	137[e]	95[e]	111[e]	sw.
Warsaw	Benton	687	30	55.6	104	Aug. 1	−16	Feb. 10	35	41.32	10.30	May	0.51	Nov.	16.0	78	136	118	111	s.
Section means and	extremes	.....	..	54.4	105	Aug. 1	−16	Feb. 10	..	44.92	13.68	May	0.31	Dec.	17.1	92	145	105	115	sw.
Northwest Plateau.																				
Bethany	Harrison	916	36	....	....	.....	−23	Feb. 10	36	.....	.....	.....	.....	.....	....	....	....	....	....	.....
Chillicothe	Livingston	779	21	49.9	101	Aug. 21†	−22	Feb. 10	24	43.37	7.78	Oct.	0.39	Dec.	33.5	111	183	69	113	ne.
Conception	Nodaway	980	41	50.6	100	Aug. 22	−18	Feb. 9	46	47.85	11.35	July	0.20	Dec.	26.5	94	134	120	111	se.
Edgerton	Platte	856	10	51.6	101	Aug. 21	−21	Feb. 10	18	36.42	8.13	June	0.67	Dec.	18.3	113	210[b]	21[b]	132[b]	s.
Grant City	Worth	1,134	26	49.5	98	Aug. 21†	−14	Feb. 9	38	32.17	5.42	July	0.22	Dec.	35.7	98	127	174	64	sw.
Kansas City	Jackson	963	41	53.4	100	Aug. 1	− 5	Feb. 9	41	42.66	8.09	June	0.55	July	23.2	117	124	121	120	s.
Kidder	Caldwell	1,020	37	48.0	100	Aug. 21	−16	Feb. 10	42	43.41	10.26	June	0.83	Dec.	26.6	106	142	84	139	se.
King City	Gentry	1,095	..	....	....	.....	....	.....	4	46.21	11.27	June	0.28	Dec.	39.7	116	....	....	....	.....
Lexington	Lafayette	688	43	53.1	96	Aug. 2†	− 7	Feb. 10	48	43.99	7.48	Oct..	0.51	Dec.	39.7	124	170	123	72	sw.
Maryville	Nodaway	1,036	40	49.7	99	Aug. 2	−15	Feb. 9	36	46.18	11.42	June	0.28	Dec.	23.3	115	156	102	107	n.
Oregon	Holt	1,048	74	52.6	104	Aug. 21	−12	Feb. 9	74	45.93	9.67	June	0.15	Dec.	24.0	101	176	90	99	sw.
St. Joseph	Buchanan	967	22	51.8	101	Aug. 2	−10	Feb. 9	58	39.36	6.93	April	0.18	Dec.	22.1	120	153	95	117	se.
Tarkio	Atchison	916	27	48.5	99	Aug. 21	−13	Feb. 9	37	46.35	10.78	July	0.37	Dec.	51.3	96	137	92	136	se.
Trenton	Grundy	822	34	50.7	102	Aug. 21†	−18	Feb. 10	35	46.07	8.30	April	0.44	Dec.	25.5	116	175	97	93	s.
Section means and	extremes	.....	..	50.8	104	Aug. 21	−23	Feb. 10	..	43.07	11.42	June	0.15	Dec.	30.0	110	157	99	109	se.
State means and	extremes	.....	..	53.5	105	Aug. 1	−23	Feb. 10	..	46.61	13.68	May	0.11	Nov.	22.3	102	154	95	116	s.

† Also on other dates.

a, b, c, indicate the number of days missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Mean Temperatures for the Year 1929, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	19.6	− 7.2	21.3	− 7.8	46.7	+ 4.8	56.0	+ 1.9	61.6	− 2.7	71.2	− 2.0	78.4	+ 2.7	73.6	− 0.2	61.1	− 5.6	53.5	− 1.7	35.9	− 5.6	27.1	− 3.5	50.5	− 2.2
Clifton Hill	19.7	− 9.0	22.9	− 6.3	46.7	+ 4.5	55.2	+ 1.7	60.4	− 3.8	69.6	− 3.4	76.8	+ 0.4	75.9	− 0.3	66.8	− 2.1	56.6	− 0.6	36.5	− 7.3	30.7	− 0.4	51.5	− 2.2
Columbia	23.5	− 5.7	25.4	− 6.3	48.5	+ 5.9	57.5	+ 2.6	61.0	− 3.3	71.2	− 1.6	77.8	+ 0.9	76.6	+ 0.1	66.9	− 1.3	57.4	+ 0.8	38.1	− 5.2	34.4	+ 1.2	53.2	− 1.0
Downing	15.6	.....	19.8	.....	46.1	.....	54.2	.....	60.3	.....	69.6	.....	75.6	.....	73.3	.....	65.3	.....	55.2	.....	36.6[f]	.....	29.6	.....	50.1	.....
Fayette	21.6	− 5.6	22.8	− 7.4	46.1	+ 4.0	55.2	+ 0.9	59.6	− 4.7	69.8	− 3.5	76.8	− 0.6	75.0	− 1.1	65.6	− 2.7	55.4	− 1.3	36.3	− 6.0	32.6	+ 1.4	51.4	− 2.2
Fulton	23.4	− 6.3	24.8	− 7.9	47.6	+ 3.2	56.4	+ 2.1	61.0	− 4.0	71.2	− 2.4	77.4	− 0.5	76.0	− 0.5	67.2	− 1.7	57.0	− 0.7	38.4	− 6.1	34.8	+ 1.1	52.9	− 2.0
Hannibal	21.0	− 6.1	23.4	− 6.3	48.0	+ 7.0	56.3	+ 2.9	60.8	− 2.8	70.6	− 1.9	77.2	+ 0.4	74.1	− 0.9	66.4	− 1.3	56.1	+ 0.1	37.8	− 4.3	32.0	+ 0.5	52.0	− 1.1
Jefferson City	26.7	− 3.1	25.0	− 5.9	49.6	+ 6.4	58.4	+ 2.3	62.4	− 2.5	73.4	− 0.6	80.5	+ 2.4	78.6	+ 1.9	69.1	0.0	58.4	+ 1.7	39.0	− 5.1	34.2	+ 1.4	54.6	− 0.1
Kirksville	16.7	− 8.2	19.6	− 6.3	44.8	+ 5.3	53.8	+ 2.1	59.9	− 2.6	69.8	− 2.4	75.9	− 0.2	73.4	− 0.6	65.0	− 1.0	55.0	+ 0.3	35.8	− 4.7	29.3	− 0.3	49.9	− 1.6
Louisiana	23.2	− 4.7	24.6	− 5.1	50.2	+ 6.9	56.8	+ 3.0	61.3	− 2.5	71.4	− 0.7	76.4	0.0	71.9	− 3.1	64.2	− 3.7	55.7	− 0.6	37.8	− 6.4	32.1	+ 0.6	52.1	− 1.4
Macon	18.3	−10.2	20.8	− 7.9	46.2	+ 3.6	54.6	+ 1.5	60.6	− 3.3	70.4	− 2.6	77.3	− 0.1	74.8	− 1.5	65.6	− 2.7	55.0	− 1.8	36.7	− 6.7	30.0	− 0.4	50.9	− 2.7
Mexico	20.6	− 7.7	23.6	− 5.7	44.9	+ 2.9	54.8	+ 1.1	60.5	− 3.8	70.6	− 3.1	77.8	+ 0.5	73.4	− 2.7	66.2	− 2.4	55.8	− 0.6	36.9	− 6.1	32.9	+ 1.1	51.5	− 2.2
St. Charles	27.3	− 3.8	27.0	− 5.5	51.2	+ 6.8	58.7	+ 3.3	62.0	− 1.0	72.4	− 1.8	79.6	+ 1.5	76.0	− 2.1	69.0	+ 1.1	58.4	+ 0.3	41.0	− 4.5	37.0	+ 2.1	55.0	− 0.3
St. Louis(1)	27.6	− 3.5	28.8	− 6.0	50.8	+ 6.7	58.2	+ 2.1	62.2	− 4.8	72.8	− 2.2	79.8	+ 1.0	76.4	− 1.1	68.7	− 1.8	58.4	− 0.4	41.5	− 3.9	37.5	+ 2.6	55.2	− 0.9
St. Louis(2)	26.2	− 4.0	27.8	− 4.4	50.6	+ 7.0	57.8	+ 2.6	61.7	− 4.4	72.0	− 2.9	79.0	− 1.1	75.6	− 1.6	68.4	− 1.8	57.7	− 1.2	41.0	− 5.5	36.9	+ 2.6	54.6	− 1.2
Steffenville	19.4	− 8.4	21.9	− 6.5	45.8[a]	+ 3.4	54.5	+ 1.6	59.8[b]	− 4.3	70.2	− 3.0	76.3	− 1.7	74.8	− 1.9	66.3	− 2.8	56.2	− 1.5	37.6	− 6.2	31.2	+ 0.6	51.2	− 2.6
Unionville	15.2	− 8.3	18.2	− 7.2	44.3	+ 5.7	53.7	+ 3.0	59.4	− 3.0	70.0	− 1.8	75.2	− 1.4	73.7	− 1.3	65.0	− 2.2	54.9	− 0.5	36.3	− 3.9	29.7	+ 2.3	49.6	− 1.6
Warrenton	26.6	− 2.4	27.3	− 2.6	51.2	+ 9.0	58.4	+ 3.9	62.6	− 2.4	71.6	− 2.0	78.3	+ 0.5	76.0	− 0.4	68.4	− 0.4	57.8	+ 2.2	40.2	− 2.7	36.9	+ 4.9	54.6	+ 0.6
Keokuk, Ia	17.6	− 7.3	21.4	− 6.9	46.0	+ 7.1	54.4	+ 2.1	60.4	− 3.4	70.0	− 2.5	77.0	+ 0.3	73.2	− 1.8	65.4	− 2.1	54.8	− 0.6	36.6	− 4.5	30.0	+ 0.4	50.6	− 1.6
Section Means	21.6	− 6.2	23.5	− 6.2	47.6	+ 5.6	56.0	+ 2.3	60.9	− 3.3	70.9	− 2.2	77.5	+ 0.3	74.9	− 1.0	66.3	− 1.9	56.1	− 0.5	37.9	− 5.3	32.6	+ 1.0	52.2	− 1.5
Southeast Lowlands																										
Campbell	37.2	.....	36.8	.....	57.4	.....	65.2	.....	68.9	.....	74.8	.....	79.2	.....	76.2	.....	70.4	.....	58.7	.....	43.6	.....	39.9	.....	59.0	.....
Caruthersville	38.8	− 0.2	35.3	− 3.6	55.8	+ 4.6	63.4	+ 3.2	67.5	− 2.0	77.8	0.0	80.8	+ 0.2	78.0	− 1.7	72.6	− 0.8	61.6	− 0.1	46.8	− 3.1	43.5	+ 3.5	60.2	0.0
Doniphan	33.0	− 3.2	30.6	− 7.5	52.0	+ 2.6	60.4	+ 2.4	63.8	− 3.1	73.0	− 1.8	78.8	+ 0.6	75.6	− 1.8	70.8	0.0	59.8	+ 1.4	45.2	− 2.4	40.5	+ 3.1	57.0	− 0.8
Jackson	31.9	− 2.1	29.1	− 6.4	49.6	+ 2.4	57.4	+ 0.5	61.8	− 4.0	69.5	− 4.6	76.4	− 1.0	73.2	− 3.0	67.6	− 2.3	55.8	− 2.2	40.8	− 5.9	36.0	− 0.6	54.1	− 2.4
Marble Hill	31.5	− 3.3	29.4	− 5.9	51.6	+ 4.2	59.6	+ 2.9	64.0	− 1.7	71.6	− 2.3	78.6	+ 1.3	74.6	− 2.4	69.4	− 1.0	58.2	+ 0.2	42.9	− 1.5	39.2	+ 3.0	55.9	− 0.5
Poplar Bluff	33.4	− 3.2	31.0	− 5.3	52.4	+ 3.6	60.7	+ 1.5	65.0	− 3.0	73.3	− 2.1	78.7	0.0	75.7	− 2.3	70.1	− 1.2	58.8	− 1.5	44.2	− 3.2	40.2	+ 3.4	57.0	− 1.1
Sikeston	35.4	− 2.2	31.0[a]	− 5.6	53.2	+ 4.8	61.4	+ 3.5	66.2	− 2.4	75.5	+ 1.0	80.6	+ 2.5	76.6	− 1.0	70.8	+ 0.2	60.2	+ 1.4	45.4	− 2.0	40.7	+ 3.2	58.1	+ 0.3
Cairo, Ill	33.4	− 1.5	31.4	− 7.1	52.9	+ 5.7	61.5	+ 3.4	65.5	− 2.9	74.4	− 1.9	79.6	0.0	75.8	− 2.0	70.0	− 1.5	59.5	− 0.9	44.6	− 2.7	40.3	+ 2.5	57.4	− 0.7
Section means	34.4	− 2.2	31.8	− 5.9	53.1	+ 4.0	61.2	+ 2.5	65.3	− 2.7	73.7	− 1.7	79.1	+ 0.4	75.7	− 2.0	70.2	− 0.9	59.1	− 0.3	44.2	− 3.0	40.0	+ 2.6	57.3	− 0.7
Ozark Plateau																										
Arcadia	27.4	− 4.7	25.9	− 7.6	47.4	+ 2.6	57.0	+ 1.7	59.6	− 5.0	68.2	− 3.4	75.4	− 0.5	71.0	− 3.5	65.0	− 2.6	55.0	− 1.1	38.4	− 5.6	36.2	+ 1.9	52.1	− 2.3
Aurora	31.2	− 2.3	27.4	− 6.2	50.7	+ 5.1	60.6	+ 4.9	63.9[g]	− 2.0	71.6	− 2.2	77.6	− 0.2	77.4	+ 0.6	68.5	− 2.2	58.6	+ 0.1	40.3	− 5.7	40.2	+ 5.1	55.7	− 0.4
Birchtree(near)	32.0	− 2.4	28.8	− 6.1	52.0	+ 4.6	59.3	+ 2.5	62.4	− 2.8	71.9	− 0.8	77.8	+ 1.4	77.4	+ 1.5	68.7[a]	− 0.8	58.4	+ 0.2	44.1	− 2.4	42.2	+ 6.4	56.2	+ 0.1
Dean	32.6[k]	− 3.6	30.9[e]	− 3.9	51.5	+ 2.6	61.6	+ 4.3	64.7	− 1.1	73.4	+ 0.4	79.0	+ 1.4	80.2	+ 2.7	70.2	− 0.5	59.4	− 0.5	39.9	− 9.8	39.6	+ 2.2	56.9	− 0.5
Eldon	25.4[c]	− 6.0	23.8	− 8.1	47.0	+ 3.5	57.2	+ 1.8	60.5[b]	− 4.0	70.3[c]	− 2.9	78.3[c]	+ 1.3	77.3	+ 0.9	67.7	− 1.6	56.8[b]	− 0.9	37.6[d]	− 7.6	35.3	+ 1.0	53.1	− 1.9
Farmington	29.2	− 3.6	27.8	− 7.8	50.7	+ 3.8	58.0	+ 1.1	61.8	− 2.0	70.6	− 2.0	77.6	+ 2.3	73.9	− 0.9	67.5	− 1.8	57.6	+ 1.2	40.6	− 3.7	38.6	+ 1.6	54.5	− 1.0
Goodland	30.3	− 2.3	27.0	− 5.9	49.3	+ 4.4	57.8	+ 3.2	60.1	− 4.4	68.8	− 3.3	75.8	+ 0.2	72.2	− 2.3	67.4	+ 0.1	56.4	+ 0.6	40.3	− 4.3	38.2	+ 3.8	53.6	− 0.8
Greenville	32.0[b]	.....	.....	.....	51.0[f]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Koshkonong	33.2	− 3.3	30.2	− 7.3	52.6	+ 3.0	60.6[a]	+ 2.8	64.4	− 2.4	73.2[b]	− 1.1	79.2	+ 0.9	76.8	− 0.9	69.5	− 1.4	59.3	− 0.7	43.6	− 5.8	41.5	+ 3.9	57.0	− 1.0
Lebanon	26.6	− 6.4	23.1	−10.8	46.8	+ 1.4	56.0	+ 0.3	59.2	− 6.4	69.2	− 3.9	78.4	+ 1.5	74.5	− 1.8	67.3	− 2.2	57.4	− 0.6	37.4	− 8.6	34.6	− 0.4	52.5	− 3.2
Lockwood	30.7	− 2.6	27.3	− 8.2	50.2	+ 2.3	59.8	+ 3.8	62.8	− 1.8	72.2	− 1.8	79.2	+ 1.6	79.3	− 2.1	70.6	− 0.7	59.4	+ 0.8	40.8	− 6.9	39.4	+ 3.9	56.0	− 1.0
Mountain Grove(near)	27.9	− 5.3	24.6	− 9.2	48.2	+ 2.2	56.2	+ 2.0	60.1	− 3.8	70.4[c]	− 1.2	78.6	− 2.6	76.1	+ 1.0	67.8	− 0.6	57.6	0.0	40.0	− 6.6	37.6	+ 3.3	53.8	− 1.7
Neosho	33.4	− 1.7	28.4	− 8.2	51.1	+ 2.9	60.7	+ 2.7	63.4	− 2.8	72.5	− 1.4	77.6	0.0	78.3	+ 1.4	69.4	− 0.9	58.8	− 0.4	40.2	− 7.0	40.9	+ 4.2	56.2	− 0.9
Rolla	27.6	− 3.7	27.0	− 8.2	50.4	+ 5.4	58.8	+ 3.8	60.6	− 3.9	70.4	− 2.4	78.0	+ 0.6	75.2	− 0.6	66.0	− 2.0	54.1	− 1.8	37.6	− 7.3	37.7	+ 4.1	53.6	− 1.3
Salem(near)	29.5	− 3.4	26.4	− 8.1	49.6	+ 2.7	57.7	+ 2.1	61.0	− 4.3	69.4	− 3.4	77.4	+ 0.5	74.2	− 1.9	66.7	− 2.8	57.4	− 0.6	39.7	− 7.1	38.8	+ 3.6	54.0	− 1.9
Seligman	34.2	− 0.5	28.8	− 7.4	52.0[b]	+ 5.8	59.8[a]	+ 4.0	62.4[a]	− 2.5	71.8	− 0.7	77.9[a]	+ 1.3	79.1	+ 3.5	69.2	+ 0.4	59.2[a]	+ 0.9	40.9	− 6.3	40.0[b]	+ 3.4	56.3	+ 0.2
Seymour(near)	30.2	− 4.1	25.7	− 6.7	49.8	+ 4.6	58.5	+ 3.1	61.4	− 2.7	70.7	− 1.3	77.5	+ 2.0	75.0	0.0	67.7	− 0.9	56.2	− 1.3	40.2	− 5.9	39.6	+ 5.2	54.4	− 0.7
Springfield	29.4	− 4.1	26.5	− 8.7	49.4	+ 4.2	58.9	+ 2.9	61.1	− 3.4	71.0	− 1.5	78.2	+ 1.4	77.0	+ 1.3	68.5	− 0.4	58.6	+ 0.4	39.7	− 6.0	39.6	+ 3.4	54.8	− 0.9
Section Means	30.2	− 3.5	27.0	− 7.6	50.0	+ 3.4	58.7	+ 2.8	61.7	− 3.2	70.7	− 2.0	77.9	+ 0.8	76.1	− 0.1	68.1	− 1.2	57.7	− 0.2	40.1	− 6.3	38.8	+ 3.3	54.8	− 1.1
Southwest Plain																										
Appleton City	26.0	− 5.3	26.2	− 6.1	49.4	+ 4.8	57.9	+ 2.1	61.6	− 3.5	71.7	− 3.1	78.0	− 0.3	78.8[d]	+ 1.0	68.7	− 1.6	58.7	− 0.4	38.4	− 7.7	36.3	+ 2.0	54.3	− 1.5
Clinton	26.2	− 5.2	26.2	− 5.7	49.8	+ 5.5	58.9	+ 3.2	64.0	− 1.2	74.2	+ 0.8	80.4	+ 2.9	80.8	+ 4.0	70.8	+ 0.6	60.5	+ 1.9	40.0	− 7.3	36.1	+ 1.7	55.7	+ 0.1
Harrisonville	20.8	− 6.4	22.7	− 7.0	46.0	+ 5.1	55.0	+ 1.2	59.4	− 4.6	70.2	− 3.2	76.4	− 1.4	77.1	+ 1.3	66.9	− 1.4	57.2	+ 1.2	36.6	− 5.8	33.0	+ 1.8	51.8	− 1.6
Lamar	28.2	− 4.2	25.4	− 9.1	48.8	+ 2.6	58.6	+ 2.0	61.8	− 4.1	72.4	− 2.0	78.8	+ 0.3	78.4	+ 0.9	70.0	− 0.6	59.5	+ 0.6	39.9	− 6.7	37.6	+ 2.4	55.0	− 1.5
Lamonte	23.8	− 4.9	24.2	− 7.4	48.6	+ 4.9	56.9	+ 1.8	61.6	− 3.1	72.4	− 1.9	79.1	− 0.4	78.4	+ 1.7	67.4	− 2.7	58.0	0.0	37.9	− 6.5	35.4	− 0.8	53.5	− 1.6
Marshall	22.6	− 5.0	24.2	− 5.3	49.8	+ 7.3	58.3	+ 3.9	64.2	+ 0.1	....	.....	.....	.....	76.6[b]	+ 1.0	68.0	− 0.3	57.9	+ 1.3	38.6	− 7.0	34.7	+ 3.1	....	.....
Nevada	28.4	− 3.3	28.0	− 3.9	50.2	+ 5.9	59.2	+ 4.1	62.5	− 2.1	72.0	− 1.6	77.8	− 2.4	78.2	+ 1.3	69.7	+ 0.6	59.7	+ 2.4	39.8	− 4.6	37.7	+ 3.8	55.3	0.0
Warrensburg	24.2	− 4.7	24.2[b]	− 7.1	51.4[e]	+ 7.8	57.1	+ 1.0	61.0	− 4.3	70.0[e]	− 4.2	78.2	− 0.6	78.6	+ 1.6	69.4[i]	− 0.7	58.0[b]	− 0.1	38.3	− 6.6	34.6	+ 1.2	53.8	− 1.4
Warsaw	29.2	− 3.6	27.4	− 6.4	50.3	+ 3.4	59.6	+ 3.8	62.9	− 2.9	72.0	− 1.7	79.6	+ 1.3	79.4	+ 2.0	69.6	− 0.4	58.4	− 0.7	40.1	− 7.4	38.2	+ 3.4	55.6	− 0.8
Section Means	25.5	− 4.7	25.1	− 6.8	49.4	+ 5.3	57.9	+ 2.6	62.1	− 2.9	71.9	− 2.1	78.5	− 0.1	78.5	+ 1.6	68.6	− 1.1	58.7	+ 0.7	38.8	− 6.6	35.7	+ 2.1	54.4	− 1.0
Northwest Plateau																										
Bethany	15.9	− 8.7	18.8	− 8.2	44.5	+ 4.5	54.0	+ 2.8	60.5	− 2.1	69.8	− 2.6	75.6[g]	− 0.4	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chillicothe	15.6	−13.2	18.0	−14.5	44.8	+ 3.2	54.1	+ 0.8	59.8	− 7.3	69.8	− 4.4	76.6	− 3.6	75.0	− 1.1	66.0	− 3.6	55.2	− 3.0	35.0	− 7.6	29.2	− 6.4	49.9	− 5.1
Conception	15.6	− 9.2	19.0	− 8.1	44.7	+ 5.2	55.2	+ 3.3	61.2	− 0.8	71.0	− 0.6	77.6	+ 1.2	75.5	+ 0.9	65.0	− 2.2	56.1	+ 0.6	36.0	− 5.4	29.8	+ 0.5	50.6	− 1.2
Edgerton	20.4[c]	.....	21.9	.....	46.7[a]	.....	55.6[d]	.....	60.4[a]	.....	71.0[b]	.....	77.4	.....	76.0[d]	.....	66.3[c]	.....	56.4	.....	36.5[b]	.....	30.9[b]	.....	51.6	.....
Grant City	14.8	−10.1	17.9	− 9.4	43.2	+ 1.9	54.2	+ 2.7	59.6	− 2.5	69.8	− 1.5	75.4	− 0.8	74.8	− 0.1	64.7	− 2.3	55.0	− 0.4	35.2	− 7.2	29.3	+ 1.6	49.5	− 2.3
Kansas City	21.0	− 7.2	24.0	− 7.2	48.2	+ 5.5	57.0	+ 2.2	61.2	− 3.6	72.4	− 1.2	79.0	+ 0.9	78.2	+ 1.6	67.8	− 1.1	58.8	+ 1.1	38.6	− 5.1	34.8	+ 2.3	53.4	− 1.0
Kidder	13.8	−13.1	16.9	−10.9	42.0	+ 0.8	51.8	− 0.6	57.5	− 5.6	67.8	− 4.6	74.8	− 2.1	73.1	− 2.6	63.7	− 4.0	53.4	− 3.0	33.5	− 8.9	28.0	− 1.7	48.0	− 4.7
Lexington	22.4	− 5.1	24.6	− 4.8	48.6	+ 5.7	57.4	+ 3.3	62.6	− 1.8	72.8	− 0.0	79.1	+ 2.0	76.6	+ 0.6	65.6	− 2.9	55.2	− 2.3	38.8	− 5.2	34.0	+ 2.5	53.1	− 0.7
Maryville	15.8	− 6.6	19.0	− 5.1	43.0	+ 5.8	54.2	+ 4.1	60.0	− 1.1	69.4	− 0.2	76.2	+ 0.6	74.8[c]	+ 1.2	64.6	− 0.8	54.6	+ 1.3	35.2	− 3.8	29.1	+ 2.8	49.7	− 0.2
Oregon	18.9	− 5.0	22.8	− 5.4	46.3	+ 7.0	57.3	+ 3.4	62.3	− 0.9	72.8	+ 0.5	79.1	+ 3.5	78.8	+ 3.8	67.2	+ 0.2	57.2	+ 2.3	37.2	− 3.1	31.8	+ 3.3	52.6	+ 0.8
St. Joseph	18.2	− 9.3	21.8	− 9.8	46.4	+ 3.9	56.4	+ 2.6	61.4	− 2.8	71.4	− 2.3	78.2	− 0.4	77.0	+ 0.3	66.6	− 2.2	56.8	+ 0.1	36.1	− 7.5	31.6	+ 1.4	51.8	− 2.2
Tarkio	13.8	− 9.1	18.8	− 9.2	42.0	+ 1.4	52.8	+ 0.6	57.0	− 6.3	68.5	− 4.2	74.0	− 3.0	73.6	− 2.0	64.0	− 2.6	54.6	− 0.9	34.2	− 6.4	28.8	+ 2.9	48.5	− 3.2
Trenton	16.8	− 9.9	19.6	− 8.9	44.6	+ 3.4	54.6	+ 2.0	60.2	− 3.6	71.0	− 1.6	77.8	+ 0.9	75.5	+ 0.3	66.3	− 1.1	56.2	− 0.1	35.7	− 6.7	30.6	+ 1.0	50.7	− 2.0
Section Means	17.2	− 8.9	20.2	− 8.5	45.0	+ 4.0	55.1	+ 2.4	60.3	− 3.0	70.6	− 1.9	77.0	− 0.1	75.7	+ 0.3	65.6	− 2.1	55.8	− 0.4	36.0	− 5.6	30.6	+ 0.9	50.8	− 2.0
State means	25.1	− 5.4	25.0	− 7.4	48.6	+ 4.7	57.4	+ 2.3	61.7	− 2.9	71.3	− 1.9	77.8	+ 0.5	76.0	0.0	67.4	− 1.6	57.2	− 0.2	39.0	− 5.4	35.2	+ 1.3	53.5	− 1.3

Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days, etc.

Monthly and Annual Precipitation for the Year 1929, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Boonville	1.94	+0.07	1.06	−1.36	2.44	−0.59	6.24	+2.33	11.31	+6.08	5.82	+0.35	2.31	−1.61	1.24	−2.49	2.87	−1.82	6.66	+3.83	1.15	−1.16	0.60	−1.31	43.64	+2.32
Brunswick	3.41	+1.78	1.85	0.00	3.34	+0.78	6.88	+3.40	6.76	+1.87	6.22	+1.03	0.90	−3.74	1.82	−2.07	2.52	−1.87	8.52	+5.79	0.88	−1.09	0.82	−0.80	43.92	+5.08
Clifton Hill	2.96	+1.36	1.56	+0.23	5.71	+3.06	5.55	+1.19	6.57	+1.43	4.01	−0.33	2.73	−1.15	1.43	−2.60	2.50	−2.36	6.08	+3.96	1.33	−0.58	1.13	−0.27	41.56	+3.94
Columbia	2.09	+0.17	1.03	−1.01	4.05	+1.11	5.74	+1.97	11.98	+7.52	7.49	+2.73	1.49	−2.00	0.40	−3.20	3.06	−1.29	6.96	+4.35	1.23	−0.97	0.88	−0.98	46.40	+8.40
Downing	2.60	+0.87	1.14	−0.26	3.29	+0.83	7.13	+3.38	2.87	−1.54	5.99	+1.61	9.60	+4.67	2.87	−0.65	4.69	−0.02	5.91	+3.71	1.50	−0.13	0.72	−0.74	48.31	+11.73
Fayette	2.49	+0.50	1.32	−0.58	2.62	−0.19	6.16	+2.62	10.03	+5.41	4.03	−0.51	3.70	+0.05	1.11	−2.11	1.92	−2.91	6.89	+4.41	1.09	−0.91	0.53	−1.10	41.89	+4.68
Fulton	2.56	+0.21	0.58	−1.31	2.86	−0.18	4.75	+0.42	11.69	+6.92	8.78	+4.58	4.19	+0.20	0.92	−2.59	3.79	−0.60	6.08	+3.33	1.35	−0.90	0.75	−1.17	48.30	+8.91
Gorin	3.45	+1.90	0.95	−0.54	3.21	+0.75	7.47	+3.47	2.26	−2.35	4.83	+0.92	9.08	+5.05	1.58	−1.42	6.97	+2.68	6.77	+4.39	1.75	−0.21	0.70	−0.99	49.02	+13.65
Hannibal	3.33	+1.61	0.84	−1.02	5.11	+2.51	3.85	+0.66	4.92	+0.57	4.80	+0.90	6.15	+3.09	1.34	−2.00	3.18	−0.79	4.67	+2.28	1.43	−0.63	0.66	−0.88	40.28	+6.27
Hermann	2.95	+0.80	0.56	−1.67	4.95	+1.94	4.34	+0.40	8.18	+3.80	5.20	+0.88	5.25	+1.60	1.29	−1.90	1.81	−2.22	5.76	+2.97	1.53	−1.19	1.19	−0.63	43.01	+4.78
Jefferson City	2.47	+0.25	0.62	−1.47	4.38	+1.56	5.12	+1.58	10.10	+5.55	5.94	+1.92	2.18	−1.27	3.29	+0.23	2.92	−0.36	5.21	+2.62	1.46	−0.81	1.56	−0.29	45.25	+9.51
Kirksville	3.63	+2.10	1.50	−0.32	4.01	+1.24	6.19	+2.55	2.93	−2.28	5.34	+1.07	5.08	+0.63	2.40	−0.92	6.21	+1.90	6.14	+3.41	1.45	−0.31	0.43	−1.21	45.31	+7.86
Louisiana	.....	.....	0.53	−1.82	4.41	+1.51	5.10	+1.72	8.80	+4.24	6.55	+2.60	9.10	+5.98	2.08	−1.65	3.92	−0.03	5.60	+2.97	1.70	−0.58	1.60	−0.09	.....	.....
Lucerne	2.55	.....	1.44	.....	1.53	.....	6 88	.....	2.52	.....	5.09	.....	7.42	.....	2.52	.....	6.69	.....	4.80	.....	0.71	.....	.....	.....	.....	.....
Macon	2.40	+0.75	0.53	−1.42	2.59	−0.10	9.96	+6.77	5.72	+1.15	4.95	+0.54	1.45	−2.31	2.12	−1.16	2.39	−1.82	7.94	+5.21	1.78	−0.15	1.06	−0.34	42.89	+7.12
Mexico	3.12	+1.07	0.83	−1.38	3.41	+0.62	5.37	+1.70	8.91	+4.15	8.60	+3.82	2.21	−1.54	1.58	−1.67	2.64	−2.04	5.19	+2.81	2.14	−0.18	1.14	−0 86	45.14	+6.50
Milan	1.80	.....	1.40	.....	2.15	.....	6.46	.....	4.65	.....	6.53	.....	5.36	.....	2.07	.....	4.72	.....	5.00	.....	1.15	.....	0.65	.....	41.94	.....
Monroe City	2.76	.....	0.56	.....	6.13	.....	4.89	.....	6.67	.....	4.60	.....	5.77	.....	2.37	.....	3.25	.....	5.23	.....	1.98	.....	0.33	.....	44.54	.....
Pacific	2.42	+0.01	0.76	−1.58	4.42	+0.71	7.37	+3.29	10.29	+5.30	6.49	+2.12	3.37	−0.71	2.01	−1.81	2.32	−1.54	6.55	+3.60	1.80	−0.95	2.54	+0.48	50.34	+8.92
St. Charles	2.16	−0.11	1.13	−1.50	4.99	+1.90	4.30	+0.62	11.81	+7.63	4.33	+0.37	2.06	−1.17	1.70	−1.76	2.36	−0.92	3.63	+0.96	1.55	−0.99	1.66	−0.21	41.68	+4.82
St. Louis(1)	2.11	−0.23	0.88	−1.68	5.33	+1.95	6.99	+3.18	10.09	+5.75	3.65	−0.17	2.67	−0.31	3.40	+0.41	1.71	−1.75	4.99	+2.27	1.41	−1.42	3 07	+0.86	46.30	+8.86
St. Louis(2)	2.46	−0.61	0.78	−1.53	5.25	+2.30	6.72	+2.71	8.44	+4.20	2.98	−0.78	2.85	+0.10	3.21	−2.40	1.68	−2.96	4.91	+1.12	2.16	−0.15	2.94	+0.84	44.38	+2.84
Shelbina	2.76	+1.04	1.54	−0.38	4.45	+1.60	7.80	+4.27	6.96	+1.98	4.86	+0.15	5.62	−1.46	2.68	−0.17	3.54	−0.44	5.34	+2.62	2.08	0.00	0.87	−0.74	48.50	+8.47
Steffenville	2.86	+0.67	1.35	−0.50	5.90	+2.99	7.20	+3.59	5.00	+0.05	5.13	+1.03	9.07	+4.64	2.80	−0.67	4.55	+0.36	7.15	+5.03	1.35	−0.58	0.86	−0.70	53.22	+15.91
Union	3.16	+1.84	0.74	−0.66	4.57	+1.03	5.05	+0.42	8.07	+3.92	5.67	+1.86	3.09	+0.35	2.14	−3.03	3.13	−1.02	6.35	+2.61	1.67	−0.90	1.76	−0.74	45.40	+5.68
Unionville	4.35	+2.51	1 30	−0.53	1.40	−0.99	6.60	+2.79	2.61	−2.35	4.93	+0.25	7.96	+3.67	3.04	−0.92	5.10	+0.49	7.15	+4.69	1.05	−0.77	0.78	−0.86	46.27	+7.98
Warrenton	4.07	+1.69	0.66	−1.53	4.88	+1.51	5.19	+0.88	8.79	+4.00	3.14	−0.82	4.52	+1.10	0.89	−2.29	3.40	−0.64	4.46	+1.60	1.51	−1.08	1.21	−0.92	42.72	+3.50
Keokuk, Iowa	3.14	+1.58	0.97	−0.58	4.78	+2.40	4.60	+1.61	2.97	−0.96	3.91	−0.22	5.75	+2.34	1.41	−1.79	4.77	+0.93	4.27	+2.01	1.51	−0.48	0.69	−0.76	38.77	+6.13
Southeast Lowlands																										
Campbell	5.85	.....	5.90	.....	3.80	.....	5.05	.....	7.87	.....	5.09	.....	5.13	.....	8.57	.....	2.77	.....	1.71	.....	2.15	.....	4.93	.....	58.92	.....
Cape Girardeau	7.06	+3.14	3.23	+1.05	3.18	−0.23	6.02	+2.08	7.97	+3.70	3.76	+0.04	2.93	+0.03	3.03	−1.24	4.06	+1.74	0.90	−2.34	2.57	−0.77	4.22	+0.93	48.93	+8.13
Caruthersville	3.57	−1.18	2.85	−0.95	5.08	+1.08	6.03	+1.91	6.25	+1.99	3.04	−0.94	6.38	+2.97	3.54	−0.03	2.89	−0.21	2.10	−0.86	3.08	−0.77	3.36	−1.08	48.17	+1.93
Dexter	8.64	.....	4.75	.....	3.56	.....	4.60	.....	6.88	.....	3.21	.....	3.78	.....	3.47	.....	2.85	.....	2.39	.....	2.88	.....	4.74	.....	51.75	.....
Doniphan	7.92	+3.71	3.02	−0.13	4.08	+0.49	7.39	+2.02	6.89	+2.73	2.84	−1.54	5.10	+0.37	4.18	−0.13	2.71	−0.93	4.03	+0.98	1.48	−1.64	5.16	+1.83	54.80	+7.76
Jackson	6.77	+3.05	2.85	−0.04	3.55	−0.79	6.22	+1.75	6.84	+2.48	5.81	+1.52	5.55	+2.03	3.49	−0.12	5.40	+1.85	1.62	−1.60	2.38	−0.75	1.82	−1.38	52.30	+8.00
Marble Hill	6.20	+2.67	4.54	+1.26	5.68	+1.50	6.14	+1.70	10.08	+5.85	6.94	+2.77	5.91	+1.23	2.69	−0.81	5.22	+1.59	2.72	+0.07	1.58	−1.59	4.57	+1.24	62.27	+17.58
Morehouse	7.75	+3.52	5.20	+1.94	3.74	−0.76	4.80	+0.54	7.74	+3.58	3.40	−0.48	4.49	−0.28	3.47	−0.34	7.32	+4.46	1.52	−1.08	4.32	+0.67	4.37	+0.36	58.12	+12.13
New Madrid	6.81	+1.45	5.11	+1.26	4.25	−1.00	5.60	+1.25	6.08	+1.49	2.86	−1.35	5.63	+1.72	3.73	−0.15	4.64	+1.33	1.76	−1.49	3.96	+0.11	4.14	−0.22	54.67	+4.40
Poplar Bluff	8.61	+4.64	4.49	+1.53	5.12	+0.60	5.19	+0.72	8.16	+3.13	2.68	−2.34	7.72	+4.17	6.82	+2.55	3.18	−0.40	2.84	−0.36	2.07	−1.19	5.46	+1.28	62.34	+14.33
Sikeston	6.83	+2.60	4.58	+1.32	3.44	−1.06	4.46	+0.20	8.73	+4.57	3.47	−0.41	3.57	−1.20	3.80	−0.01	6.29	+3.43	1.31	−1.29	4.47	+0.82	4.35	+0.34	55.30	+9.31
Cairo, Ill	4.98	+1.22	4.20	+1.07	3.54	−0.21	2.97	−0.75	5.19	+1.48	3.76	−0.07	1.28	−1.79	3.29	+0.27	5.44	+2'55	1.08	−1.68	2.51	−1.17	4.12	+0.72	42.36	+1.64
Ozark Plateau																										
Arcadia	3.39	+0.17	1.87	−1.29	2.49	−1.58	6.10	+1.38	9.56	+4.78	5.16	+0.58	4.59	+0.35	2.22	−1.50	3.41	−0.23	1.94	−1.13	2.16	−1.46	2.33	−0.65	45.22	−0.58
Aurora	3.14	+0.74	1.83	−0.99	3.28	−0.40	7.36	+3.01	8.06	+2.60	4.54	−0.44	4.80	−0.56	2.30	−1.97	2.43	−1.30	6.76	+3.49	1.25	−1.54	0.69	−1.95	46.44	+0.69
Birchtree (near)	5.09	+2.03	2.36	−0.13	1.58	−2.67	5.51	+0.79	7.80	+3.49	4.29	−0.24	3.65	−0.34	7.10	+2.71	3.54	−0.05	6.48	+3.90	1.01	−1.88	3.17	+0.60	51.58	+8.21
Bolivar	.....	.....	.....	.....	3.20	+0.16	6.84	+2.85	9.26	+3.84	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caplinger Mills	1.90	.....	1.16	.....	3.55	.....	4.92	.....	7.26	.....	5.32	.....	2.03	.....	1.95	.....	1.28	.....	4.56	.....	0.45	.....	0.77	.....	35.15	.....
Dean	3.80	+1.56	2.90	+1.07	2.67	−0.68	10.58	+6.54	12.33	+6.37	7.65	+2.38	1.40	−2.65	1.37	−2.90	3.05	−0.57	7.56	+4.07	2.38	−0.66	1.40	−0.72	57.29	+13.81
Eldon	2.30	+0.76	0.80	−1.30	3.56	+0.73	4.99	+0.53	9.70	+4.84	5.58	+1.27	2.57	−1.09	1.94	−2.04	4.12	+0.32	6.49	+3.46	1.09	−1.12	2.18	+0.02	45.32	+6.38
Farmington	4.38	+2.03	1.70	−1.59	3.09	−0.18	5.39	+1.43	12.12	+6.62	4.58	−0.05	4.53	+0.98	3.73	+0.35	2.90	−0.32	3.40	+0.51	1.34	−2.62	2.25	−0.46	49.41	+6.70
Fredericktown	4.73	.....	4.03	.....	3.27	.....	3.90	.....	5.06	.....	3.50	.....	4.13	.....	2.14	.....	3.09	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galena	1.88	−0.48	1.69	−0.39	1.85	−2.02	7.67	+4.19	11.06	+5.82	4.73	+1.17	2.95	−1.38	2.63	−1.01	2.49	−1.64	6.10	+3.66	1.14	−1.76	1.00	−1.62	45.19	+4.54
Goodland	3.55	+0.68	1.76	−0.73	2.22	−2.03	3.51	−1.58	9.32	+4.70	5.99	+1.89	2.57	−1.61	3.17	−0.86	3.00	−0.73	5.20	+1.98	1.05	−1.84	3.20	+0.72	44.54	+0.59
Greenville	6.10	.....	.....	.....	5.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hailey	2.87	.....	1.98	.....	1.20	.....	8.50	.....	7.79	.....	6.14	.....	3.05	.....	4.10	.....	3.80	.....	5.05	.....	0.11	.....	1.58	.....	46.17	.....
Koshkonong	6.05	+2.51	4.06	+1.27	2.13	−1.68	6.92	+1.95	6.44	+1.60	5.12	+0.64	2.47	−1.45	2.88	−1.57	4.37	+0.88	4.55	+1.64	1.11	−1.91	4.56	+1.40	50.66	+5.28
Lebanon	2.85	+0.40	3.03	+0.53	4.43	+0.98	5.25	+1.07	12.91	+7.30	3.73	−1.20	1.57	−2.55	4.88	+1.35	1.64	−2.45	6.07	+2.81	0.52	−2.02	1.02	−1.58	47.90	+4.64
Leeper	3.50	.....	3.65	.....	2.51	.....	7.49	.....	8.04	.....	2.66	.....	4.02	.....	3.42	.....	3.90	.....	3.11	.....	1.35	.....	2.59	.....	46.24	.....
Lockwood	2.32	+0.66	1.21	−0.76	2.77	+0.31	9.76	+6.10	9.81	+4.73	5.28	+0.48	4.96	+0.09	0.77	−3.40	2.40	−1.60	4.15	+0.70	0.74	−1.47	0.77	−1.17	44 94	+4.67
Mountain Grove	4.23	+1.36	2.18	−0.08	2.62	−1.72	5.59	+0.81	7.02	+2.17	4.48	−0.08	1.21	−2.79	3.82	−0.58	4.27	+0.23	7.28	+4.23	0.93	−1.50	2.02	−0.21	45.65	+1.84
Neosho	1.90	−0.60	3.37	+0.99	2.63	−0.84	9.12	+5.00	8.65	+2.58	8.50	+3.07	3.35	−0.83	0.32	−3.77	2.72	−1.50	5.34	+1.95	1.74	−1.32	0.98	−1.56	48.62	+3.17
Owensville	2.56	.....	0.99	.....	5.25	.....	3.58	.....	8.99	.....	4.47	.....	2.18	.....	3.42	.....	1.85	.....	4.49	.....	1.22	.....	1.80	.....	40 80	.....
Ozark Beach	4.31	.....	2.17	.....	1.93	.....	6.63	.....	10.03	.....	4.91	.....	2.65	.....	3.54	.....	3.69	.....	6.91	.....	1.97	.....	1.56	.....	50.30	.....
Rolla	3.15	+0.70	1.61	−0.73	5.36	+1.77	4.65	−0.01	8.65	+3.64	6.89	+2.76	1.40	−2.69	2.28	−1 80	2.11	−1.73	8.28	+5.33	0.79	−1.52	2.00	−0.07	47.17	+5.65
Salem(near)	3.10	+0.25	1.74	−0.64	3.32	+0.02	4.60	+0.05	8.21	+3.67	6.73	+2.43	3.88	+0.38	4.71	+0.30	2.89	−1.37	7.59	+3.71	0.86	−1.45	3.48	+1.47	51.11	+8.82
Seligman	5.21	+2.97	3.03	+1.15	2.19	−1.75	7.03	+3.10	9.95	+4.36	9.81	+6.28	3.24	−1.16	2.01	−1.98	3.23	−0.89	8.03	+5.09	1.38	−0.98	2.08	−0.49	57.19	+15.70
Seymour(near)	3.57	+0.87	2.60	+0.15	3.33	−0.73	5.02	+1.06	9.40	+3.70	5.00	+0.37	3.55	−1.20	3.56	−0.28	3 08	−1.50	5.80	+2.79	1.15	−1.18	2.52	+0.47	48.58	+4.41
Springfield	2.53	+0.19	1.55	−0.80	2.97	−0.42	3.94	+0.08	9.77	+4.58	4.78	+0.10	1.01	−3.20	2.97	−1.12	2.37	−1.15	5.55	+2.50	1.10	−1.69	1.61	−0.70	40.15	−1.63
Steelville	3.19	+1.34	1.15	−1.11	3.74	+1.66	5.52	+1.21	9.65	+5.31	6.02	+1.87	3.72	+0.52	1.83	−1.68	2.99	−0.21	7.31	+4.10	1.47	−1.21	2.48	+0.57	49.07	+12.37
Stover	2.17	.....	1.42	.....	3.27	.....	7.38	.....	12.42	.....	6.18	.....	1.20	.....	2.74	.....	4.34	.....	5.69	.....	0.39	.....	0.99	.....	48.19	.....
Tuscumbia	2.40	+1.26	1.01	−0.31	4.13	+0.68	5.75	+1.31	7.84	+3.75	3.49	−0.18	2.56	+0.22	2.81	−0.83	3.12	−2.30	5.29	+1.17	0.71	−1.71	1.20	−0.91	40.31	+2.15
Williamsville	6.16	.....	3.31	.....	4.50	.....	6.26	.....	7.20	.....	3.45	.....	8.18	.....	5.54	.....	3.01	.....	3.21	.....	1.50	.....	4.69	.....	57.01	.....
Willow Springs(near)	5.14	.....	2.73	.....	2.57	.....	5.00	.....	7.94	.....	5.63	.....	1.71	.....	4.00	.....	2.85	.....	6.22	.....	0.83	.....	2.57	.....	47.19	.....
Southwest Plain																										
Appleton City	2.57	+0.74	1.16	−0.81	2.82	−0.25	7.44	+3.18	8.00	+2.46	5.70	+0.71	2.24	−2.39	0.91	−2.83	4.07	+0.40	5.10	+2.76	0.62	−1.51	0.84	−0.80	41.47	+1.66
Clinton	2.11	−0.13	1.04	−1.06	2.97	+0.11	6.07	+2.03	12.32	+6.88	7.46	+2.73	2.15	−1.79	1.19	−2.17	2.68	−1.14	5.92	+3.11	1.58	−0.30	1.75	+0.02	47.24	+8.29
Concordia	2.07	.....	1.56	.....	4.91	.....	4.65	.....	6.55	.....	6.88	.....	1.76	.....	1.96	.....	1.88	.....	6.31	.....	0.42	.....	0.27	.....	32 34	.....
Harrisonville	3.26	+1.66	0.96	−1.06	3.36	+0.67	4.52	+1.13	6.56	+1.75	9.19	+4.73	3.61	−0.17	1.41	−2.74	2.88	−1.48	5.12	+2.53	0.76	−1.19	0.31	−1.47	41.94	+4.36
Joplin	2.59	+0.51	1.36	−0.88	2.24	−0.65	9.29	+5.00	11.04	+5.88	7.71	+2.37	3.75	−0.66	1.99	−2.27	3.16	−0.09	4.49	+1.19	1.08	−1.48	1.17	−0.69	49.83	+8.23
Lamar	2.48	+0.78	1.41	−0.82	1.43	−1.47	7.36	+3.21	11.89	+6.43	5.63	+0.67	2.88	−1.36	1.30	−2.88	0.98	−3.26	3.40	+0.27	1.16	−1.08	0.83	−1.12	40.55	−0.63
Lamonte	2.49	+0.71	2.06	+0.15	4.02	+1.42	5.80	+2.03	13.68	+8.73	7.49	+3.00	2.07	−1.93	1.44	−2.28	2.33	−2.17	7.17	+4.84	1.23	−0.67	1.78	+0.12	51.56	+13.96
Marshall	1.35	−0.47	1.78	−0.06	4.64	+1.93	6.02	+2.33	7.85	+2.99	.....	.....	.....	.....	2.53	−1.13	5.05	+0.17	8.58	+6.00	0.83	−1.25	1.14	−0.52	.....	.....
Nevada	2.18	+0.21	1.18	−0.90	1.75	−1.24	6.86	+3.07	12.09	+6.37	4.82	−0.29	4.92	+0.99	2.22	−1.29	0.88	−3.28	3.71	+0.63	0.78	−1.10	0.45	−1.41	41.84	+1.76
Osceola	2.27	+0.15	1.52	−0.27	2.56	−0.37	6.64	+2.59	11.13	+5.18	4.72	−0.03	1.79	−2.25	0.63	−2.99	1.91	−2.60	5.16	+2.33	0.53	−2.25	0.49	−1.73	39.35	−2.24
Warrensburg	4.49	+2.70	2.11	−0.02	5.15	+2.61	6.95	+3.75	10.53	+5.87	8.09	+3.33	3.72	−0.23	1.91	−1.68	2.64	−0.95	6.42	+3.87	0.94	−0.84	0.45	−1.35	53.40	+17.06
Warsaw	1.13	−1.25	1.72	−0.84	3.19	−0.04	6.69	+2.47	10.30	+5.07	5.57	+0.40	0.88	−3.42	0.66	−3.63	3.86	−0.46	6.12	+2.81	0.51	−1.90	0.69	−1.63	41.32	−2.42
Waverly	3.51	+1.89	1.55	−0.41	3.84	+0.62	5.01	+0.72	6.29	+0.98	5.10	−0.02	3.05	−0.31	2.90	−1.09	3.44	−1.50	8.18	+6.10	1.03	−0.81	0.41	−0.62	44.31	+5.55
Northwest Plateau																										
Albany	0.70	.....	1.70	.....	2.19	.....	5.35	.....	1.23	.....	6.13	.....	6.44	.....	.....	.....	1.74	.....	.....	.....	0.73	.....	.....	.....	.....	.....
Bethany	2.95	+1.65	1.83	+0.39	1.81	−0.49	6.47	+3.25	2.64	−2.34	9.48	+5.00	6.95	+2.44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chillicothe	4.15	+2.49	1.68	−0.38	1.79	−0.99	6.85	+2.41	4.67	−0.04	6.92	+1.85	3.93	−0.65	2.26	−2.40	1.97	−3.77	7.78	+4.33	1.03	−1.30	0.39	−1.26	43.37	+0.29
Conception	2.04	+1.09	1.59	+0.40	1.74	−0.01	7.55	+4.74	1.71	−3.06	9.05	+4.50	11.35	+7.05	1.20	−2.28	2.56	−1.29	7.46	+5.01	1.40	+0.04	0.20	−0.79	47.85	+15.40
Edgerton	1.96	+0.69	1.33	−0.12	1.40	−1.35	5.40	+1.86	5.05	−0.40	8.13	+3.02	1.99	−2.81	0.78	−3.06	1.15	−2.13	7.35	+5.10	1.21	−0.26	0.67	−0.66	36.42	−0.12
Gallatin	2.21	+1.02	2.44	+0.84	0.71	+1.84	9.02	+5.30	3.61	−1.86	9.53	+4.22	.....	.....	1.03	−3.09	1.83	−2.21	7.79	+5.17	1.44	−0.34	0.16	−1.36	.....	.....

Continued on next page

Monthly and Annual Precipitation for the Year 1929, with Departures—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northwest Plateau—Concluded from preceding page																										
Grant City	2.70	+1.74	1.74	+0.62	0.47	−1.64	4.78	+1.72	1.45	−3.28	5.08	+0.53	5.42	+0.26	1.45	−2.18	2.72	−1.27	4.68	+1.96	1.46	−0.15	0.22	−0.94	32.17	−2.63
Kansas City	3.12	+1.93	1.79	+0.04	3.28	+0.75	4.78	+1.64	6.91	+2.26	8.09	+3.10	0 55	−3.58	4.13	+0.04	1.55	−3.01	6.72	+3.80	1.09	−0.74	0.65	−0.68	42.66	+5.55
Kidder	2.06	+0.76	1.50	−0.02	1.41	−0.89	7.29	+4.25	4.34	−0.87	10.26	+5.90	3.97	+0.04	1.04	−2.87	1.83	−2.41	7.72	+5.10	1.16	−0.68	0.83	−0.47	43.41	+7.84
King City	3.31	.....	1.70	.....	1.78	.....	7.78	.....	2.17	.....	11.27	.....	5.84	..	1.53	.....	2.50	.....	6.63	.....	1.42	.....	0.28	.....	46.21	.....
Lexington	3.98	+2.41	1.99	−0.01	3.96	+1.59	6.08	+2.72	5.94	+0.88	6.24	+1.47	2.17	−2.55	2.42	−0.81	1.90	−2.54	7.48	+4.91	1.32	−0.53	0.51	−1.21	43.99	+6.33
Maryville	1.99	+0.91	1.22	−0.22	1.05	−0 83	8.98	+6.07	1.46	−4.29	11.42	+6.79	8.43	+3.04	1.59	−2.27	2.08	−2.13	6.43	+3.76	1.25	−0.40	0.28	−0.77	46.18	+9.66
Oregon	2.93	+1.54	1.49	−0.13	1.74	−0.28	6.28	+2.99	5.63	+0.77	9.67	+4.94	6.77	+2.45	1.38	−2.59	1.38	−2.36	7.08	+4.52	1.43	−0.26	0.15	−1.29	45.93	+10.30
St. Joseph	2.96	+2.17	1.57	+0.06	1.98	−0.43	6.93	+3.92	3.72	−0.41	6.71	+1.70	3.61	+0.51	2.09	−1.39	1.94	−3.31	6.05	+3.33	1.62	−0.07	0.18	−0.84	39.36	+5.24
Tarkio	1.81	+1.02	1.28	+0.21	1.56	−0.14	5.82	+2.65	4.82	+0.16	5.87	+1.06	10.78	+7.07	1.71	−2.16	3.91	+0.41	6.72	+4.15	1.70	+0.25	0.37	−0.55	46.35	+14.13
Trenton	3.35	+1.97	2.21	+0.68	1.93	−0.51	8.30	+5.03	2.96	−2.38	6.08	+1.78	6.86	+2.53	1.48	−2.14	3.19	−1.07	7.82	+5.26	1.45	−0.35	0.44	−0.91	46.07	+9.89

(*Continued from Page 49.*)

was relatively cool. Light frost temperatures occurred on a few dates during the middle of the month. Rainfall was deficient as compared with the normal but it was well distributed. Some sections needed more rain for good plowing, otherwise this work made good progress, with some sowing of wheat. Much of the early planted corn was cut for fodder. The late crop bid fair to make provided the weather continued favorable during October. Hay and nearly all legumes turned out well.

OCTOBER.—Somewhat wetter than normal but largely a very pleasant month. Most crops needed just such weather, and the absence of any general freeze or even frosts, was of great economic value. Owing to lack of moisture the preceding months, there were no complaints of too much rain anywhere. The rainy days were well bunched alternating with pleasant open weather. Decidedly favorable for late maturing crops and for completing the seeding of winter wheat. Nearly all corn had safely matured.

NOVEMBER.—Mainly a relatively dry, cold month, with a general snowstorm and zero cold at the end. Wheat made good growth; and there was considerable corn shucked and cribbed, through probably one-half was still in the fields at the close of the month. Building and other outdoor occupations were somewhat handicapped by the cold. Heavy clothing and fuel trades were good.

DECEMBER.—Some cold and warm spells but mainly a relatively mild winter month, with less precipitation than the usual December. A spell of nine to eleven consecutive days of dense fog, beginning generally on the 7th, putting nearly a complete stop to most traffic, was the outstanding feature. About the usual farm activities were kept up, in addition to some plowing under sod.

SUMMARY OF APPROXIMATE STORM DAMAGE IN MISSOURI IN 1929

JANUARY.—High winds 10.30 A. M. to about 12.30 P. M. in Scott, Cape Girardeau and Perry counties, with one known tornado south of Benton, in Scott County where three persons were killed, and six injured. Damage in Benton vicinity alone ---------- $15,000

MARCH.—Evening of 31st heavy rain with hail and high winds caused scattered damage over most of Ripley, Wayne, Stoddard, Bollinger, St. Francois, and Washington counties, with two known tornadoes; one across Ripley from Poynor to Doniphan with $150,000 damage in Doniphan; and the other at Mineral Point, Washington County, where one person was killed, two others injured, and property damaged $5,000. 20 or 22 persons were injured over the whole storm area, and property damaged in excess of ---------- $211,000

APRIL.—Tornado at 9 P. M. of 7th in southwestern McDonald County, damage ---------- $600
Between 4.30 and 6.30 P. M. of 20th five tornadoes in the southwest:—From Amos to Foster, Vernon and Bates counties, 4 injured, damage ---------- $75,000
Oskaloosa, Barton County to central Vernon County, 6 injured, property damage ---------- $84,000
St. Clair County, west of Collins, damage ---------- $1,500
Northern Polk and southern Hickory counties, 20 to 30 injured, property damage, at least ---------- $15,000
Polk and Dallas counties, Bolivar, Polk County, especially devasted, 29 injured, property damage ---------- $171,000
On 21st hail damage at Warrensburg ---------- $500

MAY—1st at 2 P. M. severe hailstorm in northern Perry County, some hailstones "large as a goose-egg",, damage ---------- $160,000
On same date, 15 square miles in Barry County damaged $15,000
On 11th, Boone County, Huntsdale to Bethel comunity, damage ---------- $12,000
On 18th, 8.55 A. M. small tornado in City of Springfield, damage ---------- $1,200

JUNE.—On 12th, local hail and squall wind storms: in Marion, Ralls, and Monroe counties, damage not stated; along Greene-Lawrence county line roofs damaged and crops ruined, estimated at ---------- $2,200
Also same date, Jasper County, hail "crashed through roofs and ceilings and landed on the floor", damage ---------- $18,000
On 19th, near Stewartsville, Dekalb County, probably a tornado caused damage at ---------- $2,000
On 19th, lightning damage at Columbia, Boone County, $20,000

JULY.—On 1st, Morehouse damaged by squall wind ---------- $200
Also Palmyra, Marion County, on same date ---------- $200
From 4th to 8th, excessive rains and floods in northwest Missouri inundated 50,000 acres river bottoms, destroying crops and drowning 250 head livestock, 150 highway bridges washed away. Loss heavy. On 11th, local floods in Harrison County; on 14th, a downpour or 3 or 4 inches over watershed of Pineoak Creek, Franklin County, caused a 5-foot wall of water to rush down the creek, engulfing a stranded automobile and drowning the seven occupants. On 16-17th floods in Lewis and Marion counties damaged crops ---------- $5,000

Monthly Data of the State for 1929

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	25.1	− 5.4	72	−13	3.47	+1.43	8.64	1.13	8
February	25.0	− 7.4	64	−23	1.92	−0.19	5 90	0.53	7
March	48.6	+ 4.7	97	11	3.30	+0.28	6.13	0.47	8
April	57.4	+ 2.3	96	27	6.15	+2.34	10.58	3.51	12
May	61.7	− 2.9	95	28	7.52	+2.82	13.68	1.45	13
June	71.3	− 1.9	99	39	5.77	+0.90	11.42	2.66	10
July	77.8	+ 0.5	104	50	4.12	+0.12	11.35	0.55	8
August	76.0	0.0	105	43	2.50	−1.25	8.57	0.32	6
September	67.4	− 1.6	98	33	3.20	−0.64	7.32	0.88	8
October	57.2	− 0.2	91	23	5.54	+2.65	8.58	0.90	10
November	39.0	− 5.4	78	− 8	1.46	−0.96	4.47	0.11	6
December	35.2	+ 1.3	76	− 9	1.66	−0.41	5.46	0.15	6
Year	53.5	− 1.3	105	−23	46.61	+7.14	13.68	0.11	102

KILLING FROSTS, 1929

Stations	Last in Spring	First in Autumn	Days in Growing Season	Stations	Last in Spring	First in Autumn	Days in Growing Season
Northeast Plain				*Ozark Plateau (continued)*			
Brunswick	April 12	Nov. 2	204	Koshkonong	Mar. 10	Nov. 5	240
Clifton Hill	April 12	Oct. 23	194	Lebanon	May 5	Oct. 22	170
Columbia	Mar. 10	Oct. 25	229	Lockwood	April 1	Oct. 25	207
Downing	April 12	Oct. 23	194	Mountain Grove	May 3	Oct. 24	174
Fayette	April 12	Oct. 24	195	Neosho	April 2	Oct. 22	203
Fulton	Mar. 18	Nov. 2	229	Rolla	April 1	Oct. 23	205
Hannibal	Mar. 10	Oct. 25	229	Salem(near)	May 2	Oct. 25	176
Jefferson City	April 1	Oct. 25	207	Seligman	April 1	Oct. 24	206
Kirksville	April 12	Oct. 23	194	Seymour	May 5	Oct. 24	172
Louisiana	Mar. 20	Nov. 2	227	Springfield	April 1	Oct. 25	207
Macon	April 12	Oct. 24	195				
Mexico	April 2	Nov. 2	214	*Southwest Plain*			
St. Charles	Mar. 17	Nov. 4	232	Appleton City	April 12	Nov. 2	204
St. Louis (1)	Mar. 5	Nov. 5	245	Clinton	April 12	Oct. 25	196
St. Louis (2)	May 2	Nov. 20	202	Harrisonville	April 2	Oct. 25	206
Steffenville	April 12	Oct. 23	194	Lamar	April 2	Oct. 25	206
Unionville	April 12	Oct. 23	194	Lamonte	April 12	Oct. 25	196
Warrenton	April 1	Nov. 5	218	Marshall	April 12	Oct. 22	193
Keokuk, Iowa	April 1	Oct. 23	205	Nevada	April 1	Oct. 25	207
				Warrensburg	April 1	Nov. 4	217
Southeast Lowlands				Warsaw	April 12	Oct. 25	196
Campbell	Mar. 10	Oct. 24	228				
Caruthersville	Mar. 10	Nov. 21	256	*Northwest Plateau*			
Doniphan	Mar. 18	Oct. 24	251	Bethany	May 5	.....	....
Jackson	April 12	Oct. 25	196	Chillicothe	April 12	Oct. 23	194
Marble Hill	April 12	Oct. 25	196	Conception	April 12	Oct. 23	194
Poplar Bluff	Mar. 20	Oct. 24	218	Edgerton	April 12	Oct. 25	196
Sikeston	Mar. 16	Oct. 24	222	Grant City	April 12	Oct. 23	194
Cairo, Ill.	Mar. 10	Nov. 5	240	Kansas City	April 1	Nov. 15	228
				Kidder	April 13	Oct. 28	198
Ozark Plateau				Lexington	April 1	Nov. 4	217
Arcadia	May 5	Oct. 25	173	Maryville	May 2	Oct. 23	174
Aurora	April 1	Oct. 25	207	Oregon	May 2	Oct. 23	174
Birchtree	April 12	Oct. 24	195	St. Joseph	April 12	Nov. 4	206
Dean	April 1	Oct. 22	204	Tarkio	May 2	Oct. 23	174
Eldon	April 12	Oct. 25	196	Trenton	April 12	Oct. 25	196
Farmington	May 2	Nov. 4	186	.....	.....	.....	....
Goodland	May 3	Oct. 25	175	.....	.....	.....	....
Greenville	Mar. 19	.....	....	.....	.....	.....	....

Comparative Annual Data for the State

Year	Temperature			Precipitation	Year	Temperature			Precipitation
	Mean	Maximum	Minimum			Mean	Maximum	Minimum	
1888	52.9	111	−32	41.22	1910	55.0	109	−24	36.86
1889	54.3	107	− 9	37.91	1911	56.9	113	−19	38.94
1890	54.7	106	−19	35.71	1912	53.6	105	−36	38.68
1891	53.9	108	−11	38.04	1913	56.5	110	−12	37.47
1892	53.4	101	−11	42.76	1914	56.1	109	−18	34.72
1893	52.7	107	−20	38.19	1915	54.8	102	−24	49.62
1894	55.1	111	−35	33.18	1916	55.2	109	−29	40.33
1895	52.9	106	−26	39.30	1917	52.3	107	−23	31.94
1896	55.5	108	−10	44.63	1918	55.5	111	−25	37.16
1897	55.0	108	−16	38.82	1919	55.2	106	−23	40.05
1898	54.4	104	−20	53.67	1920	54.3	105	−10	37.17
1899	54.0	108	−32	37.32	1921	58.2	109	− 8	43.77
1900	55.6	105	−16	38.34	1922	56.8	108	− 6	39.99
1901	55.5	116	−29	25.28	1923	55.3	108	−11	41.23
1902	54.1	103	−17	44.96	1924	52.9	106	−28	40.01
1903	53.6	102	−25	40.15	1925	55.5	110	−14	39.78
1904	53.2	100	−23	41.62	1926	54.5	108	−20	43.07
1905	53.6	103	−40	45.43	1927	55.5	102	−24	53.86
1906	55.1	101	−13	37.34	1928	55.2	102	−18	45.59
1907	55.6	109	−15	41.81	1929	53.5	105	−23	46.61
1908	56.7	102	−10	42.56	.....	....	....	....	.....
1909	55.7	110	−20	45.16	Average 42 yrs.	54.8	116	−40	40.48

WBO, St. Louis, 3-5-30—1080.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., JANUARY, 1930 No. 1

GENERAL SUMMARY

January, 1930, was the coldest since January, 1918, and the wettest since 1916, and both the cold and the wetness covered the entire State of Missouri. The month opened warm and the first five days were mild. Cold weather, with a severe ice and sleet storm, entered the State on the 6th, and a few days later had covered all parts even to the extreme southern limits, and by the third week intense cold was widespread. While no temperature records were broken, very few Januarys in the past forty years have been colder.

The ice and snow cover continued the remainder of the month, except in the southern sections where it melted away rather before the close of the month. In most of the Ozark Plateau there was considerable damage to trees and utility properties by ice, from rain freezing as it fell, for three or four days beginning about the 8th. There was excessive rainfall in the southeastern lowlands, the monthly average for that section exceeding five inches, or double the normal. There was considerable damage from flooded rivers.

The snowfall, preceded by a two to three-inch ice layer, was heavy and general, the monthly totals being from two to three times more than the January normals. The average for the for the whole State was 13.0 inches. Most of the State remained well covered for about twenty-five days. The greatest falls in any one day were 10 to 12 inches on the 9th, as a rule. The largest monthly total was 30.5 inches, though many localities received more than 20 inches. All traffic was temporarily suspended during the heaviest snowstorm, the 9th.

Save the usual chores, there was no farm activity. Livestock suffered and required heavy feeding. There was some shipments to market because of shortness of feed. Many quails and other birds perished because of the intense cold and scarcity of proper food. Wheat was covered by snow during lowest temperatures.

TEMPERATURE

The monthly mean temperature for the State, based upon the reports of 66 stations, was 20.8°, or 9.7° colder than normal, and the largest minus departure for January since 1918. The cold also was widespread. The highest local mean was 34.0°, at Caruthersville and the lowest was 12.7° at Tarkio. The highest temperature reported was 73°, at Campbell on the 4th; and the lowest reported was −31°, at Neosho on the 22d. Zero or lower occurred on six to twelve days; and 32° or lower twenty-five to thirty days. The greatest daily range was 60°, at Dean on the 20th.

PRECIPITATION

The average precipitation for the State. 93 stations reporting, was 4.51 inches, or 2.47 inches more than the 60 years' average, and the wettest January since 1916. All sections of the State were wetter than normal, the southeastern lowlands being the wettest with more than double the normal, while the northwestern plateau averaged less than one half inch more than the usual January amounts. The greatest local monthly amount was 13.58 inches, at Caruthersville, nearly three times the normal. The least local monthly amount was 0.71 inch, at Tarkio, or nearly normal. The greatest fall in any twenty-four consecutive hours was 3.70 inches, at Caruthersville on the 8th. Heavy rains occurred in the southeast on the 7th, 8th, and 9th, causing floods.

The snowfall was the heaviest and most general of any January since 1918, the monthly totals being two to three times more than normal. However, there was, over most of the State, a two to three inch solid ice as a bottom or ground layer. Lexington, with 30.5 inches, received the largest fall, while New Madrid with 3.4 inches had the least amount.

MISCELLANEOUS PHENOMENA

Fogs, dense.—1st, 2d, 11th, 12th, 13th, 14th, 27th, and 29th.

Hail.—At Springfield on the 13th.

Halos, solar.—15th, 16th, 17th, 21st, 26th, 28th, 30th, and 31st.

Halos, lunar.—6th, 10th, and 15th.

Sleet (or glaze, rain freezing as it falls).—6th, 7th, 8th, 9th, 10th, 11th, 13th, 20th, and 21st. Heavy coating of ice covered all objects in most of the Ozark region from the 8th to the 11th, breaking trees, telegraph and telephone wires. The storm was espcially severe at Seligman, Barry County.

Thunderstorms.—Local on the 13th, and 14th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.26	86	76	152	50	5,598	7.5	22	s.	6
Hannibal	30.26	81	..	....	..	6,216	8.4	27	sw.	14
Kansas City	30.28	84	77	179	59	7,694	10.3	30	nw.	2
St. Joseph	30.27	87	77	179	60	5,839	7.8	26	nw.	2
St. Louis	30.26	80	73	143	47	7,641	10.3	44	sw.	6
Springfield	30.26	88	78	127	41	6,693	9.0	27	w.	1
Cairo, Ill.	30.27	80	70	....	..	6,605	8.9	34	nw.	14
Keokuk, Iowa	30.28	85	76	172	57	5,530	7.4	26	sw.	14

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JANUARY

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	21.5	−8.7	74	−32	1.91	−0.08	....	....	6	..	..	..
1889	31.8	+1.9	79	− 2	2.36	+0.37	....	....	6	..	..	..
1890	32.8	+2.0	81	−19	4.25	+2.26	....	....	9	..	..	..
1891	31.1	+3.9	74	− 1	1.52	−0.47	....	4.3	6	..	..	..
1892	24.0	−6.2	67	−25	1.80	−0.19	....	....	4	14	8	9
1893	22.5	−7.7	66	−14	0.45	−1.54	0.90	2.4	3	9	11	11
1894	31.4	+1.2	77	−35	2.21	−0.22	2.96	2.7	5	13	9	9
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	9.4	5	14	8	9
1896	32.9	+2.7	71	− 9	1.17	−0.82	2.44	3.1	4	10	7	14
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	4.0	8	12	7	12
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	8.4	9	11	8	12
1899	30.2	0.0	79	−21	1.55	−0.44	2.40	4.0	6	12	8	11
1900	34.5	+4.3	77	− 9	1.22	−0.77	2.30	0.2	4	14	7	10
1901	35.0	+4.8	72	−11	1.30	−0.69	2.96	0.8	4	17	7	7
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	6.9	5	16	7	8
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	5.0	6	13	6	12
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	7.4	8	14	6	11
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	6.8	8	14	6	11
1906	35.6	+5.4	76	− 8	3.64	+1.65	3.00	9.2	6	14	5	12
1907	34.3	+4.1	79	− 5	5.10	+3.11	4.42	2.8	12	7	6	18
1908	34.4	+4.2	68	−10	1.51	−0.48	2.13	3.6	5	19	5	7
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	6.5	7	6	7	18
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	3.5	5	13	6	12
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	0.7	5	8	7	16
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	6.5	4	14	7	10
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	2.6	8	13	6	12
1914	38.1	+6.9	78	− 1	1.42	−0.92	2.00	1.0	4	12	7	12
1915	29.1	−2.2	76	−24	2.92	+0.59	3.10	5.4	8	12	5	14
1916	31.6	+0.7	72	−24	7.36	+5.16	4.65	3.4	12	9	4	18
1917	32.9	+2.5	76	−10	1.52	−0.64	2.50	2.3	5	15	7	9
1918	16.4	−14.0	67	−24	1.68	−0.71	3.20	16.6	7	12	7	12
1919	34.0	+3.6	70	−23	0.40	−1.88	3.05	1.4	2	20	5	6
1920	28.6	−1.4	72	− 5	1.57	−0.65	4.15	5.7	5	15	5	11
1921	37.1	+7.2	74	− 1	1.88	−0.38	1.45	5.4	6	10	7	14
1922	29.5	−0.6	66	− 6	1.21	−1.05	2.95	3.9	5	14	5	12
1923	39.2	+8.5	75	3	2.72	+1.81	3.52	0.6	6	12	7	12
1924	24.9	−5.5	68	−25	1.54	−0.49	1.78	5.7	7	14	5	12
1925	29.7	−0.7	65	−15	1.00	−1.03	2.10	4.7	4	15	7	9
1926	32.7	+2.3	70	−20	1.90	−0.13	2.51	4.2	6	11	7	13
1927	30.8	+0.4	73	−24	3.05	+1.02	4.30	3.6	6	13	6	12
1928	33.3	+2.9	77	−18	0.87	−1.16	1.25	0.5	3	16	7	8
1929	25.1	−5.4	72	−13	3.47	+1.43	3.50	6.8	8	11	6	14
1930	20.8	−9.7	73	−31	4.51	+2.47	3.70	13.0	10	12	5	14
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
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Climatological Data for January, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	14.0	−12.8	55	6	−22	18†	46	2.46	+0.83	0.57	19.0	13	15	0	16	nw.	O. K. Benecke
Clifton Hill	Randolph	731	31	16.2	−12.5	55	5†	−25	22	39	3.78	+2.18	1.20	26.5	12	14	3	14	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	20.4	− 8.8	57	6	−16	18	35	4.41	+2.49	1.34	8.5	12	12	3	16	sw.	U. S. Weather Bureau
Downing	Schuyler	876	9	14.8	.....	51	5	−21	18	37	1.14	−0.59	0.40	18.5	9	15	7	9	nw.	James Taylor
Fayette	Howard	661	50	18.8	− 8.4	57	5†	−24	22†	47	3.00	+1.01	0.56	15.5	10	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	20.6	− 9.1	60	6	−22	18†	45	2.98	+0.63	0.55	17.6	11	13	4	14	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	1.44	−0.11	0.29	9.7	8	11	6	14	nw.	J. W. Pulliam
Hannibal	Marion	534	38	18.6	− 8.5	57	6	−17	18	39	3.45	+1.73	0.77	11.6	16	13	2	16	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	20.3	− 9.5	57	4	−19	18	42	4.82	+2.60	1.40	9.5	10	11	8	12	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	14.6	−10.3	51	5†	−20	18†	30	2.04	+0.51	1.30	14.7	8	10	1	20	n.	Prof. J. S. Stokes
Louisiana	Pike	469	36	19.9	− 8.0	60	5	−24	22	36	4.90	+2.88	1.50	14.4	10	15	2	14	n.	Stark Bros. Nurseries
Macon	Macon	875	31	15.4	−13.1	58	6	−20	18	38	2.27	+0.62	0.85	19.0	6	14	5	12	w.	W. C. Brown
Mexico	Audrain	800	41	18.6	− 9.7	57	6	−19	18	36	4.08	+2.03	0.85	14.2	13	14	0	17	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	....	..	..	2.18	.....	1.16	8.0	5	9	8	14	se.	J. S. Conway
St. Charles	St. Charles	456	42	23.8	− 7.3	58	1	−20	18	38	3.56	+1.29	0.73	13.2	11	14	2	15	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	24.7	− 6.4	60	1	−13	18	28	5.70	+3.36	0.92	11.0	12	13	3	15	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	23.9	− 6.3	60	1	−13	18	27	5.47	+2.40	0.88	12.9	12	12	3	16	w.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	....	..	..	1.56	−0.16	0.45	11.5	9	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	32	17.4	−10.4	54	5†	−22	18	41	2.22	+0.03	0.80	13.0	8	12	6	13	e.	Frank Hall
Unionville	Putnam	1,062	37	14.0	− 9.5	54	5	−21	18	33	2.68	+0.84	1.20	22.0	8	14	5	12	n.	Geo. W. Davis
Warrenton	Warren	816	48	23.6	− 5.4	59	1	−19	18	41	4.69	+2.31	1.13	12.5	11	13	5	13	nw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	16.9	− 8.0	56	6	−17	18	42	2.51	+0.95	0.76	16.4	13	12	3	16	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	18.8	− 9.1	60	1†	−25	22	47	3.32	+1.39	1.50	14.7	10	13	4	14	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	30.4	.....	73	4	−24	18	40	10.28	.....	2.10	5.0	12	12	4	15	n.	Jeff. King
Caruthersville	Pemiscot	265	34	34.0[b]	− 5.0	66	1	−15	18	40	13.58	+8.83	3.70	5.0	12	14[b]	0[b]	15[b]	n.	Sam Smith
Doniphan	Ripley	344	26	29.3	− 6.9	63	1	−18	18	45	9.25	+5.04	2.20	10.0	11	12	8	11	sw.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	39	24.8	− 9.2	55	6	−26	18	43	8.66	+4.94	2.45	6.5	12	9	2	20	n.	John G. Putz
Marble Hill	Bollinger	470	35	26.8	− 8.0	60	1	−22	18	47	7.99	+4.46	2.20	13.9	12	10	2	19	n.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	...	..	..	....	..	..	9.74	+5.51	2.28	6.9	15	14	0	17	n.	John A. Spence
Poplar Bluff††	Butler	339	26	27.7	− 8.9	63	1	−23	18	45	7.85	+3.88	1.96	8.8	11	11	5	15	w.	J. H. Wolpers
Sikeston	Scott	318	29	25.6	−12.0	64	1	−15	18	34	10.91	+6.68	2.12	6.8	11	11	7	13	n.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	30.6	− 4.3	64	1	− 8	18	31	9.44	+5.68	1.84	5.5	14	9	3	19	n.	U. S. Weather Bureau
Section means and	extremes	....	..	28.6	− 7.8	73	4	−26	18	47	9.74	+5.63	3.70	7.6	12	11	4	16	n.	
Ozark Plateau																				
Arcadia	Iron	926	48	23.4	− 8.7	68	1	−19	18	43	3.02	−0.20	0.83	7.5	9	18	0	13	nw.	Arcadia College
Aurora	Lawrence	1,370	38	24.0	− 9.5	59	1	−16	18	34	5.25	+2.85	1.10	13.0	10	11	2	18	sw.	W T. Troughton
Birchtree (near)	Shannon	1,000	36	26.8	− 7.6	62	1	−19	18	42	5.47	+2.41	1.05	13.5	13	14	1	16	n.	V. H. Kirkendall
Dean ‡‡	McDonald	1,000	31	23.4	−12.8	57	6	−29	20	60	5.61	+3.37	0.80	18.0	10	11	3	17	sw.	Southwest Baptist College
Eldon	Miller	934	34	20.4[a]	−11.0	57	5	−20	18†	45	4.71	+3.17	1.40	11.6	8	3	15	13	s.	H. E. Dean
Farmington	St. Francois	918	19	25.4	− 7.4	57	1	−18	18	39	7.47	+5.12	1.53	8.5	12	13	4	14	sw.	E. H. Shepherd
Goodland	Iron	1,000	36	24.8	− 7.8	59	1	−26	18	48	1.98	−0.89	0.50	9.0	8	10	7	14	n.	Robert Forsyth
Greenville	Wayne	381	7	24.9	.....	62	1†	−24	18	49	9.52	.....	2.02	8.0	9	12	4	15	nw.	F. M. Adams
Hailey	Barry	1,350	4	...	.....	..	..	....	..	..	3.56	.....	1.00	9.0	11	9	6	16	w.	Wm. P. Owens
Koshkonong	Oregon	958	29	27.9	− 8.6	59	1	−16	18	34	7.28	+3.74	1.67	14.0	12	10	3	18	nw.	A. W. Madison
Lebanon	Laclede	1,265	43	21.0	−12.0	61	1	−20	17†	44	4.96	+2.51	1.50	10.5	8	13	6	12	n.	R. M. Hitt
Lockwood	Dade	1,078	24	22.4	−10.9	62	1	−22	18	38	3.79	+2.13	0.85	15.0	9	13	3	15	nw.	Mrs. Lou Mulcare
Mountain Grove(near)	Wright	1,463	29	23.6	− 9.6	58	1	−18	18	42	5.17	+2.30	0.75	8.5	12	10	4	17	nw.	C. S. Crow
Neosho	Newton	1,011	43	24.0	−11.1	64	1	−31	22	51	5.32	+2.82	0.88	25.0	14	11	5	15	nw.	Mo. Fruit Exp. Sta.
Rolla	Phelps	1,099	29	24.0	− 7.3	55	1†	−17	18	35	4.81	+2.36	0.67	8.0	11	9	8	14	w.	U. S. Fisheries Sta.
Salem(near)	Dent	1,173	26	24.2	− 8.7	64	6	−19	18	37	5.93	+3.08	0.96	10.6	13	10	6	15	sw.	F. H. Lane
Seligman	Barry	1,542	28	26.0	− 8.7	69	1	−20	18	37	4.83	+2.59	1.10	12.1	12	10	4	17	sw.	A. C. Leech
Seymour (near)	Webster	1,642	24	24.2	−10.1	58	1	−21	18	41	3.42	+0.72	0.76	7.0	10	11	2	18	nw.	Floyd E. Fawver
Springfield	Greene	1,324	42	23.8	− 9.7	60	1	−17	18	32	5.27	+2.93	1.05	11.0	12	10	6	15	s.	Ira H. Hailey
Section means and	extremes	.....	..	24.1	− 9.5	69	1	−31	22	60	5.12	+2.41	2.02	11.6	11	11	5	15	nw.	U. S. Weather Bureau
Southwest Plain																				
Appleton City	St. Clair	853	36	20.0	−11.3	56	5†	−22	18	34	3.96	+2.13	1.09	9.2	10	8	11	12	sw.	
Clinton	Henry	765	37	20.6	−10.8	58	1†	−22	18	30	4.47	+2.49	1.07	8.5	10	8	9	15	sw.	W. G. Bigelow
Harrisonville	Cass	904	52	16.8	−10.4	55	5	−21	18	39	2.83	+1.23	....	13.0	9	10	4	17	n.	A. E. Derwent, M. D.
Lamar	Barton	980	43	20.2	−12.2	58	6	−22	22†	45	4.10	+2.40	1.12	13.0	12	11	3	17	sw.	John H. Patterson
Lamonte	Pettis	867	30	18.0	−10 7	56	6	−24	18	36	5.25	+3.47	1.90	22.8	8	12	7	12	nw.	Jesse A. Mann
Marshall	Saline	779	42	19.6	− 8.0	58	1	−21	18	37	2.00	+0.18	0.60	15.5	6	18	4	9	nw.	J. E. Wheeler
Nevada	Vernon	862	37	21.4	−10.3	59	6	−17	18	32	2.76	+0.79	0.65	13.5	10	12	4	15	sw.	Sec. Chamber of Commerce
Warrensburg	Johnson	878	43	18.2	−10.7	56	1	−20	18	32	1.84	+0.05	1.10	12.0	5	10	9	12	nw.	George A. Kaupp
Warsaw	Benton	687	29	23.2	− 9.6	60	1	−29	22	40	4.77	+2.39	1.60	12.0	9	10	5	16	n.	E. A. Markey
Section means and	extremes	.....	..	19.8	−10.4	60	1	−29	22	45	3.55	+1.68	1.90	13.3	9	11	6	14	sw.	Everett Martin
Northwest Plateau																				
Bethany	Harrison	916	37	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	
Chillicothe	Livingston	779	20	13.8	−15.0	56	5	−29	22	39	2.38	+0.72	0.81	23.3	8	18	4	9	ne.	M. H. Moulton
Conception	Nodaway	980	41	13.8	−11.0	55	5	−22	22	36	1.08	+0.13	0.36	14.0	8	12	10	9	nw.	Wm. J. Olenhouse
Edgerton	Platte	856	10	13.8[k]	.....	53	5	−29	22	39	1.22	−0.05	0.32	15.9	9	12[f]	1[f]	12[f]	n.	Fr. Adelhelm Hess
Grant City	Worth	1,134	26	13.6	−11.3	52	4†	−22	22	37	1.08	+0.12	0.44	16.5	9	13	14	4	sw.	Fred L. Stiff
Kansas City	Jackson	963	41	18.6	− 9.6	54	5	−12	17	38	2.56	+1.37	1.00	22.2	13	10	11	10	n.	W. P. Spillman
Kidder	Caldwell	1,020	37	11.9	−15.0	52	5	−21	18	41	1.10	−0.20	0.45	14.5	6	15	4	12	n.	U. S. Weather Bureau
King City	Gentry	1,095	4	....	.....	..	..	....	..	..	1.43	.....	0.57	15.6	10	..	..	..	.....	Linn Terry
Lexington	Lafayette	688	45	18.5	− 9.0	58	1	−15	18†	43	3.52	+1.95	1.25	30.5	10	12	10	9	nw.	H. L. Yates
Maryville	Nodaway	1,169	40	14.2	− 8.2	55	4	−20	18†	36	1.97	+0.89	0.50	16.5	11	12	10	9	n.	Miss Carrie Loomis
Oregon	Holt	1,048	74	16.4	− 7.5	56	4	−17	18	43	1.34	−0.05	0.40	12.5	10	14	9	8	ne.	J. R. Brink
St. Joseph	Buchanan	987	22	15.4	−11.7	53	5	−17	22	39	1.30	+0.40	0.58	13.9	11	12	10	9	nw.	Mina Wright
Tarkio	Atchison	916	27	12.7	−10.2	57	4	−20	18†	36	0.71	−0.08	0.15	20.0	9	13	10	8	ne.	U. S. Weather Bureau
Trenton	Grundy	822	34	14.8	−11.9	51	5	−26	22	32	1.94	+0.56	0.71	17.5	10	15	3	13	n.	Albert Volker
Section means and	extremes	.....	..	14.8	−10.9	58	1	−29	22	43	1.66	+0.48	1.25	17.9	10	13	8	10	n.	W. H. Estes
State means and	extremes	.....	..	20.8	− 9.7	73	4	−31	22	60	4.51	+2.47	3.70	13.0	10	12	5	14	n.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for January, 1930

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville‖	Missouri	.52	.55					.64	.26	.63	.05		.54	.10	.14			.10	.11		T.	.03	T.								T.	3.67
Brunswick‖	Grand	.03	.20					.57	.33	.56	.13	.02	.35	.04	.02			.11			.07	.03										2.46
Clifton Hill	Chariton	.35	.04				.33	.34	.40	1.20		.02		.04	.06			.50			.40	.10										3.78
Columbia***	Missouri	1.34					.70	.44	.21	.37		.52	.13	.12	.22			.29		T.	.03	.04					T.				T.	4.41
Downing	Mississippi	.18					.12	T.	.08	.40		.10		T.	.06			.09			.06						.05				T.	1.14
Fayette‖	Missouri	.40	.51				.56	.12	.10	.40		.10	.55	T.						.10	.06	.10										3.00
Fulton‖	do	.55	.35					.35	.43	.55	.30	T.	T.	T.	.05			.21	.07			.08	.04									T.	2.98
Gorin	Mississippi	.29					.17		.20	.20	.20							.22			.05						.11				T.	1.44
Hannibal***	do	.53					.67	.29	.21	.67		.46	.09	.04	.16			.15		.04	.08	.02				.01	.02				.01	3.45
Hermann‖	Missouri	.10	1.07					.50	.18	.60	.17		.24	.06	.06			.13	.26		T.	.12	T.				T.				T.	3.49
Jefferson City‖	do	.45	1.05					.20	1.40				.55	.25	.32			.25	.23			.12										4.82
Kirksville	Mississippi	.25					T.	T.	.10	1.30		.10		T.	.02			.20		T.	.04	.03										2.04
Louisiana	do	.60						.20	.30	1.50		.60	.30	.20				.65		.20	.35											4.90
Lucerne‖	Grand																															
Macon ‖	Chariton		T.	T.				.52	.26	.85	.04							.51			.09											2.27
Mexico ‖	Mississippi	.63	.70					.85	.47	T.	.10			.25	.12			.10	.32		.32	.09	.08								.05	4.08
Milan‖	Grand		.10						.60	.30					.10			.25			.20	.10				.05					1.70
Monroe City	Mississippi	.55					.23			1.16			.10			.14															2.18
Pacific‖	Meramec	.12	.50					.65	.50	.70	.18	T.	.85	.84	.72			.10	.18		T.	.18	.05									5.57
St. Charles	Missouri	.73					T.	.03	.25	.20		.20	.30	.50	.45			.60			.10	T.	.20				T.					3.56
St. Louis (1)***	Mississippi	.68					.40	.52	.35	.50		.88	.69	.65	.18		T.	.42		T.	.34	.09					T.					5.70
St. Louis (2)*	do	.53					.26	.40	.49	.65		.88	.64	.51	.19		T.	.43			.35	.14					T.					5.47
Shelbina ‖	do	.01	.39					.45		.40	.12							.15	.01								.01	.02				1.56
Steffenville	do	.30					T.	.55	.10	.80		.30				T.		.02			.10	T.					.05					2.22
Union‖	Meramec	.07	.33					.40	.59	.40	.15	.03	.75	.75	.58			.25	.15		T.	.15	.10									4.70
Unionville	Chariton	.10					.25	T.	.12	1.20		T.		T.	.30			.30			.21						.20					2.68
Valley Park	Meramec	.13	.49					.53	.03	.57	T.		.90	.90	.66			.25	.40		T.	.16	.05					T.				5.07
Warrenton	Mississippi	1.13						.44	.35	.53		.32	.30	.33	.44			.50			.25	.10	T.				T.			T.		4.69
Keokuk, Ia.***	do	.22					.36	.18	.30	.56		.36	T.	.18	.05		T.	.13		.02	.07						.07				.01	2.51
Southeast Lowlands																																
Campbell‖	St. Francis	.70	.80					2.10	1.30	1.75			1.45	.67	.90			.30			.06	.10						.15				10.28
Cape Girardeau‖	Mississippi	.04	1.53					1.70	.45	.37	.45	.02	.16	1.28	1.05				.28			.25	.05					.02	.01			7.66
Caruthersville‖	do		.75					2.95	3.70	2.00		.20	1.75	.30	.18				.25		.50	.20						.80				13.58
Dexter‖	St. Francis	T.	1.46					1.80	1.25	.76	.50	.04	.34	1.43	.92				.20			.45	.03					.10	.18			9.46
Doniphan	Black	.73					.50	2.20	.70		1.20	.28	1.24	.50	.76			.54	T.		.60		T.									9.25
Jackson	Mississippi	.51	1.15					2 45	.47	.64		.03	.62	.08	1.17			.15			.10	.39										8.66
Marble Hill	Mississippi	.80	.60					2.20	.30	.30	.80			.82	1.20			.21			.12	.48	.16									7.99
Morehouse	do	.15	1.21					2.28	.46	1.38		.36	1.05	.82	1.06			.12	.05		.01	.40	.02				T.	.37				9.74
New Madrid‖	do	.02	1.05	.02				.86	2.85	1.90	.93	.01	.35	1.91	.74			.01	.21			.55	.05					.45	.20			12.11
Poplar Bluff‖	Black		1.50					1.96		.91	.43	.10	.15	1.15	.98			.26				.36	.05									7.85
Sikeston‖	Mississippi	1.50						2.12	1.45	1.17	.78		1.92		1.00			.25			.20	.10				.42						10.91
Cairo, Ill.***	do	.88	.36				T.	1.74	1.31	1.42		.13	1.80	.23	.59		T.	.28			.23	.12				.09	.26	T.				9.44
Ozark Plateau																																
Arcadia ‖	St. Francis	T.			.03			.60	T.	.83	.27		.25		.34			T.	.14		T.	.46	.10									3.02
Aurora	Neosho	.60					T.	.66	1.10	.33		.97	.63	T.	.37	T.		.26			.31	.02										5.25
Birchtree (near)	Black	.64	.08					.58	.35	.43	.09	.20	1.05	.60	.85			.05			.20	.35										5.47
Caplinger Mills	Osage	.87					T.	T.	.20	.54		.14	1.45	.28	.29			.60			.10	.10				T						4.57
Dean	Neosho	.80					T.	.28	.50	.75	.55	.55	.48	T.	T.	T.		.65			.55	.50				T.	T.					5.61
Eldon‖	Missouri	.24	.87					.20	1.40	.26					1.12			.45					.17									4.71
Farmington	St. Francis	.62	.22				.04	.85	.06	1.46			1.38	.63	1.53			.26			.30		.12									7.47
Fredericktown‖	do																															
Galena‖	White		.48					.42						1.75	.30																	2.95
Goodland	Black		.18					.20		.15		.25		.50							.40	.20	.10									1.98
Greenville	St. Francis	1.10						2.00	1.00				2.02	.60	1.00			1.03			.67	.10										9.52
Hailey	White	.65					1.00	.10	.15	.08	.06	.60		.20				.40			.20	.12										3.56
Koshkonong	Black	.46					.25	1.14	.27	.67	T.	.09	1.67	.56	.77	T.		.30			.20	.30										7.28
Lebanon ‖	Osage	T.	1.50					.40	T.	.32		1.00	.80	.40	.30						.24					T.						4.96
Leeper‖	Black	T	.70					1.95	.10	.70	.35	T.	.34	1.68	.78				.28			.51	T.									7.39
Lockwood	Osage	.82						.05	.40	.20		.85	.35					.50			.50	.12										3.79
Mountain Grove‖	White	.07	.56					.74	.37	.60	.09	T	.45	.75	.69				.20		T.	.60	.05				T.				.10		5.17
Neosho	Neosho	.30					T.	.29	.88	.56		.73	.59	.29	.35	.05	.46	.30			.32	.10										5.32
Owensville ‖	Gasconade		.12					.45		.80	.70		.60	.58				.12				.10	.12									3.59
Ozark Beach‖	White		.58					.62	.12	.52	.47		.48	.57	.31				.08			.36	.08									4.22
Rolla ‖	Meramec	.67					T.	.46	.62	.47		.67	.65	.29	.63		T.	.20			.08	.07										4.81
Salem (near)	do	.93	.03					.68	.65	.61		.15	.88	.28	.87			.24			.30	.24	.07									5.93
Seligman	Neosho	.58						.26	.50	.25	.10	1.10	.65	.34		.10		.40			.35	.20				T.						4.83
Seymour (near)	White	.76						.38	.09	.04		.13	.68	.26	.43	T.		.20			.45					T.	T.					3.42
Springfield ***	do	.70					.47	.40	1.05	.09	.02	.73	.85	.28	T.	T.	T.	.25		T.	.34	.09					T.					5.27
Steelville‖	Meramec	.10	.48					.43	.25	.35	.20		.65	.95	.75			.10	.25		T.	.26	.11									4.88
Stover ‖	Missouri	.89	.73					.45	.42	.79	.02			.44	.27			.17	.04				.10									4.32
Tuscumbia ‖	Osage	.11	.75					.50	.40	.62	.02	T.	.56	.32	.30			.26	.15		T.	.16	.05									4.20
Williamsville‖	Black		1.15	.01				1.98	.47	.38	.62	.08	.27	1.44	.96				.16			.56	.06					.09				8.23
Willow Sprgs. ‖ (near)	White		.67					.39	.34	.33	.12		.60	1.06	.86				.10		.01	.45	.06									4.99
Southwest Plain																																
Appleton City	Osage	1.02					.10	.40	.53	1.09	T.	.27	.17		T.			.32			.04	.02										3.96
Clinton	Osage	1.07					.20	.50	.50	**	1.15	.48	.12	.15				.30														4.47
Concordia ‖	Missouri									.64	.28							.24	T.													1.16
Harrisonville‖	Osage	.25						**	**	**	2.20			.06	.10			.20				.02										2.83
Joplin ‖	Neosho	.90					.10	.50	.68	.29		.60	.40	.10				.32			.43	.08				.02						4.42
Lamar‖	do	.35	.75					.20	.55	1.12	.10		.45	.08	.10			.05	.10			.25	T.					T.				4.10
Lamonte	Missouri	.85					.70	.30	.16	.90		.40						1.90			.04											5.25
Marshall	do	.38						.25	.30	.60								.41			.06											2.00
Nevada	Osage	.65						.30	.34	.32		.14	.60	.11	T.			.22			.06	.02										2.76
Osceola‖	do	.93	.40					.25	.95	1.97	.12		.55	.32				.64	.10			.15	T.									6.38
Warrensburg	Missouri	.14					.12	.15	T.	1.10									T.							.33				T.		1.84
Warsaw	Osage	1.48	T.				T.	.43	.12	.22	T.	1.60			.48	.06		.34			.04											4.77
Waverly ‖	Missouri	.32	.21					.45	.26	.80	.12	T.	.27	T.	.10	T.		.10	.12		T.	.10										2.85
Northwest Plateau																																
Bethany	Grand																															
Chillicothe ‖	do		.63	T.				.03	.21	.81				.12	.17	T.		.14	T.		.16	.11	T.									2.38
Conception	Missouri	.07		T.			T.	.10	.10	.36		T.		T.	.24			.12		.04	.05					T.						1.08
Edgerton	do	.26					T.	.14	.06							.23	.32	.09		.08	.01	.03										1.22
Gallatin ‖	Grand		.09					.09	.30	.42	.91		.03	T.	.10	T.		.14	T.		.12	T.										2.20
Grant City	do						T.	.06	.08	.44		.05		.04	.08			.24		.08	.01					T.						1.08
Kansas City***	Missouri	.27	T.				.25	.36	.41	.70	.01	.10	T.	.06	.10		.09	.14		T.	.06	.01										2.56
Kidder ‖	Grand		.10						.24	.45	.05							.20	T.		.06											1.10
King City	Missouri	.11						.04		.57		.07		.07	.22			.25		.07	.02	.01										1.43
Lexington	do	.16						.70	.40	1.25	.16		.26		.23			.20	.05		T.	.11										3.52
Maryville ‖	do						T.	.10		.30	.20		.12	.10	.30	.10		.50	.10		.10	.05				T.						1.97
Oregon	do	.04					T.	.08	.04	.40		.13		.10	.18			.28		.05	.04											1.34
St. Joseph***	do	.14	T.				T.	.04	.20	.39		.02		.09	.11	.05		.18		.05	.03					T.						1.30
Tarkio	do						T.	.03	.04	.15		.10		.03	.15			.12		.06	.03											0.71
Trenton	Grand	.22					.09	T.	.16	.71		.11		.12	.17			.24			.09	.03										1.94

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for January, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	41	25	34	36	48	55	14	14	14	25	25	22	17	22	10	0	13	2	26	16	15	20	30	27	25	26	7	27	24	33	36	23.5
	Minimum	35	25	22	23	33	35	7	7	12	−12	−10	21	20	17	− 2	− 7	− 6	−22	−13	− 2	0	−22	−16	− 7	4	13	1	− 1	−12	− 5	6	4.6
Columbia	Maximum	55	46	37	55	56	57	22	18	20	23	36	36	33	33	11	6	4	13	22	25	13	11	21	28	30	30	32	28	26	34	39	29.0
	Minimum	34	30	24	32	36	22	13	15	11	4	23	32	29	8	5	− 3	−14	−16	− 2	13	− 4	−16	− 2	12	11	18	10	9	− 1	19	11	11.7
Fayette	Maximum	42	47	39	54	57	57	50	18	22	26	35	33	32	27	19	10	0	13	25	27	20	15	23	30	33	29	32	33	28	35	39	30.6
	Minimum	40	25	23	27	30	32	12	12	14	0	0	26	27	19	0	− 5	− 3	−20	−10	− 2	− 2	−24	−24	− 4	8	9	6	5	− 7	− 6	5	7.1
Hannibal	Maximum	54	43	36	53	56	57	18	17	19	22	35	36	31	33	13	6	2	12	21	21	9	9	18	29	23	24	30	25	23	33	34	27.2
	Minimum	35	30	21	30	36	18	10	15	12	3	22	31	25	9	1	− 5	−15	−17	0	9	− 3	−16	− 4	10	8	8	8	7	− 2	11	8	9.9
Jefferson City§§	Maximum	51	47	40	57	56	50	21	20	21	28	37	35	38	28	16	10	6	18	24	26	9	12	22	30	36	34	39	30	28	38	42	30.6
	Minimum	37	31	23	23	25	36	11	12	16	11	10	25	29	26	7	− 1	− 2	−19	−18	1	3	−15	−14	− 3	8	13	14	9	2	2	8	10.0
Kirksville	Maximum	47	44	36	42	51	51	21	13	14	17	31	33	29	24	19	6	0	10	19	15	8	9	16	24	22	18	27	24	22	19	32	24.0
	Minimum	32	17	16	25	33	21	3	11	10	− 5	5	26	13	7	− 2	−11	−12	−20	− 3	− 1	− 6	−20	− 8	6	11	4	− 2	5	− 5	5	2	5.1
Louisiana	Maximum	50	43	40	52	60	49	24	20	20	20	41	46	40	29	13	15	6	11	22	22	15	10	18	28	26	30	34	28	26	30	37	29.2
	Minimum	35	30	23	25	30	23	13	15	13	3	22	33	32	12	6	− 2	0	−16	− 7	15	2	−24	− 5	11	13	11	10	9	−10	5	2	10.6
Macon§§	Maximum	40	40	37	50	54	58	15	15	20	25	34	30	27	19	10	6	− 7	10	23	22	6	10	18	27	28	24	30	25	25	32	33	25.4
	Minimum	32	20	18	19	35	40	6	6	12	− 3	0	23	19	17	− 4	−10	− 8	−20	−15	7	− 2	−17	−16	− 6	− 7	8	0	4	− 1	0	7	5.3
Mexico§§	Maximum	49	41	36	53	56	57	18	18	20	26	35	34	35	26	14	10	0	11	23	24	4	14	20	30	31	26	34	31	25	35	37	28.2
	Minimum	36	29	22	22	31	37	13	12	13	2	3	25	28	23	4	− 4	− 4	−19	− 6	− 5	0	−14	−14	− 4	12	12	6	9	− 2	− 1	10	8.9
St. Louis(1)	Maximum	60	47	39	52	54	55	32	26	31	26	36	39	38	39	20	15	14	15	25	24	22	10	20	28	34	35	38	40	32	24	38	32.5
	Minimum	37	36	29	28	33	32	19	23	19	18	24	33	33	15	11	7	− 9	−13	8	18	2	− 4	1	14	17	14	24	15	8	14	19	16.9
Unionville	Maximum	50	44	44	52	54	46	22	14	13	14	30	32	30	20	10	5	− 5	10	20	18	5	0	15	26	25	17	26	24	23	28	33	24.0
	Minimum	30	20	14	25	30	16	0	7	10	− 8	3	25	8	8	− 5	−14	−12	−21	− 4	5	−10	−20	− 8	5	10	5	− 5	5	−10	6	7	3.9
Warrenton	Maximum	59	47	46	54	57	57	56	21	24	24	32	37	35	38	22	16	11	16	26	25	23	12	22	31	33	32	41	39	26	37	43	33.6
	Minimum	37	33	24	26	31	44	15	15	19	12	21	31	31	21	7	0	− 6	−19	2	17	2	−14	− 5	10	12	13	16	9	0	10	12	13.7
Southeast Lowlands																																	
Campbell	Maximum	65	55	65	73	61	57	61	32	34	30	38	53	55	60	36	29	24	13	26	30	29	17	28	37	33	40	37	36	29	39	50	41.0
	Minimum	52	35	35	45	23	40	29	28	27	23	26	35	45	36	19	10	7	−24	− 9	10	15	− 6	−11	− 3	9	18	31	24	14	10	19	19.7
Caruthersville	Maximum	66	63	43	49	54	59	60	37	38	34	45	54	56	62	40	..	..	25	28	35	32	25	24	36	42	43	38	38	32	40	44	[b]42.8
	Minimum	55	41	32	26	30	45	36	32	33	28	31	41	41	40	26	..	..	−15	− 7	23	18	− 4	− 5	6	21	28	35	31	15	19	28	[b]25.2
Doniphan	Maximum	63	57	47	51	56	55	58	33	34	33	35	44	50	50	35	31	25	23	32	32	30	25	31	41	33	42	45	38	34	42	47	40.4
	Minimum	49	40	30	17	18	42	31	28	27	28	24	33	42	33	17	10	4	−18	− 5	9	15	− 7	−13	− 4	1	20	22	30	15	8	16	18.2
Jackson	Maximum	49	44	39	42	50	55	51	32	32	32	33	43	47	37	36	35	20	12	26	30	26	12	22	31	37	33	38	37	27	35	41	35.0
	Minimum	44	35	26	17	25	39	24	23	27	20	30	30	32	33	13	3	2	−26	− 9	15	8	−10	−21	− 6	− 1	13	22	19	9	3	16	14.7
Poplar Bluff	Maximum	63	55	47	49	45	58	39	33	34	31	41	46	52	47	31	28	25	13	29	31	29	20	28	37	39	45	39	37	32	39	44	38.3
	Minimum	46	32	22	12	19	39	31	28	29	24	27	34	42	30	18	10	7	−23	− 7	19	16	−13	−17	− 6	− 1	15	33	26	15	9	15	17.1
Sikeston	Maximum	64	60	45	48	58	56	56	32	34	33	39	54	53	60	42	28	24	16	26	32	27	17	27	35	37	40	45	37	30	38	42	39.7
	Minimum	54	39	30	22	27	45	29	28	31	24	26	36	41	40	20	12	15	−15	− 2	15	15	− 5	− 7	8	13	20	28	25	15	12	22	21.4
Cairo, Ill	Maximum	64	47	39	46	52	58	58	35	35	31	48	53	58	62	31	21	23	10	26	30	30	13	22	31	35	41	39	36	27	36	41	38.0
	Minimum	45	39	32	26	33	46	31	30	27	27	31	40	46	31	19	12	0	− 8	9	21	10	− 1	− 1	13	17	27	34	23	15	17	25	23.1
Ozark Plateau																																	
Arcadia§§	Maximum	68	51	40	49	52	51	30	32	32	29	41	37	42	39	24	22	24	22	27	25	21	16	28	32	41	35	42	33	29	39	44	35.4
	Minimum	27	35	25	18	24	29	28	20	22	17	18	26	28	31	10	4	4	−19	−16	− 6	7	−14	−15	− 8	8	− 8	21	19	9	2	4	11.3
Aurora	Maximum	59	43	42	40	51	54	54	28	27	24	34	35	42	36	16	10	9	9	27	27	26	9	20	30	33	38	37	34	28	33	39	32.1
	Minimum	36	32	24	29	33	45	20	18	12	10	23	31	31	15	8	0	− 6	−16	4	21	− 1	−14	− 2	11	12	24	27	16	10	19	17	15.8
Birchtree	Maximum	62	59	58	51	55	52	54	32	30	25	33	37	44	43	27	23	18	23	31	27	25	16	23	32	42	35	36	36	31	38	43	36.8
	Minimum	43	38	27	21	20	44	28	24	21	19	24	32	34	25	13	6	− 2	−19	− 2	20	8	− 9	−11	− 2	7	22	33	22	10	9	17	16.8
Eldon§§	Maximum	51	49	42	55	57	51	19	17	..	16	26	37	33	28	15	10	0	20	25	21	5	13	24	31	37	39	35	32	31	38	44	[a]30.0
	Minimum	35	34	25	25	31	35	18	16	16	..	11	11	26	28	8	0	− 1	−20	−20	5	4	−12	−12	− 3	11	11	15	10	4	3	12	[a]10.9
Farmington	Maximum	57	47	42	51	53	52	51	26	29	25	32	36	39	39	36	19	16	21	32	28	18	14	28	32	40	36	42	36	26	40	42	35.0
	Minimum	41	35	25	21	18	40	20	20	23	18	23	32	32	34	11	5	− 1	−18	− 5	18	4	−10	− 5	7	14	21	27	15	7	4	16	15.9
Koshkonong	Maximum	59	52	45	50	57	54	55	31	31	24	32	38	46	45	29	24	21	18	30	26	23	18	27	33	42	37	38	37	33	40	45	36.8
	Minimum	45	37	29	25	29	43	30	16	21	20	24	32	37	28	14	6	2	−16	1	20	6	− 9	− 3	10	13	21	33	25	12	14	23	19.0
Lebanon§§	Maximum	61	42	55	60	50	23	23	20	30	39	36	41	30	20	10	10	18	29	28	10	11	21	30	42	38	40	32	34	39	39	45	32.5
	Minimum	40	31	21	29	31	17	10	10	10	25	29	25	25	5	− 2	− 3	−20	−15	5	1	−17	−20	− 5	8	8	22	12	− 3	5	14	14	9.6
Mountain Grove§§	Maximum	58	49	42	51	54	54	27	30	23	27	34	36	41	34	22	19	12	18	26	24	10	11	25	28	40	36	37	34	36	38	43	32.9
	Minimum	39	34	24	24	26	29	26	21	21	16	16	26	32	32	9	2	2	−18	−16	11	9	−12	−12	2	10	11	27	18	9	9	19	14.4
Neosho	Maximum	64	51	49	54	57	57	27	27	26	35	36	37	37	21	16	14	22	28	29	27	14	28	32	45	41	38	33	35	41	49	36.4
	Minimum	37	26	22	25	29	46	17	16	13	6	22	31	30	16	8	− 1	− 6	−29	− 4	21	1	−31	−16	− 6	− 3	19	22	15	10	13	11	11.6
Rolla	Maximum	55	42	41	48	51	55	55	21	21	23	34	35	35	35	22	15	11	15	27	27	24	6	20	27	31	37	38	40	26	35	35	31.8
	Minimum	38	34	25	26	33	45	20	18	19	16	21	33	32	21	10	3	− 4	−17	− 2	19	3	−13	− 3	9	10	22	25	14	9	12	20	16.1
Springfield	Maximum	60	48	39	53	56	56	30	26	26	25	34	36	38	39	14	12	14	15	25	24	22	7	21	27	35	36	39	31	31	38	43	32.3
	Minimum	35	33	24	30	33	29	20	18	11	11	25	32	32	10	5	0	−15	−17	9	18	− 6	−11	− 2	11	14	27	28	17	11	22	20	15.3
Southwest Plain																																	
Appleton City	Maximum	55	49	47	52	56	56	27	16	16	22	34	34	28	26	13	10	4	12	26	26	21	13	23	29	35	36	31	28	26	35	40	29.9
	Minimum	33	25	22	29	31	26	10	10	10	0	20	25	25	11	2	− 5	−11	−22	− 4	19	− 1	−18	− 7	3	5	20	10	15	5	15	9	10.1
Clinton	Maximum	58	47	44	52	56	58	34	17	16	22	33	33	33	32	12	9	4	5	24	23	22	9	15	22	33	38	32	35	31	30	34	29.5
	Minimum	34	25	24	30	32	28	0	12	12	3	20	28	30	12	8	− 3	− 9	−22	− 3	18	1	−14	0	6	6	26	12	11	2	14	10	11.6
Harrisonville§§	Maximum	38	51	42	53	55	53	13	15	14	24	32	27	24	14	11	6	− 3	16	21	20	6	15	24	32	36	34	28	32	20	37	38	27.0
	Minimum	37	25	20	21	31	36	9	8	9	− 7	2	20	20	11	− 4	− 9	− 8	−21	−15	7	− 3	−15	−15	− 7	8	9	7	6	3	7	8	6.7
Lamar§§	Maximum	45	51	42	53	55	58	19	19	15	29	34	34	33	21	14	11	0	14	28	28	4	11	23	28	37	37	27	31	33	35	40	29.3
	Minimum	43	32	24	31	32	38	19	16	15	4	9	28	29	20	7	− 1	− 1	−20	−12	10	3	−22	−22	− 4	6	6	17	14	7	7	10	11.1
Lamonte	Maximum	52	48	40	51	55	56	21	18	18	20	35	35	29	27	10	5	1	10	22	27	12	11	22	29	36	27	27	29	31	34	39	28.3
	Minimum	33	27	23	30	34	20	11	13	9	− 6	19	26	23	8	0	− 5	−20	−24	− 4	10	− 4	−17	− 9	4	4	4	6	4	− 2	16	6	7.7
Marshall	Maximum	58	55	42	53	55	45	26	18	21	21	34	34	34	27	24	15	9	16	22	25	25	14	22	30	29	29	30	29	28	33	38	30.4
	Minimum	29	24	22	30	25	22	8	12	12	2	15	18	21	12	− 2	− 8	− 8	−21	4	14	− 1	−15	− 6	8	9	16	3	7	− 1	15	8	8.8
Nevada	Maximum	57	49	42	51	55	59	28	19	19	24	34	34	32	29	14	9	8	12	28	26	20	11	22	28	33	36	35	30	30	35	37	30.5
	Minimum	35	30	23	32	32	27	12	12	9	1	22	28	28	12	4	− 3	− 7	−17	− 1	18	0	−15	− 1	8	8	21	12	16	6	19	12	12.4
Warrensburg	Maximum	56	48	39	51	55	55	23	14	18	14	33	28	26	20	12	10	14	10	22	22	5	15	20	28	35	36	30	30	30	33	36	28.0
	Minimum	32	27	21	29	33	23	9	10	10	− 5	11	22	18	9	3	− 7	−14	−20	0	0	− 3	−15	− 5	6	3	18	5	7	7	17	9	8.4
Warsaw	Maximum	60	51	50	55	58	58	39	23	21	26	34	38	35	35	19	13	6	17	27	29	27	11	25	31	39	38	36	32	33	37	43	33.7
	Minimum	35	38	32	33	49	31	15	16	17	10	21	31	29	15	6	− 1	− 4	−21	− 9	12	0	−29	− 5	9	3	22	13	5	3	8	8	12.6
Northwest Plateau																																	
Chillicothe§§	Maximum	39	47	40	51	56	52	28	14	14	22	37	33	21	13	9	1	− 6	17	20	18	5	13	21	30	28	27	27	30	25	34	36	25.9
	Minimum	30	17	18	18	30	39	2	2	8	8	9	10	10	10	− 6	−14	−13	−22	−15	2	− 7	−29	−24	− 8	6	8	− 5	− 5	−13	−11	2	1.8
Grant City	Maximum	46	41	39	52	52	45	14	12	10	16	28	32	18	16	9	6	− 6	16	17	14	3	7	18	26	23	19	23	23	27	29	32	22.8
	Minimum	33	21	15	29	33	14	− 1	6	2	− 4	8	18	9	5	− 4	−13	−15	−21	−12	0	−12	−22	− 5	5	11	6	− 5	7	− 7	13	6	4.4
Kansas City	Maximum	51	48	41	51	54	52	14	14	13	17	33	31	25	21	11	4	− 3	20	18	17	6	14	24	31	29	28	28	32	32	34	38	26.7
	Minimum	33	30	24	34	37	14	5	9	3	− 3	17	22	16	6	2	− 4	−12	−11	5	3	− 4	−10	0	12	16	13	6	13	12	20	17	10.5
Kidder§§	Maximum	38	47	37	51	52	50	11	13	11	19	32	30	19	11	7	− 2	− 7	15	11	11	0	9	18	20	22	21	23	24	25	31	37	22.1
	Minimum	31	23	18	18	31	31	1	1	6	−10	− 9	16	11	9	− 7	−12	−13	−21	−17	3	− 9	−19	−20	− 9	2	7	− 5	− 5	− 4	0	4	1.7
Lexington§§	Maximum	58	54	50	40	52	55	50	21	14	15	15	32	33	29	20	10	6	0	14	21	20	9	10	23	31	31	24	30	33	26	36	27.8
	Minimum	33	24	22	32	36	21	7	11	10	− 4	14	15	12	9	0	− 7	− 6	−15	0	11	− 3	−15	− 4	8	11	17	4	9	0	20	12	9.2
Maryville	Maximum	45	45	38	55	51	48	15	14	13	17	50	31	20	17	9	6	− 5	16	18	15	4	9	20	29	23	20	22	22	30	28	35	24.5
	Minimum	33	21	14	30	33	14	− 1	6	4	− 5	10	15	10	4	− 6	−13	−14	−20	− 6	0	−11	−20	− 9	3	5	8	− 3	0	− 3	16	5	3.9
Oregon	Maximum	48	45	41	56	55	49	12	15	14	21	30	31	20	17	11	6	− 3	25	18	15	5	14	24	30	31	25	28	29	34	30	40	26.3
	Minimum	34	29	17	32	35	6	0	7	5	− 7	14	7	12	3	− 5	−11	−13	−17	2	2	− 9	−16	− 4	7	9	13	3	4	6	21	10	6.6
St. Joseph	Maximum	42	45	39	53	53	49	10	15	13	17	32	26	19	16	9	0	− 5	19	17	11	2	10	22	27	27	25	25	26	31	30	37	23.9
	Minimum	30	26	21	35	37	10	1	9	0	− 6	15	19	14	5	− 1	− 8	−16	−15	2	1	−11	−17	− 4	8	12	10	3	6	4	14	11	6.9
Trenton	Maximum	50	42	40	48	51	48	21	14	12	17	30	31	25	19	11	5	− 1	11	19	15	9	5	19	26	23	21	23	24	21	32	34	24.0
	Minimum	31	20	18	28	32	21	2	8	9	− 6	10	24	12	4	− 2	−11	−12	−20	− 5	9	− 8	−26	− 5	7	12	11	− 4	4	−11	13	6	5.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 3-21-30—955.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., FEBRUARY, 1930 No. 2

GENERAL SUMMARY

Not during forty years or more have two winter months, in the State of Missouri, shown such great contrasts in temperature conditions as were experienced in January and February of this year. January was notably and persistently cold everywhere, with more than double the normal snowfall. In contrast, February was abnormally warm in every part of the State, with unusually small snowfall.

It was the warmest February of record. The monthly mean, 44.5°, approximated, and in fact, was a little higher, than the the normal for the month of March. The maximum, 89°, broke all past records by 2° for this month, and the number of consecutive days of summer-like warmth exceeded previous records of the kind. The warmth was general, with every temperature station in the State reporting mean temperatures of from 9° to more than 17° above normal.

The precipitation was relatively small, and unevenly distributed. There were few widespread rains of importance; and only two days with snow. Snow and ice covered the northern half of the State the first three or four days, being a carry-over from January's heavy snowfall. There was no appreciable snow over the southern half of the State.

The ground thawed out before the 15th of the month, and much plowing was done during the last ten days, and considerable seeding of oats and clover was done in southern parts. The month's weather was favorable for all outdoor work; for winter grains, and livestock. The commercial peach crops were mostly killed by January's low temperatures; and a small amount of wheat was winter killed, particularly in Dade, Barton, and Jasper counties.

TEMPERATURE

The monthly mean temperature, based upon the records of 66 stations, was 44.5°, or about 12.1° warmer than normal, and besides, this value approximates the normal for the month of March. It was the warmest February of record, beginning in 1888. The warmth was equally marked in all parts of the State. The highest local monthly mean was 51.0°, at Caruthersville; and lowest local monthly mean was 39.4°, at Kidder. The highest reported temperature was 89°, at Jefferson City on the 24th, and the record maximum for the State in February. The lowest reported temperature was 5° below zero, at Downing on the 15th. The greatest daily range was 55°, at Kidder on the 16th. Temperatures were 32° or lower on only 15 days, and zero or lower on one day, at seven stations.

PRECIPITATION

The average precipitation for the State, 95 stations reporting, was 1.71 inches, or 0.40 inch less than the 60 years' average. The Ozark Plateau and southeastern lowlands received nearly the normal amounts, but the remainder of the State received around one-half the normal February precipitation. The greatest local monthly amount was 4.42 inches, at New Madrid, while less than one-fourth inch fell at Warrensburg. The greatest amount that fell in any 24-hour period was 2.20 inches at Campbell on the 4th.

A general snowstorm occurred on the 14th and 15th. Over most of the central and northern sections amounts ranged from 2 to 6 inches, and all of it melted within a few days time.

MISCELLANEOUS PHENOMENA

Fogs, dense.—2d, 3d, 4th, 5th, 17th, 18th, 22d, and 23d.

Hail.—Local, without damage, 13th, 24th, 25th, and 28th.

Halos, lunar.—6th, 8th, 9th, 11th, 12th, and 13th.

Halos, solar.—6th, 12th, 14th, 16th, 17th, 19th, 20th, 23d, and 27th.

Sleet.—Light without damage, 9th. 13th, and 14th.

Thunderstorms, local.—12th, 22d, 23d, 24th, 25th, and 28th.

Wind.—High local winds occurred on the 25th. At Downing, Schuyler County, the only place reporting damage, windows were broken, a barn owned by J. E. Kitchens, six miles south of the town, was blown down, and several other barns and outbuildings damaged. Estimated loss $1,000.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.03	80	66	179	59	5,238	7.8	27	sw.	24
Hannibal	30.04	76	..	...	..	5,782	8.6	29	sw.	24
Kansas City	30.02	74	59	234	78	7,067	10.5	27	nw.	9
St. Joseph	30.00	75	58	186	62	5,576	8.3	28	nw.	9
St. Louis	30.05	73	63	160	53	8,273	12.3	35	sw.	21
Springfield	30.06	84	59	169	56	6,781	10.1	29	sw.	24
Cairo, Ill.	30.10	78	64	...	..	6,156	9.2	32	n.	4
Keokuk, Iowa	30.03	77	63	179	60	4,852	7.2	25	nw.	9

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	33.0	+2.0	73	−11	2.04	−0.28	....	....	7	..	..	..
1889	29.3	−1.7	73	− 9	2.57	+0.25	....	....	7	..	..	..
1890	35.5	+4.5	81	− 7	2.24	−0.08	....	....	7	..	..	..
1891	32.7	+1.7	76	− 8	2.28	−0.04	....	2.4	6	..	..	..
1892	37.7	+6.7	71	2	4.15	+1.83	....	....	9	7	6	16
1893	27.9	−3.1	65	−20	1.98	−0.34	2.30	4.6	6	10	7	11
1894	30.8	−0.2	72	−12	2.52	+0.20	2.60	11.2	6	10	8	10
1895	23.6	−7.4	77	−26	0.55	−1.77	1.10	3.3	5	10	10	8
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	4.1	5	12	8	9
1897	34.8	+3.8	74	−15	2.30	−0.02	3.60	8.2	7	7	7	14
1898	35.4	+4.4	78	− 9	1.62	−0.70	2.90	0.8	5	13	6	9
1899	20.4	−10.6	72	−32	2.17	−0.15	4.30	5.3	6	12	8	8
1900	26.2	−4.8	70	−16	3.92	+1.60	2.85	16.6	10	10	6	12
1901	28.1	−2.9	76	−19	1.63	−0.69	2.36	7.6	6	13	7	8
1902	24.0	−7.0	72	−17	1.50	−0.82	2.35	5.8	5	11	8	9
1903	29.8	−1.2	74	−25	2.92	+0.60	2.65	5.3	7	11	6	11
1904	30.0	−1.0	82	−18	0.91	−1.41	1.46	1.5	5	11	8	10
1905	21.5	−9.5	69	−40	1.64	−0.68	1.20	13.2	8	11	6	11
1906	33.7	+2.7	73	−13	2.28	−0.04	2.40	4.1	7	15	6	7
1907	34.8	+3.8	77	−15	1.65	−0.67	3.72	4.5	6	12	5	11
1908	35.6	+4.6	78	− 7	4.32	+2.00	4.28	4.1	9	13	6	10
1909	38.8	+7.8	71	− 4	3.38	+1.06	2.50	3.1	9	13	5	10
1910	28.3	−2.7	72	−24	1.98	−0.34	3.00	7.7	6	12	6	10
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	6.3	8	12	5	11
1912	28.3	−2.7	72	−12	2.45	+0.13	3.20	11.9	6	10	7	12
1913	29.8	−1.7	78	− 9	2.21	−0.18	4.78	8.5	7	12	5	11
1914	28.3	−3.2	75	−11	2.71	+0.42	2.80	14.0	7	12	6	10
1915	39.4	+8.0	72	7	3.18	+0.81	2.05	4.1	8	9	5	14
1916	31.4	+0.2	78	−12	0.98	−1.48	2.70	5.0	5	13	6	10
1917	30.5	−1.0	83	−22	0.41	−2.03	1.24	1.4	2	14	7	7
1918	34.9	+4.6	83	−25	1.11	−1.26	2.00	0.6	4	15	6	7
1919	35.3	+4.0	71	−10	1.98	−0.35	2.20	6.4	7	13	4	11
1920	34.5	+3.2	78	− 5	0.57	−1.68	1.41	1.2	4	11	6	12
1921	40.1	+9.1	86	5	0.94	−1.33	2.00	1.8	4	14	6	8
1922	35.4	+4.1	80	− 5	1.79	−0.44	1.65	1.9	5	14	6	8
1923	30.2	−1.2	75	− 9	1.37	−0.88	2.20	1.4	5	13	5	10
1924	33.8	+2.0	79	− 5	1.84	−0.31	1.60	8.1	7	14	4	11
1925	38.7	+6.9	78	1	1.85	−0.30	1.78	1.7	6	12	6	10
1926	39.4	+7.6	76	− 4	2.08	−0.07	2.00	2.9	6	11	6	11
1927	41.3	+9.5	78	1	1.08	−1.07	1.48	2.3	5	10	8	10
1928	37.0	+5.2	71	− 2	2.28	+0.13	3.25	1.8	7	12	6	11
1929	25.0	−7.4	64	−23	1.92	−0.19	4.25	9.4	7	10	5	13
1930	44.5	+12.1	89	− 5	1.71	−0 40	2.20	1.3	4	13	8	7
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
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Climatological Data for February, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	41.3	+12.2	78	24	3	15	41	0.96	−0.89	0.55	3.0	6	11	3	14	sw.	O. K. Benecke
Clifton Hill	Randolph	731	31	41.3	+12.1	79	24	− 1	15	47	1.34	+0.01	0.60	4.0	5	14	7	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	44.2	+12.5	81	24	6	15	39	1.82	−0.22	1.30	3.4	4	7	10	11	s.	U. S. Weather Bureau
Downing	Schuyler	876	9	40.9	.....	78	24	− 5	15	38	0.83	−0.57	0.62	0.4	5	9	13	6	s.	James Taylor
Fayette	Howard	661	50	42.2	+12.0	81	24	5	15	49	0.80	−1.10	0.53	2.5	3	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	43.1	+10.4	81	24	8	15	51	0.48	−1.41	0.25	4.5	3	11	11	6	.....	Chamber of Commerce
Gorin	Scotland	700	41	...	.....	..	..	....	..	..	0.55	−0.94	0.41	0.2	6	11	6	11	nw.	J. W. Pulliam
Hannibal	Marion	534	38	42.0	+12.3	79	24	6	15	36	1.73	−0.13	1.16	1.8	6	7	9	12	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	43.4	+12.5	89	24	9	15†	50	1.45	−0.64	0.55	4.0	5	12	4	12	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	40.8	+14.9	77	24	− 1	15	39	0.43	−1.39	0.35	0.7	3	13	5	10	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	43.1	+13.4	80	24	− 1	16	51	0.60	−1.75	0.25	3.3	3	16	7	5	s.	Stark Bros. Nurseries
Macon	Macon	875	31	41.5	+12.8	79	24	− 1	15	47	0.72	−1.23	0.54	2.0	3	14	8	6	sw.	W. C. Brown
Mexico	Audrain	800	41	41.6	+12.3	80	24	4	15	47	0.97	−1.24	0.53	4.0	3	17	0	11	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	...	.....	..	..	....	..	..	0.96	.....	0.43	2.0	3	12	9	7	n.	J. S. Conway
St. Charles	St. Charles	456	42	44.9	+12.4	81	24	5	16	40	1.85	−0.78	0.90	5.0	4	10	5	13	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	45.3	+10.5	80	24	12	16	32	2.35	−0.21	0.98	4.2	4	9	9	10	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	44.4	+12.2	81	24	12	16	32	2.06	−0.25	0.85	3.7	4	11	6	11	se.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	....	..	..	2.06	+0.14	1.38	4.0	4	..	..	..	....	J. C. Jewett
Steffenville	Lewis	650	32	41.6	+13.2	78	24	1	15	38	0.77	−1.08	0.35	1.0	4	11	9	8	s.	Frank Hall
Unionville	Putnam	1,062	37	41.8	+16.4	80	24	− 3	15	44	0.74	−1.09	0.60	T.	3	13	9	6	sw.	Geo. W. Davis
Warrenton	Warren	816	48	45.6	+15.7	82	24	7	16	43	1.55	−0.64	0.64	6.0	4	11	9	8	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	40.7	+12.4	78	24	0	15	38	1.01	−0.54	0.48	1.0	5	6	12	10	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	42.6	+12.8	89	24	− 5	15	51	1.18	−0.76	1.38	2.7	4	11	8	9	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	48.2	.....	74	25	17	16	42	3.37	.....	2.20	0	5	10	10	8	s.	Jeff. King
Caruthersville	Pemiscot	265	34	51.0	+12.1	76	25	30	15	30	3.08	−0.72	1.22	0	8	6	11	11	s.	Sam Smith
Doniphan	Ripley	344	26	47.8	+ 9.7	79	24	15	16	46	3.28	+0.13	1.33	0	5	13	10	5	sw.	A. C. Jones Jr.
Jackson	Cape Girardeau	428	39	44.8	+ 9.3	72	19†	13	16	45	3.00	+0.11	1.70	0	6	5	11	12	s.	John G. Putz
Marble Hill	Bollinger	470	35	46.0	+10.7	73	19†	12	16	45	2.78	−0.50	2.12	T.	4	11	3	14	w.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	....	..	..	3.79	+0.53	2.14	0	8	12	8	8	sw.	John A. Spence
Poplar Bluff††	Butler	339	26	46.4	+10.1	75	24	16	16	44	3.70	+0.74	1.65	0	7	9	9	10	s.	J. H. Wolpers
Sikeston	Scott.	318	29	48.2	+11.6	74	24	18	16	36	2.63	−0.63	2.04	0	4	15	4	9	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	48.0	+ 9.5	74	25	20	16	28	2.53	−0.60	1.14	T.	8	5	10	13	s.	U. S. Weather Bureau
Section means and	extremes	....	..	47.6	+10.4	79	24	12	16	46	3.13	−0.12	2.20	T.	6	10	8	10	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	42.7	+ 9.2	77	24	13	16	46	2.35	−0.81	1.06	T.	3	21	0	7	se.	Arcadia College
Aurora	Lawrence	1,370	38	45.7	+12.1	72	24	22	15	27	2.21	−0.61	0.71	0	5	17	3	8	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	47.8	+12.9	78	23	13	15	40	3.93	+1.44	1.49	0	4	17	3	8	sw	V. H. Kirkendall
Dean ††	McDonald	1,000	31	48.1	+13.3	79	23	19	10	39	1.00	−0.83	0.55	0	2	11	10	7	sw.	H. E. Dean
Eldon	Miller	934	34	43.8	+11.9	79	24	12	16	43	1.19	−0.91	0.42	2.6	6	10	14	4	s.	E. H. Shepherd
Farmington	St. Francois	918	19	45.1	+ 9.5	79	24	13	16	52	2.50	−0.79	0.94	T.	6	12	7	9	sw.	Robert Forsyth
Goodland	Iron	1,000	°36	43.6	+10.7	79	24	12	16	49	2.64	+0.15	0.99	0	3	8	13	7	s.	F. M. Adams
Greenville	Wayne	381	7	41.8	.....	69	22	15	1	42	1.95	.....	1.40	1.0	3	11	9	8	s.	Wm. P. Owens
Hailey	Barry	1,350	4	....	.....	..	..	....	..	..	3.05	.....	1.70	0	3	20	5	3	w.	A. W. Madison
Koshkonong	Oregon	958	29	49.0	+11.5	77	24†	20	16	35	3.25	+0.46	1.00	0	5	13	6	9	w.	R. M. Hitt
Lebanon	Laclede	1,265	43	43.5	+ 9.6	80	24	14	1	42	1.90	−0.60	0.60	0	5	11	8	9	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	46.4	+10.9	80	24	18	1	35	1.15	−0.82	0.75	0	3	15	6	7	sw.	C. S. Crow
Mountain Grove (near)	Wright	.....	29	44.9	+11.1	76	24	19	1	44	3.27	+1.01	0.94	T.	7	15	7	6	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	47.6	+11.0	78	24	17	10	41	1.22	−1.16	0.51	0	3	15	4	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	45.0	+ 9.8	75	24	17	15	33	1.63	−0.71	0.82	1.5	7	4	15	9	s.	F. H. Lane
Salem (near)	Dent	1,173	26	45.2	+10.7	80	24	16	16	45	3.12	+0.74	1.82	1.0	6	11	10	7	s.	A. C. Leech
Seligman	Barry	1,542	28	45.8[i]	+ 9.6	..	..	24	15	..	2.66	+0.78	1.71	0	3	10[i]	7[i]	2[i]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	47.6	+15.2	76	24	19	10	39	3.57	+1.12	1.76	T.	4	13	6	9	sw.	Ira H. Hailey
Springfield	Greene	1,324	42	46.8	+11.6	76	24	21	15	30	1.59	−0.76	0.72	T.	4	13	7	8	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	45.6	+11.2	80	24	12	16	52	2.33	−0.13	1.82	0.3	4	13	8	7	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	45.5	+13.2	76	24	13	15	38	0.70	−1.27	0.35	0.2	4	10	14	4	sw.	W. G. Bigelow
Clinton	Henry	765	37	47.2	+15.3	83	24	12	15	36	1.15	−0 95	0.42	1.5	6	12	9	7	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	44.3	+14.6	81	24	8	15	53	0.40	−1.62	0.28	0	2	14	3	11	s.	John H. Patterson
Lamar	Barton	980	43	45.3	+10.8	80	23	11	1	40	1.05	−1.18	0.48	0	3	19	3	6	sw.	Jesse A. Mann
Lamonte	Pettis	867	30	43.8	+12.2	78	24	7	15	40	0.68	−1.23	0.30	1.2	4	21	5	2	sw.	J. E. Wheeler
Marshall	Saline	779	42	44.0	+14.5	79	24	4	15	49	0.58	−1.26	0.33	3.0	2	18	5	5	w.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	46.2	+14.3	79	24	18	15	35	0.47	−1.61	0.29	0	3	17	4	7	s.	George A. Kaupp
Warrensburg	Johnson	878	43	44.4	+13.1	77	24	7	15	35	0.15	−1.98	0.10	0.7	2	21	4	3	sw.	E. A. Markey
Warsaw	Benton	687	29	46.8	+13.0	80	24	14	15	47	1.57	−0.99	0.56	0.5	5	13	10	5	s.	Everett Martin
Section means and	extremes	.....	..	45.3	+13.4	83	24	4	15	53	0.75	−1.34	0.56	0.8	3	16	6	6	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	M. H. Moulton
Chillicothe	Livingston	779	20	41.1	+ 8.6	83	24	− 3	15	55	0.46	−1.55	0.28	3.0	2	16	8	4	se.	Wm. J. Olenhouse
Conception	Nodaway	980	41	42.8	+15.7	82	24	− 1	15	41	1.37	+0.18	1.32	0.5	2	9	15	4	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	44.0	.....	82	24	1	15	45	0.51	−0.94	0.40	2.0	3	20	2	6	sw.	Fred L. Stiff
Grant City	Worth	1,134	26	41.7	+14.4	80	24	− 4	15	39	1.09	−0.03	0.84	2.0	3	6	19	3	sw.	W. P. Spillman
Kansas City	Jackson	963	41	46.2	+15.0	81	24	5	15	34	0.80	−0.95	0.50	1.2	5	12	12	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	39.4	+11.6	80	24	− 3	16	55	0.57	−0.95	0.39	2.0	2	13	5	10	sw.	Linn Terry
King City	Gentry	1,095	4	....	.....	..	..	....	..	..	0.77	.....	0.61	1.5	3	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	44.8	+15.4	80	25	4	15	40	1.12	−0.88	0.68	2.0	4	16	8	4	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	42.0	+17.9	80	24	0	15	42	0.83	−0.61	0.53	0.5	3	9	10	9	n.	J. R. Brink
Oregon	Holt	1,048	74	45.6	+17.4	84	24	1	15	43	1.45	−0.17	1.25	1.0	3	17	6	5	sw.	Mina Wright
St. Joseph	Buchanan	967	22	44.3	+13.2	83	24	3	15	34	0.83	−0.68	0.52	2.5	3	13	10	5	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	27	41.8	+13.8	79	24	1	15	40	0.60	−0.47	0.38	1.0	3	10	6	12	sw.	Albert Volker
Trenton	Grundy	822	34	42.3	+13.8	82	24	1	15	42	0.39	−1.14	0.14	1.5	3	10	13	5	s.	W. H. Estes
Section means and	extremes	.....	..	43.0	+14.3	84	24	− 4	15	55	0.83	−0.68	1.32	1.6	3	13	9	6	sw.	
State means and	extremes	.....	..	44.5	+12.1	89	24	− 5	15	55	1.71	−0.40	2.20	1.3	4	13	8	7	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for February, 1930

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Northeast Plain																																	
Boonville‖	Missouri				.06											.18								1.05		.03							1.32
Brunswick‖	Grand								.02						.07	.11							.17	.04		.55							0.96
Clifton Hill	Chariton			.25											.36								.11	.02		.60			T.				1.34
Columbia***	Missouri			T.	.06				T.						.25			T.					1.30			.21			T.				1.82
Downing	Mississippi		T.	.05											.02	.02		.12								.62			T.				0.83
Fayette‖	Missouri														.25								.53			.02							0.80
Fulton‖	....do				T.									T.		.25							.07	T.		.16	T.						0.48
Gorin	Mississippi			.03											.02			.05					.02			.41			.02				0.55
Hannibal***	....do			.01					T.						.13		T.	.02					1.16	.16		.25			T.				1.73
Hermann‖	Missouri													T.		.40							.03	.75	.03	.14	.15						1.50
Jefferson City‖	....do				.25							.28				.24								.55		.18							1.45
Kirksville	Mississippi														.07											.35			.01				0.43
Louisiana	....do														.25									.25	.10								0.60
Lucerne‖	Grand																																
Macon‖	Chariton		T.												T.	.14								.04		.54							0.72
Mexico‖	Mississippi															.37								.53		.07							0.97
Milan‖	Grand														.05	T.			T.							.40							0.45
Monroe City	Mississippi														.18			T.					.43	T.	.35								0.96
Pacific‖	Meramec												T.	.04		.30							T.	.90		.28	.55						2.07
St. Charles	Missouri												T.	T.	.20	.30							.45			.90			T.				1.85
St. Louis (1)***	Mississippi							T.	T.				T.	T.	.42	.05		T.					.98			.90							2.35
St. Louis (2)*	....do													T	.21	.16		T.					.85			.84							2.06
Shelbina ‖	....do															.40								1.38	.01	.27							2.06
Steffenville	....do														.07	T.		T.					.05		.30	.35			T.				0.77
Union‖	Meramec													.06		.31							.10	.73		.22	.38						1.80
Unionville	Chariton			T.											T.	.10										.60			.04				0.74
Valley Park	Meramec												T.	.10		.35		T.						.74		T.	.84						2.03
Warrenton	Mississippi													T.	.30	.30							.64			.31							1.55
Keokuk, Ia.***	....do			T.					T.				T.		.05	T.		.19					T.	.28	T.	.48			.01				1.01
Southeast Lowlands																																	
Campbell‖	St. Francis				2.20								.41										.32	.02		.42							3.37
Cape Girardeau‖	Mississippi				1.14	.43								.35	T				T.				T.	.08	T.		.52		T				2.52
Caruthersville‖	.... do			.08	1.22									.35									.18	.28		.12	.70		.15				3.08
Dexter‖	St. Francis				1 55	.07								.20	.10								T.	.38			.92						3.22
Doniphan	Black				1.33								.20	.08									.83			.84							3.28
Jackson	Mississippi				1.70								.34	.03				.04					.18		.71								3.00
Marble Hill	Mississippi				2.12								.30	.12												.24							2.78
Morehouse	....do	T.			2.14								.34	.08				T.					.17	.02		.80	.21		.03				3.79
New Madrid‖	....do				1.70	.35							.02	1.00	.05									.30			.90		.10				4.42
Poplar Bluff‖	Black				1.65	.09							.08	.36										.40			1.03		.09				3.70
Sikeston‖	Mississippi				2.04					.04				.38									.17										2.63
Cairo, Ill.***,	.. do	T.	T.	.21	.93	T.				T.			.58	.03		T.		.01					.28	T.		.47		T.	.02				2.53
Ozark Plateau																																	
Arcadia‖	St. Francis	T.			.84								T.	T.		T.							T.	.45			1.06						2.35
Aurora	Neosho			.39	.71								.03										.42			.66							2.21
Birchtree (near)	Black			1.49									.22									1.13			1.09							3.93
Caplinger Mills	Osage			T.	.60											T.							.37			.43			T.				1.40
Dean	Neosho																						.55			.45							1.00
Eldon‖	Missouri				.42									.03	.20	.06								.33		.15							1.19
Farmington	St. Francis				.46								.59	T.		T.		T.					.36	.13	.02	.94							2.50
Fredericktown‖	.... do																																
Galena‖	White				.97																		.05	.05		1.05							2.12
Goodland	Black													.78										.99		.87							2.64
Greenville	St. Francis	.10			1.40									T.									.45										1.95
Hailey	White				1.70																		.30		1.05								3.05
Koshkonong	Black			.72	.99								.05										1.00			.49							3.25
Lebanon‖	Osage				.40								T		T.								T.	.30		.60		.30	.30				1.90
Leeper‖	Black				1.58								.07	.27									.44	.13	T.		.22		T.				2.71
Lockwood	Osage			.25	T.																		.15			.75							1.15
Mountain Grove‖	White				.94								T.	.11									.38	.50		.56	.75		.03				3.27
Neosho	Neosho			.27	T.																	T.	.51			.44							1.22
Owensville‖	Gasconade													T.		.20							.15	.38		.20	.55						1.48
Ozark Beach‖	White				.90																		.22			1.82	.31						3.25
Rolla‖	Meramec				.12									.07		.01						.01	.05			.82	.55						1.63
Salem (near)	....do				.42								.03	.12		T.							.65	.08		1.82							3.12
Seligman	Neosho			.05	.90																					1.71							2.66
Seymour (near)	White		..	T.	1.76								.12	T.									.28			1.41							3.57
Springfield***	....do			.50	.22								T.	T.		T.							.23			.64		T.					1.59
Steelville‖	Meramec				.10									.09		.06							.25	.98	.12	.75	.65						3.00
Stover‖	Missouri				.35									.02		.12								.80		.14							1.43
Tuscumbia‖	Osage				.37									.13		.13							T.	.49		.19	.03						1.34
Williamsville‖	Black				1.35	.01							.03	.35	.05									.54	.01		.27		.05				2.66
Willow Sprgs. ‖ (near)	White				1.42								.02	.22									.25	.68		.20	1.26		.03				4.08
Southwest Plain																																	
Appleton City	Osage				.22									.04	T.	T.							.35			.09			T.				0.70
Clinton	Osage			.20	.30									.05		.10							.42		.08								1.15
Concordia‖	Missouri																									.50							0.50
Harrisonville‖	Osage																						.12			.28							0.40
Joplin‖	Neosho			.58	.38																		.75	.15		.25							2.11
Lamar‖	....do				.30																			.27		.48	T.						1.05
Lamonte	Missouri			.30										.05	.15								.18			T.							0.68
Marshall	.... do												T.		.25								T.		T.	.33		T.					0.58
Nevada	Osage			.10											.08											.29							0.47
Osceola‖	....do				.35									.13									.26	.24		.13							1.11
Warrensburg	Missouri			T.	T.									T.	.05								.10			T.							0.15
Warsaw	Osage			T.										.52	.05	.25							.56			.19							1.57
Waverly ‖	Missouri															.15							.10	T.		.60	T.						0.85
Northwest Plateau																																	
Bethany	Grand																																
Chillicothe ‖	....do				T.				T.						T.	.18		T.					T.	T.	T.	.28							0.46
Conception	Missouri			T.									T.		.05											1.32			T.				1.37
Edgerton	....do			T.											.08								.03			.40							0.51
Gallatin ‖	Grand														T.	.18										.48	T.						0.66
Grant City	.... do													T.	.20											.84			.05				1.09
Kansas City***	Missouri			07				T.					T.		.08							T.	.15		.19	.31			T.				0.80
Kidder ‖	Grand															.18										.39			T.				0.57
King City	Missouri			.03											.13											.61		T.					0.77
Lexington	....do														.04	.13							.27			.68							1.12
Maryville ‖	....do					.25									.05											.53		T.					0.83
Oregon	....do			.06											.14											1.25							1.45
St. Joseph***	....do			.02	T.			T.	T.						.22							T.	T.		.52	T			.07				0.83
Tarkio	....do			.38											.10												12		T.					0.60
Trenton	Grand			T.					T.						.14								T.			.20			.05				0.39

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for February, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	42	45	44	32	40	51	41	47	43	47	57	50	44	28	36	40	60	71	74	66	71	58	65	78	57	59	46	46	..	..	..	51.4
	Minimum	10	29	31	31	28	28	33	26	33	23	26	40	28	23	3	6	32	30	37	49	51	56	36	38	56	30	29	33	..	..	..	31.2
Columbia	Maximum	43	45	48	39	41	52	42	50	46	47	57	53	44	29	25	53	57	71	76	70	70	61	63	81	69	60	51	50	..	..	..	53.3
	Minimum	32	34	34	28	28	31	31	27	33	28	35	37	29	25	6	20	40	32	52	50	55	51	44	61	38	31	31	42	..	..	..	35.2
Fayette	Maximum	46	47	48	39	44	56	44	50	46	49	57	55	48	30	28	55	63	72	76	70	71	58	66	81	63	62	50	49	..	..	..	54.4
	Minimum	22	28	30	28	27	26	28	25	32	25	27	33	29	22	5	6	29	27	29	44	46	55	38	39	56	27	28	30	..	..	..	30.0
Hannibal	Maximum	42	45	44	37	36	49	38	42	44	44	55	51	42	29	23	49	54	65	75	68	72	59	63	79	69	58	45	49	..	..	..	50.9
	Minimum	28	30	33	30	28	31	31	25	33	29	34	35	29	23	6	13	32	30	51	50	49	46	37	56	39	33	30	38	..	..	..	33.2
Jefferson City§§	Maximum	49	50	50	39	45	57	40	54	46	51	56	57	47	31	28	58	61	74	85	71	77	61	66	89	66	61	55	52	..	..	..	56.3
	Minimum	13	18	24	33	27	28	29	28	31	26	27	31	29	26	9	9	16	32	35	42	49	54	47	46	51	29	31	31	..	..	..	30.4
Kirksville	Maximum	38	44	41	36	35	48	42	42	42	44	53	48	39	36	26	48	57	66	72	64	67	63	62	77	71	56	45	45	..	..	..	50.2
	Minimum	23	30	30	29	25	28	28	25	34	24	31	39	28	21	−1	9	30	33	48	50	49	56	38	52	39	28	24	32	..	..	..	31.5
Louisiana	Maximum	40	45	44	37	37	48	39	40	46	43	56	57	53	38	35	50	52	68	75	73	70	70	65	80	72	60	54	50	..	..	..	53.5
	Minimum	16	32	31	30	28	29	33	24	37	28	30	43	29	24	7	−1	30	27	44	42	50	50	46	54	54	32	30	37	..	..	..	32.7
Macon§§	Maximum	41	43	43	35	40	50	38	45	44	46	56	50	43	30	40	50	57	70	74	69	69	59	67	79	61	59	45	49	..	..	..	51.9
	Minimum	12	29	30	30	26	29	30	26	32	24	28	40	26	23	−1	3	33	34	38	50	50	55	34	52	55	28	25	29	..	..	..	31.1
Mexico§§	Maximum	44	45	48	35	42	54	35	45	43	47	55	55	45	30	26	52	56	69	76	69	72	58	64	80	61	61	49	50	..	..	..	52.4
	Minimum	11	31	32	33	27	28	32	26	31	26	26	35	28	22	4	5	26	30	35	47	47	53	41	43	56	30	28	30	..	..	..	30.8
St. Louis(1)	Maximum	48	52	52	41	39	57	45	42	48	46	53	63	44	36	28	44	54	65	76	69	71	58	60	80	69	59	50	53	..	..	..	53.6
	Minimum	30	34	39	32	30	30	34	31	35	31	34	39	31	28	15	12	40	41	51	49	50	54	50	57	45	36	36	41	..	..	..	37.0
Unionville	Maximum	40	46	44	40	35	48	45	44	43	47	53	50	45	35	30	54	60	68	77	78	68	68	67	80	77	55	45	50	..	..	..	53.3
	Minimum	24	28	30	28	25	30	26	25	30	24	30	35	26	25	−3	10	30	31	45	42	45	50	38	52	47	28	20	31	..	..	..	30.4
Warrenton	Maximum	47	52	51	45	40	57	56	45	45	56	62	53	40	27	50	55	70	78	76	73	70	62	82	80	62	58	51	..	..	..	..	56.7
	Minimum	29	32	34	31	28	27	32	27	38	28	30	41	29	25	9	7	35	36	45	47	49	53	48	53	56	31	30	39	..	..	..	34.6
Southeast Lowlands																																	
Campbell	Maximum	53	58	53	51	51	61	60	60	62	53	51	61	58	56	48	46	69	70	73	70	73	64	66	73	74	61	55	63	..	..	..	60.5
	Minimum	28	33	41	45	37	27	26	28	25	21	21	47	28	32	32	17	33	28	41	41	40	53	50	57	56	38	33	44	..	..	..	35.8
Caruthersville	Maximum	48	57	54	50	52	64	58	50	66	51	56	63	63	48	44	48	59	70	72	71	73	62	66	73	76	65	63	65	..	..	..	60.2
	Minimum	33	40	46	43	35	34	40	31	43	32	33	53	37	34	30	30	36	41	47	47	50	55	48	59	62	45	38	47	..	..	..	41.8
Doniphan	Maximum	55	65	64	53	59	70	65	58	50	53	50	67	57	47	42	51	62	75	77	74	77	67	72	79	72	59	57	59	..	..	..	62.0
	Minimum	22	26	24	31	31	26	34	29	27	30	28	34	34	25	31	15	30	29	39	36	45	56	49	53	48	32	31	45	..	..	..	33.6
Jackson	Maximum	50	58	60	43	52	65	51	48	55	52	49	58	56	42	34	46	59	70	72	68	72	63	62	71	70	62	55	57	..	..	..	57.1
	Minimum	19	19	27	34	27	25	32	23	39	22	24	44	29	22	20	13	29	25	36	39	44	51	49	54	55	34	33	41	..	..	..	32.5
Poplar Bluff	Maximum	51	60	48	49	54	63	65	52	62	56	53	62	50	45	40	50	61	71	72	71	73	63	62	75	70	62	57	61	..	..	..	59.2
	Minimum	20	27	41	35	31	26	34	23	29	20	20	48	34	25	25	16	30	27	35	36	32	55	50	55	55	38	31	45	..	..	..	33.7
Sikeston	Maximum	47	65	53	50	50	63	58	48	58	52	55	58	59	46	46	40	55	70	72	69	71	68	64	74	70	62	58	62	..	..	..	58.7
	Minimum	28	34	37	32	30	29	39	29	37	28	27	47	33	28	27	18	39	34	41	42	45	54	53	59	60	40	38	44	..	..	..	37.6
Cairo, Ill	Maximum	49	55	54	47	46	60	47	46	57	48	54	56	48	44	34	45	57	66	69	68	70	60	64	71	74	58	57	61	..	..	..	55.9
	Minimum	32	37	42	35	32	32	34	33	38	34	34	48	34	31	21	20	37	40	48	50	52	56	53	59	57	42	43	46	..	..	..	40.0
Ozark Plateau																																	
Arcadia§§	Maximum	59	60	53	42	51	67	54	50	53	53	51	59	48	36	34	47	55	72	73	66	70	58	60	77	65	61	55	52	..	..	..	56.5
	Minimum	18	26	26	28	25	24	28	23	26	25	24	30	28	22	22	13	17	26	27	38	39	30	46	48	58	33	29	29	..	..	..	28.9
Aurora	Maximum	42	46	45	41	38	51	50	57	56	48	55	54	52	42	36	49	56	62	66	66	68	63	71	72	70	50	51	52	..	..	..	53.9
	Minimum	32	31	31	31	27	30	35	31	39	26	28	50	34	32	22	25	40	40	51	49	50	54	46	61	48	31	36	41	..	..	..	37.5
Birchtree	Maximum	51	58	47	53	59	59	53	57	55	56	65	57	52	46	51	63	72	73	68	71	65	63	78	71	62	57	53	53	..	..	..	59.6
	Minimum	28	24	35	28	25	42	28	38	25	30	45	31	28	23	13	28	32	41	45	51	55	47	57	57	34	32	43	44	..	..	..	36.0
Eldon§§	Maximum	46	50	50	35	42	57	58	58	41	53	57	58	47	47	28	55	62	74	76	70	70	59	65	79	56	50	45	45	..	..	..	54.8
	Minimum	14	31	33	33	28	28	31	29	29	29	29	34	30	24	18	12	28	35	35	44	45	54	50	50	54	31	31	31	..	..	..	32.9
Farmington	Maximum	47	48	50	42	47	64	55	49	44	49	52	54	52	39	33	47	54	72	75	68	71	61	61	79	66	62	54	53	..	..	..	55.3
	Minimum	27	42	29	33	25	26	37	27	37	26	25	42	29	23	19	13	27	30	45	43	49	51	49	57	58	32	33	42	..	..	..	34.9
Koshkonong	Maximum	52	58	53	47	54	67	61	55	61	53	50	68	59	45	38	52	64	70	72	68	71	65	70	77	77	61	59	53	..	..	..	60.0
	Minimum	30	31	33	36	28	32	42	31	39	27	29	44	33	28	28	20	34	43	45	50	55	47	58	60	34	38	43	..	..	..	..	38.0
Lebanon§§	Maximum	45	49	50	41	39	62	55	56	48	52	54	65	47	39	34	49	63	73	73	68	68	61	78	80	64	60	59	53	..	..	..	56.6
	Minimum	14	29	30	34	25	25	25	28	31	21	21	31	29	25	19	17	21	32	32	45	45	48	41	45	54	27	27	31	..	..	..	30.4
Mountain Grove§§	Maximum	47	55	47	40	47	65	58	53	52	53	52	62	51	49	38	56	64	71	72	65	69	60	66	76	63	59	57	50	..	..	..	57.0
	Minimum	19	30	32	36	26	25	33	31	32	23	23	31	30	30	25	20	20	37	39	42	42	48	44	47	55	31	31	35	..	..	..	32.8
Neosho	Maximum	47	53	50	44	47	64	60	66	62	55	61	63	60	48	50	60	65	75	73	69	67	67	77	78	72	61	60	55	..	..	..	61.0
	Minimum	24	24	26	32	27	26	27	26	42	17	29	47	36	27	22	19	34	34	44	48	49	53	43	64	48	26	29	36	..	..	..	34.2
Rolla	Maximum	41	48	47	43	40	49	49	50	50	45	49	52	52	40	32	52	57	64	69	68	67	67	59	75	74	56	53	52	..	..	..	53.6
	Minimum	33	31	31	31	28	27	37	27	37	23	33	43	30	27	17	19	38	35	48	48	52	56	48	57	53	30	36	43	..	..	..	36.4
Springfield	Maximum	43	49	47	40	35	58	53	57	50	50	59	59	47	42	38	57	61	70	71	66	67	61	75	76	65	58	55	52	..	..	..	55.8
	Minimum	35	30	37	29	27	30	39	35	32	29	34	41	32	33	21	27	41	43	49	49	53	47	47	61	41	32	40	41	..	..	..	37.7
Southwest Plain																																	
Appleton City	Maximum	43	45	41	36	44	56	48	58	49	51	58	55	47	41	31	58	67	73	73	66	70	64	71	76	69	63	57	52	..	..	..	55.8
	Minimum	27	26	30	30	27	27	35	32	36	24	31	46	29	29	13	22	36	35	45	45	51	54	47	64	44	28	33	41	..	..	..	35.2
Clinton	Maximum	42	43	39	38	38	50	50	60	53	52	60	57	50	48	32	57	70	78	81	73	75	72	78	83	70	60	65	50	..	..	..	58.0
	Minimum	28	20	30	30	28	28	35	30	40	25	30	47	30	30	12	21	42	43	45	49	55	56	56	55	46	35	40	32	..	..	..	36.4
Harrisonville§§	Maximum	45	49	43	34	48	61	54	57	56	53	59	58	50	31	40	62	70	75	75	67	70	62	69	81	52	63	53	53	..	..	..	56.8
	Minimum	10	26	31	31	26	28	32	32	35	23	24	33	26	27	8	9	34	38	41	46	47	52	44	51	51	28	28	30	..	..	..	31.8
Lamar§§	Maximum	41	43	46	37	36	56	54	62	46	53	62	58	49	43	37	58	69	74	74	67	70	65	80	79	59	61	57	48	..	..	..	56.6
	Minimum	11	28	31	33	29	30	32	30	36	24	23	35	34	30	23	22	31	35	38	48	49	56	40	51	56	30	30	37	..	..	..	34.0
Lamonte	Maximum	43	44	44	37	42	53	45	53	45	45	58	53	46	36	29	55	63	72	73	66	70	63	66	78	68	60	52	49	..	..	..	53.9
	Minimum	27	29	33	29	27	29	33	29	34	29	34	39	28	27	7	16	36	32	46	46	52	50	40	57	41	28	30	37	..	..	..	33.8
Marshall	Maximum	43	45	44	42	41	53	48	55	55	51	52	46	44	28	60	62	72	75	69	70	69	65	79	74	58	59	48	..	..	..	..	55.7
	Minimum	15	30	33	30	27	30	33	29	30	31	33	44	29	25	4	13	13	32	49	50	50	57	36	51	42	30	29	30	..	..	..	32.3
Nevada	Maximum	40	41	43	39	42	51	50	59	50	50	60	55	48	41	35	59	67	73	73	66	70	65	76	78	71	62	58	50	..	..	..	56.1
	Minimum	30	30	30	30	28	30	32	32	39	25	33	42	32	32	18	25	38	38	48	38	50	55	48	62	45	32	35	40	..	..	..	36.3
Warrensburg	Maximum	40	43	42	39	40	55	41	55	49	49	51	52	46	39	32	57	63	72	73	66	71	65	67	77	68	62	53	49	..	..	..	54.1
	Minimum	28	28	33	30	27	29	34	31	37	25	35	43	28	26	7	18	38	37	48	48	50	53	40	58	42	30	28	38	..	..	..	34.6
Warsaw	Maximum	45	48	48	42	45	56	48	66	55	52	58	58	55	45	34	57	65	75	75	70	70	68	72	80	74	63	59	50	..	..	..	58.3
	Minimum	24	29	29	31	28	28	31	26	36	21	32	47	29	28	14	18	41	28	50	50	54	56	48	59	46	29	33	42	..	..	..	35.2
Northwest Plateau																																	
Chillicothe§§	Maximum	48	52	44	34	43	53	45	46	50	52	58	51	44	29	31	54	63	74	76	68	65	68	70	83	50	57	45	49	..	..	..	53.6
	Minimum	8	22	26	29	25	25	31	25	28	28	28	36	25	22	−3	−1	32	31	38	47	49	45	47	32	47	26	23	29	..	..	..	28.6
Grant City	Maximum	37	47	41	38	36	49	44	51	46	48	54	51	41	36	26	54	59	71	73	69	66	65	65	80	73	51	40	52	..	..	..	52.2
	Minimum	23	29	34	27	26	28	32	29	34	25	34	34	23	21	−4	16	34	34	44	48	50	44	38	52	34	27	22	35	..	..	..	31.2
Kansas City	Maximum	43	50	46	37	47	60	51	59	52	53	58	52	46	30	30	59	64	74	74	65	69	65	65	81	57	59	46	54	..	..	..	55.2
	Minimum	32	36	37	28	28	37	37	38	37	30	38	39	30	20	5	25	43	48	53	54	54	52	46	57	39	36	30	34	..	..	..	37.2
Kidder§§	Maximum	38	45	41	31	35	47	44	51	50	53	57	47	42	28	33	52	60	72	74	64	68	63	61	80	44	55	43	50	..	..	..	51.0
	Minimum	7	23	32	28	23	23	30	29	31	22	21	34	24	22	−2	−3	30	33	35	47	46	47	37	42	42	31	23	23	..	..	..	27.9
Lexington§§	Maximum	35	43	50	40	38	43	56	49	55	50	42	56	52	48	39	29	59	61	74	75	65	70	65	68	80	72	60	54	..	..	..	54.6
	Minimum	28	33	34	30	27	32	34	33	38	22	32	42	28	25	4	18	39	40	51	50	51	54	41	56	42	32	28	40	..	..	..	35.1
Maryville	Maximum	39	48	41	37	33	50	45	57	55	49	54	53	43	27	27	55	58	73	75	68	66	65	64	80	68	52	44	53	..	..	..	52.8
	Minimum	19	29	34	27	25	29	32	34	34	21	36	34	20	23	0	16	35	31	42	51	52	43	32	53	34	27	22	35	..	..	..	31.1
Oregon	Maximum	44	54	45	39	45	56	52	62	55	54	58	55	46	33	28	61	65	77	78	69	69	68	68	84	71	61	48	58	..	..	..	57.2
	Minimum	23	32	37	28	27	34	34	33	35	25	37	36	25	25	1	18	38	44	50	53	54	45	38	56	35	31	25	37	..	..	..	34.1
St. Joseph	Maximum	41	50	44	38	41	55	50	61	50	52	58	48	44	30	25	58	62	75	76	66	68	64	64	83	55	58	45	54	..	..	..	54.1
	Minimum	25	34	37	28	28	34	34	36	32	27	38	34	28	17	3	25	38	41	52	54	55	46	38	55	37	38	26	31	..	..	..	34.5
Trenton	Maximum	38	46	44	38	36	52	45	48	46	48	53	46	38	34	28	54	62	72	75	68	68	66	68	82	80	46	45	50	..	..	..	52.7
	Minimum	24	29	32	29	26	28	32	27	36	26	30	37	22	23	1	12	31	31	49	48	50	53	34	53	40	29	25	36	..	..	..	31.9

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-14-30—955.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., MARCH, 1930 No. 3

GENERAL SUMMARY

Prevailing dryness and a large amount of sunshine were the outstanding weather features of March, 1930, in all of Missouri. It was the driest March since 1918, and the sunshine was well above normal, averaging about 77 per cent for the State, and more than 80 per cent over western sections.

For the State as a whole, the month averaged slightly cooler than normal. Following a remarkably mild February, the first three days of March were cold, followed in turn by uniformly above normal temperatures until the 18th. The remainder of the month was colder than normal, the period from the 25th to the 30th being especially cold, with hard freezes nightly, except the 31st, which was one of the warmest days of the month.

The month was among the driest Marches indicated by weather records, only four other Marches since 1867 being drier. The deficiencies were large as well as uniformly distributed. For the State as a whole the monthly fall was not more than one-half the usual, while in parts of the eastern Ozark hills and most of the southwestern plain it was not much more than one-third. Thirty-three stations had less than one inch precipitation for the month.

Taking the State as a whole, the month was less stormy than is usual in March. There were no damages by wind, hail, or sleet anywhere, but winds were strong and gusty on several days.

In all parts of the State the month was unusually favorable for outdoor work, and excellent progress was made. As a rule field work was well ahead of the average. The mild weather of February forced much vegetation out of the dormant state, but the colder weather of March set back or checked the main fruits. The wheat crop was below normal, because of the lack of moisture; considerable in southwestern counties was winterkilled.

TEMPERATURE

The monthly mean temperature for the State, 65 stations reporting, was 43.2°, or 0.7° colder than normal. The western half of the State was slightly warmer, while the eastern half was slightly colder than normal. The highest local monthly mean was 49.6°, at Caruthersville; and the lowest local monthly mean was 37.2°, at Kidder. The highest reported temperature was 88°, on the 16th, at Lamonte, and the lowest reported was 6°, at Grant City on the 2d. The greatest daily range was 54°, at Chillicothe on the 31st. Minimum temperatures of 32° or lower occurred on 19 days.

PRECIPITATION

The average monthly precipitation for the State, 95 stations reporting, was 1.37 inches, or 1.65 inches less than the 60 years' average; and the driest March since 1918. The deficiency was large in all sections, and especially outstanding over the western part of the Ozarks and most of the southwestern plain. The greatest local monthly amount was 4.50 inches, at Caruthersville, while at Nevada there was less than one-tenth of an inch. The greatest fall in any 24 hours was 2.63 inches, at Caruthersville on the 18th, and this was about the only heavy rain in the State. There were only two short rainy spells for the State as a whole, 17th-18th, and 23d to the 25th.

In general there was but one snowstorm of any importance, that of the 24th-25th. Over southern sections it melted almost as fast as it fell, and except for some drifts soon disappeared in northern sections; 14 inches was the heaviest fall, and at Unionville.

All rivers and tributaries were low or well within banks.

MISCELLANEOUS PHENOMENA

Frost, killing.—Nightly from 19th to 30th generally.
Fogs, dense.—Local and short duration, on the 18th, and 24th.
Hail.—Small, 6th, and 17th.
Halos, lunar.—7th. Solar.—3d, 4th, 6th, 7th, 8th, 9th, 10th, 15th, 16th, 21st, 25th, 27th, 28th, 29th, 30th, and 31st.
Sleet, light.—17th, 18th, and 24th.
Thunderstorms.—Local, 6th, 17th, 18th, and 23d.
Wind.—There were no damaging windstorms. Most stations reported strong wind on the 11th, and a few other dates, but no damage.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	29.95	70	48	281	76	7,478	10.1	35	nw.	11
Hannibal	29.94	72	..	...	..	7,983	10.7	29	nw.	11
Kansas City	29.97	66	41	315	85	9,741	13.1	40	nw.	11
St. Joseph	29.96	67	38	291	79	8,029	10.8	33	nw.	11
St. Louis	29.93	67	50	275	74	9,967	13.4	46	w.	26
Springfield	29.98	73	41	263	71	8,502	11.4	38	nw.	11
Cairo, Ill.	29.94	78	55	...	..	7,284	9.8	29	nw.	11
Keokuk, Iowa	29.95	67	44	279	75	7,237	9.7	30	nw.	11

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

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COMPARATIVE DATA FOR MARCH

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	38.5	−4.8	90	1	4.02	+1.11	....	....	10	..	..	..
1889	44.3	+1.0	84	13	1.98	−0.93	....	....	5	..	..	..
1890	37.3	−6.0	76	−11	2.61	−0.30	....	5.7	8	..	..	..
1891	36.6	−6.7	78	−11	3.01	+0.10	....	7.1	10	..	..	..
1892	38.9	−4.4	87	5	3.11	+0.20	....	....	8	8	10	13
1893	40.5	−2.8	86	1	2.86	−0.05	2.15	3.2	7	11	10	10
1894	47.7	+4.4	89	2	2.93	+0.02	3.20	0.2	6	15	9	7
1895	42.4	−0.9	98	0	2.14	−0.77	3.00	4.4	9	14	7	10
1896	39.2	−3.9	82	2	2.05	−0.86	4.47	5.2	8	11	9	11
1897	44.2	+0.9	93	− 5	6.07	+3.16	4.10	1.0	2	9	9	13
1898	44.7	+1.4	83	9	7.09	+4.18	3.87	0.6	11	11	7	13
1899	37.4	−4.1	78	− 8	2.93	+0.02	4.30	8.9	16	9	11	11
1900	40.4	−1.9	88	− 4	1.48	−1.43	3.41	0.2	6	15	9	7
1901	42.7	−0.6	85	− 1	3.74	+0.83	3.21	1.8	8	11	8	12
1902	45.3	+2.0	85	1	3.49	+0.58	5.60	0.8	9	10	10	11
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	1.1	8	13	7	11
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	1.2	9	11	9	11
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	T.	8	11	8	12
1906	34.6	−8.7	75	− 5	3.93	+1.02	3.00	8.6	11	6	7	18
1907	53.9	+10.6	95	16	2.82	−0.09	3.08	1.0	7	14	7	10
1908	50.1	+6.8	89	14	2.58	−0.33	2.55	1.0	7	14	7	10
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	0.6	6	13	9	9
1910	55.8	+12.5	96	15	0.66	−2.25	2.25	0.1	2	20	7	4
1911	46.8	+3.5	91	5	1.85	−1.06	2.00	1.4	6	16	8	7
1912	35.2	−8.1	89	− 4	4.62	+1.71	2.85	16.5	11	12	6	13
1913	40.6	−3.7	84	−12	4.36	+1.31	7.97	5.0	9	12	8	11
1914	43.2	−1.3	87	− 2	2.75	−0.41	3.01	4.7	8	13	7	11
1915	36.4	−8.1	70	6	1.50	−1.74	1.85	7.9	6	7	8	16
1916	47.0	+1.3	95	− 2	2.58	−0.65	4.25	3.1	7	14	8	9
1917	45.2	+1.7	86	− 7	2.91	−0.42	4.08	1.5	7	15	7	9
1918	50.9	+7.8	95	8	0.94	−2.05	2.25	0.1	4	18	6	7
1919	46.3	+2.9	90	− 2	2.40	−0.69	5.37	0.7	6	15	8	8
1920	44.6	+1.4	86	− 6	5.01	+2.09	6.00	1.4	8	15	6	10
1921	51.9	+8.5	90	11	4.69	+1.68	2.88	0.5	10	13	9	9
1922	45.6	+1.4	80	3	6.46	+3.38	4.00	2.2	12	11	6	14
1923	40.4	−3.1	83	−11	4.12	+1.00	2.84	2.3	8	14	6	11
1924	38.4	−5.4	80	8	2.55	−0.45	2.38	9.4	8	8	8	15
1925	47.7	+3.9	86	− 5	1.96	−1.05	2.55	0.8	5	17	8	6
1926	32.6	−4.2	83	8	2.89	−0.11	1.77	7.0	8	13	6	12
1927	45.9	+2.1	80	0	5.87	+2.87	4.90	3.7	11	12	8	11
1928	46.3	+2.5	89	10	1.54	−1.46	1.60	2.4	5	15	9	7
1929	48.6	+4.7	97	11	3.30	+0.28	3.30	T.	8	12	8	11
1930	43.2	−0.7	88	6	1.37	−1.65	2.63	1.4	4	18	6	7
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for March, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	42.7	+ 0.8	80	31	14	2	49	1.50	−1.06	0.95	3.0	2	20	3	8	nw.	O. K. Beneckc
Clifton Hill	Randolph	781	31	41.4	− 0.8	76	15	10	2	46	1.38	−1.27	0.74	9.0	4	19	8	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	42.8	+ 0.2	72	16	13	2	42	1.03	−1.91	0.61	3.7	6	14	8	9	nw.	U. S. Weather Bureau
Downing	Schuyler	876	9	39.7	.....	76	16	9	2	41	1.49	−0.87	0.76	3.2	7	18	10	3	w.	James Taylor
Fayette	Howard	661	50	41.8	− 0.3	74	16	14	2	47	1.24	−1.57	0.70	2.9	3	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	42.3	− 2.1	72	15†	14	2	46	0.78	−2.26	0.46	1.5	5	16	11	4	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	....	..	..	1.05	−1.41	0.96	0	4	14	9	8	nw.	J. W. Pulliam
Hannibal	Marion	584	38	41.1	+ 0.1	71	16	14	2	40	0.94	−1.66	0.79	1.0	5	12	13	6	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	42.7	− 0.5	77	31	14	2	46	1.02	−1.80	0.35	3.5	5	21	1	9	w.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	40.5	+ 1.0	73	16	10	2	43	1.03	−1.74	0.54	2.8	4	22	4	5	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	42.4	− 0.9	70	12†	15	2	46	0.70	−2.20	0.30	3.3	3	22	6	3	n.	Stark Bros. Nurseries
Macon	Macon	875	31	40.1	− 2.5	74	16	11	2	43	1.31	−1.38	0.74	2.0	3	21	6	4	w.	W. C. Brown
Mexico	Audrain	800	41	41.2	− 0.8	73	16	14	2†	41	1.16	−1.63	0.66	2.5	3	23	0	8	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	....	..	..	1.00	.....	0.76	2.0	3	11	6	14	se.	J. S. Conway
St. Charles	St. Charles	456	42	44.4	0.0	74	20	16	2	39	1.29	−1.80	0.66	3.0	3	11	11	9	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	44.4	+ 0.3	70	20	18	2	33	0.99	−2.39	0.49	1.5	5	15	9	7	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	43.8	+ 0.2	70	16	16	2	34	1.08	−1.87	0.36	2.3	5	15	9	7	w.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	....	..	..	1.30	−1.55	0.94	2.4	5	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	32	40.4	− 2.0	74	16	10	2	44	1.20	−1.71	0.60	4.0	4	15	10	6	e.	Frank Hall
Unionville	Putnam	1,062	37	40.6	+ 2.0	73	16	8	2	46	3.00	+0.61	1.50	15.0	4	20	5	6	n.	Geo. W. Davis
Warrenton	Warren	816	48	44.2	+ 2.0	78	13	14	2	39	1.05	−2.32	0.60	6.0	4	14	8	9	nw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	40.0	+ 1.1	73	16	11	2	37	0.67	−1.71	0.59	0.2	4	13	6	12	w.	U. S. Weather Bureau
Section means and	extremes	.....	..	41.9	− 0.1	80	31	8	2	49	1.19	−1.60	1.50	3.4	4	17	7	7	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	46.6	.....	74	13†	21	2	44	2.79	.....	1.13	0	7	12	9	10	s.	Jeff. King
Caruthersville	Pemiscot	265	34	49.6	− 1.6	74	15	24	3	32	4.50	+0.50	2.63	0.3	6	20	1	10	n.	Sam Smith
Doniphan	Ripley	344	26	47.1	− 2.3	73	23	22	2†	45	2.84	−0.75	1.70	0	5	23	6	2	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	42.6	− 4.6	69	15	16	2	38	1.57	−2.77	0.48	3.2	4	11	6	14	n.	John G. Putz
Marble Hill	Bollinger	470	35	46.0	− 1.4	74	13	18	2	43	1.34	−2.84	0.70	T.	3	13	5	13	n.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	....	..	..	3.35	−1.15	1.13	0	6	21	4	6	sw.	John A. Spence
Poplar Bluff††	Butler	329	26	46.0	− 2.8	72	13†	19	3	44	2.55	−1.97	0.90	0	6	19	6	6	w.	J. H. Wolpers
Sikeston	Scott.	318	29	48.0	− 0.4	74	16	20	3	39	3.1¢	−1.34	1.02	0.2	5	20	2	9	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	46.8	− 0.4	71	15	22	2	29	2.54	−1.21	1.00	0.3	7	10	9	12	s.	U. S. Weather Bureau
Section means and	extremes	....	..	46.6	− 1.9	74	13†	16	2	45	2.74	−1.44	2.63	0.4	5	17	5	9	sw.	
Ozark Plateau																				
Arcadia	Iron	926	48	42.2	− 2.6	72	13	14	2	46	0.57	−3.50	0.24	T.	3	26	0	5	nw.	Arcadia College
Aurora	Lawrence	1,370	38	43.2	− 2.4	67	31	17	2	43	0.68	−3.00	0.36	0.5	4	19	5	7	nw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	45.8	− 1.6	71	17	17	2	41	1.75	−2.50	0.53	T.	4	21	2	8	nw.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	45.8	− 3.1	74	15†	17	2	45	0.45	−2.90	0.45	T.	1	14	11	6	nw.	H. E. Dean
Eldon	Miller	934	34	39.4	− 4.1	69	20	14	2†	40	1.25	−1.58	0.55	1.2	4	14	11	6	nw.	E. H. Shepherd
Farmington	St. Francois	918	19	43.6	− 3.3	73	13	16	2	41	1.61	−1.66	0.47	3.0	5	15	12	4	nw.	Robert Forsyth
Goodland	Iron	1,000	36	41.5	− 3.4	72	13†	15	2†	49	1.34	−2.91	0.80	3.0	3	18	9	4	n.	F. M. Adams
Greenville	Wayne	381	7	41.2	.....	64	17†	19	4	38	2.60	.....	1.00	T.	4	21	4	6	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	....	..	..	0.75	.....	0.50	T.	2	21	5	5	w.	A. W. Madison
Koshkonong	Oregon	958	29	47.0[a]	− 2.6	70	15†	18	2	34	2.39	−1.42	1.68	T.	4	14[a]	5[a]	11[a]	w.	R. M. Hitt
Lebanon	Laclede	1,265	43	41.6	− 3.8	71	16†	11	2†	47	1.51	−1.94	0.71	0.5	4	20	4	7	nw.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	45.2	− 2.7	72	12†	14	2	42	0.99	−1.47	0.55	T.	4	22	3	6	nw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	29	43.0	− 3.0	69	20	14	2†	42	1.20	−3.14	0.55	T.	6	19	5	7	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	45.6	− 2.6	73	15	14	2	46	0.71	−2.76	0.53	T.	2	19	5	7	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	44.0	− 1.0	71	20	15	2	40	2.10	−1.49	1.45	0.8	5	10	14	7	w.	F. H. Lane
Salem(near)	Dent	1,173	26	43.6	− 3.3	71	13	14	2	41	2.19	−1.11	1.57	0.8	6	17	8	6	nw.	A. C. Leech
Seligman	Barry	1,542	28	47.0[b]	+ 0.8	74	15	13	2	..	0.34	−3.60	0.21	T.	2	18[a]	5[a]	3[a]	nw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	43.0	− 2.2	70	20†	12	2	44	0.88	−3.18	0.27	0.5	5	15	7	9	nw.	Ira H. Hailey
Springfield	Greene	1,324	42	44.3	− 0.9	68	20	14	2	34	0.77	−2.62	0.36	0.5	5	21	5	5	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	43.7	− 2.5	74	15†	11	2†	49	1.27	−2.40	1.68	0.6	4	19	6	6	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	43.8	− 0.8	72	12†	13	2	43	1.00	−2.07	0.34	T.	6	14	13	4	nw.	W. G. Bigelow
Clinton	Henry	765	37	46.6	+ 2.3	78	31	14	2	45	0.93	−1.93	0.48	0	4	18	9	4	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	42.5	+ 1.6	75	12	12	2†	46	0.86	−1.83	0.32	T.	5	15	4	12	nw.	John H. Patterson
Lamar	Barton	980	43	43.9	− 2.3	73	15	15	2†	44	0.69	−2.21	0.40	T.	3	19	5	7	sw.	Jesse A. Mann
Lamonte	Pettis	867	30	43.6	− 0.1	88	16	14	2	51	0.97	−1.63	0.52	1.0	4	24	3	4	nw.	J. E. Wheeler
Marshall	Saline	779	42	42.5	0.0	73	16	13	2	42	1.03	−1.68	0.69	T.	2	25	3	3	nw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	45.8	+ 1.5	74	31	14	2	43	0.04	−2.95	0.04	0	1	18	5	8	nw.	George A. Kaupp
Warrensburg	Johnson	878	43	42.8	− 0.8	73	12†	12	2	44	0.77	−1.77	0.53	1.5	3	22	2	7	nw.	E. A. Markey
Warsaw	Benton	687	29	....	.....	..	..	15	2	..	1.05	−2.18	0.57	T.	5	20	6	5	w.	Everett Martin
Section means and	extremes	.....	..	43.9	+ 0.2	88	16	12	2†	51	0.82	−2.03	0.69	0.3	4	16	7	8	nw.	
Northwest Plateau																				
Bethany	Harrison	916	37	....	.....	..	..	....	..	..	....	.....	....	....	..	..	..	..	.....	A. S. Cumming
Chillicothe	Livingston	779	20	39.3	− 2.3	75	15†	9	2	54	1.80	−0.98	0.78	9.0	5	23	7	1	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	41	42.0	+ 2.5	75	12†	8	2	46	1.12	−0.63	0.90	0.5	3	16	12	3	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	42.6[m]	.....	76	12	....	..	..	0.50	−2.25	0.21	0.2	3	24	1	6	nw.	Fred L. Stiff
Grant City	Worth	1,134	26	40.6	− 0.7	74	12†	6	2	45	1.51	−0.60	0.95	T.	4	16	12	3	nw.	W. P. Spillman
Kansas City	Jackson	963	41	43.6	+ 0.9	75	12	12	2	36	0.67	−1.86	0.26	T.	4	19	7	5	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	37.2	− 4.0	73	12†	8	2†	47	0.67	−1.63	0.37	0.5	2	19	7	5	nw	Linn Terry
King City	Gentry	1,095	4	....	.....	..	..	....	..	..	1.10	.....	0.45	0	4	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	43.6	+ 0.7	74	16	13	2	37	1.42	−0.95	0.97	T.	2	22	5	4	nw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	40.9	+ 3.7	76	16	7	2	48	1.31	−0.57	0.58	0.5	4	17	7	7	n.	J. R. Brink
Oregon	Holt	1,048	74	44.2	+ 4.9	78	12	19	2	45	0.61	−1.41	0.61	0	2	21	6	4	nw.	Mina Wright
St. Joseph	Buchanan	987	22	42.6	− 0.1	76	12	11	2	43	0.83	−1.56	0.58	0.1	3	21	7	3	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	27	40.8	+ 0.2	78	16	8	2	49	1.10	−0.60	1.10	0	1	15	7	9	nw.	Albert Volker
Trenton	Grundy	822	34	41.7	+ 0.5	76	16	11	2	43	1.92	−0.52	0.81	0.5	4	16	9	6	n.	W. H. Estes
Section means and	extremes	.....	..	41.6	+ 0.5	78	12†	6	2	54	1.12	−1.13	1.10	0.9	3	19	7	5	nw.	
State means and	extremes	.....	..	43.2	− 0.7	88	16	6	2	54	1.37	−1.65	2.63	1.4	4	18	6	7	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for March, 1930

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville‖	Missouri	T.																T.	.32	T.					.55	T.						0.87
Brunswick‖	Grand																		.55						.95							1.50
Clifton Hill	Chariton														T.			.12	.74					T.	.40	.12						1.38
Columbia***	Missouri	.01					T.								T.			.17	.12					.12	.46	.15		T.				1.03
Downing	Mississippi										.02							.53	.76					.06	.02	.08		.02				1.49
Fayette‖	Missouri																		.52							.70	.02					1.24
Fulton‖	do	.03						.12							T.				.10						.07	.46	T.					0.78
Gorin	Mississippi																	.16	.80					.01		.08						1.05
Hannibal***	do	T.									T.	T.					T.	.53	.27					.06	.92	.06		T.				0.94
Hermann‖	Missouri	.02						.20					T.					T.	.16						.10	.41	.05					0.94
Jefferson City‖	do							.24											.18						.11	.35	.14					1.02
Kirksville	Mississippi																		.54					.06	.05	.38						1.03
Louisiana	do																	.15						.30		.25						0.70
Lucerne‖	Grand																	.51	.97							.79			T.			2.27
Macon ‖	Chariton																	.10	.74							.47						1.31
Mexico ‖	Mississippi																		.40						.10	.66						1.16
Milan‖	Grand											T.					.78	.90							.15							1.83
Monroe City	Mississippi																	.05	.76						.19	T.						1.00
Pacific‖	Meramec							.25	.07										T.							.68	.05					1.05
St. Charles	Missouri							.66							T.				.05					T.		.58						1.29
St. Louis (1)***	Mississippi	T.					.18	.31				T.			T.				T.					.14	.11	.25						0.99
St. Louis (2)*	do						.21	.26				T.							T.					.15	.10	.36						1.08
Shelbina ‖	do	.02															.07	.94							.04	.23						1.30
Steffenville	do	T.									T.	T.						.30	.60					.10		.20		T.				1.20
Union‖	Meramec							.26																	.10	.65	.02					1.03
Unionville	Chariton											T.						.70	.80						.90	.60						3.00
Valley Park	Meramec							.28	T.											T.					T.	.62	T.					0.90
Warrenton	Mississippi	T.						.21				T.						T.	.16					T.	.08	.60						1.05
Keokuk, Ia.***	do	T.										T.						.42	.18					.06	T.	T.	T.	.01				0.67
Southeast Lowlands																																	
Campbell‖	St. Francis	.02					.52	.25			.03								.80						1.13	.04						2.79
Cape Girardeau‖	Mississippi		T.					.27	T.										.31	.10					.82	.34	.05					1.89
Caruthersville ‖	do	T.					.30	.45			.35								2.63						.74	.03						4.50
Dexter‖	St. Francis		.02					.83	.05										.80	.20					.84	.08	.08					2.90
Doniphan	Black	.20					.39			.20									1.70				T.		.44							2.84
Jackson	Mississippi	T.					.42												.35						.48	.32						1.57
Marble Hill	Mississippi						.32	.70											.32							T.	T.						1.34
Morehouse	do	.01					.50	.48											1.13						1.08	.15						3.35
New Madrid‖	do		.12					.70	.02										.25	.55					.75	.25	.10					2.74
Poplar Bluff‖	Black		.05					.75											.90	.05					.70	.10						2.55
Sikeston‖	Mississippi	.06						.85											.98					1.02		.25						3.16
Cairo, Ill.***	do	.03					.48	.31			T.				T.			T.	.69					.01	.99	.03						2.54
Ozark Plateau																																	
Arcadia ‖	St. Francis		T.																.24	.10					.23	T.		T.				0.57
Aurora	Neosho							.12											.10					T.	.36	.10						0.68
Birchtree (near)	Black	T.					.47	.34											.53						.41							1.75
Caplinger Mills	Osage	.11					.04												.07						.25	T.						0.47
Dean	Neosho																T.		.45					T.	T.	T.						0.45
Eldon‖	Missouri	T.						.28											.39						.03	.55						1.25
Farmington	St. Francis	T.					.47	.24							T.			T.	.14						.33	.43	T.					1.61
Fredericktown‖	do																																
Galena‖	White																		.54						.55	.05						1.14
Goodland	Black						.80												.26							.28	T.						1.34
Greenville	St. Francis	.20					.90												1.00						.50							2.60
Hailey	White																		.50						.25	T.						0.75
Koshkonong	Black	T.					.30	.15						T.					1.68						.26	T						2.39
Lebanon ‖	Osage							.71							T.				.40						T.	.30	.10					1.51
Leeper‖	Black	T.						.60	.15			T.							.45	T.					.40	.10		T.				1.70
Lockwood	Osage						.24												.55						.15	.05						0.99
Mountain Grove‖	White							.55	.08						.08				.18	T.					.07	.24	T.					1.20
Neosho	Neosho																		.53					T.	.18	T.						0.71
Owensville ‖	Gasconade																																
Ozark Beach‖	White														.17				.66						.10	.17						1.10
Rolla ‖	Meramec							1.45											.21					.02	.37	.05						2.10
Salem (near)	do						.82	.75											.40					.05	.07	.10						2.19
Seligman	Neosho																		.21						.13	T.						0.34
Seymour (near)	White						.06	.27	T.						T.			T.	.24					T.	.17	.14	T.					0.88
Springfield***	do	T.					.14	.01						T.	T.			T.	.36					T.	.21	.05						0.77
Steelville‖	Meramec							1.72	.05						T.				.15						.12	.39	.05					2.48
Stover ‖	Missouri							.02											.10							.55	.02					0.69
Tuscumbia ‖	Osage	.04						.86											.22						.36	.46	.02					1.96
Williamsville‖	Black		.03					.48	.02										.29	.29					.37	.12	.02					1.62
Willow Sprgs. ‖ (near)	White		.02					1.19							.08				.51						.17	.10						2.07
Southwest Plain																																	
Appleton City	Osage	.34					.08								T.			.10	.20					T.	.25	.03	T.					1.00
Clinton	Osage	.05																.21	.19			T.			.48							0.93
Concordia ‖	Missouri																	.22							.51							0.73
Harrisonville‖	Osage	.18						.22											.32						.03	.11						0.86
Joplin ‖	Neosho						.20											.33	.35						.12							1.00
Lamar ‖	do							.40											.12							.17	T.					0.69
Lamonte	Missouri																	.03	.22			T.			.52	.20						0.97
Marshall	do																	.34	T.						.69							1.03
Nevada	Osage						T.								T.				T.						.04	T.						0.04
Osceola‖	do	.05						.32											.05						.18	.20						0.80
Warrensburg	Missouri																	.11				T.		T.	.53	.13						0.77
Warsaw	Osage	.02					.57												.12					T.	.22	.12						1.05
Waverly ‖	Missouri	T.																	.55							.40							0.95
Northwest Plateau																																	
Bethany	Grand																								.37								
Chillicothe ‖	do	.14																.07	.62						T.	.78	.19						1.80
Conception	Missouri																	.90	.12						.10	T.							1.12
Edgerton	do																	.08	.21						.21	T.							0.50
Gallatin ‖	Grand																	T.	.31							.25							0.56
Grant City	do															.03		.95	.42						.11		T.					1.51
Kansas City***	Missouri																T.	.50	.01					T.	.15	.01						0.67
Kidder ‖	Grand																	T.	.37						T.	.30						0.67
King City	Missouri														T.			.45	.44						.18	.03						1.10
Lexington	do																		.97							.45							1.42
Maryville ‖	do															.08		.50	.58						.15	T.							1.31
Oregon	do								T.									.48	.13						T.								0.61
St. Joseph***	do																	.56	.02					T.	.25	T.							0.83
Tarkio	do																	1.10															1.10
Trenton	Grand																	.55	.38					T.	.81	.18							1.92

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for March, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	23	22	38	58	55	59	60	51	71	64	53	75	64	61	75	77	55	39	59	59	54	61	64	46	38	42	50	51	54	60	80	55.4
	Minimum	23	14	17	22	27	30	33	31	27	36	37	26	38	31	34	43	49	31	27	33	28	28	35	36	29	29	26	25	30	24	32	30.0
Columbia	Maximum	42	27	44	57	51	54	53	49	64	58	51	72	61	52	72	72	65	42	52	62	46	56	65	46	35	41	42	48	47	55	72	53.4
	Minimum	22	13	21	25	29	36	35	34	30	41	38	30	43	37	38	54	42	31	27	34	32	29	42	33	28	29	27	23	30	28	38	32.2
Fayette	Maximum	37	31	42	57	55	57	55	54	66	63	53	71	61	55	73	74	62	57	52	63	48	58	62	47	39	44	41	52	51	58	72	55.2
	Minimum	25	14	15	21	23	29	33	32	22	28	37	25	28	34	35	37	54	33	25	27	30	29	31	34	28	28	26	24	28	22	25	28.5
Hannibal	Maximum	44	26	41	55	51	54	52	49	61	58	48	69	57	46	69	71	57	38	51	57	42	50	64	48	36	37	43	49	39	54	69	51.1
	Minimum	22	14	20	24	29	32	36	34	31	39	36	29	37	31	35	53	38	32	27	33	30	27	41	34	26	29	27	25	31	28	35	31.1
Jefferson City§§	Maximum	35	30	44	59	52	55	55	51	66	61	52	75	66	55	73	74	67	40	55	69	50	54	76	52	36	45	45	50	50	60	77	55.8
	Minimum	29	14	15	21	26	29	34	34	30	39	39	30	30	39	34	34	38	35	25	26	31	29	31	36	28	28	25	25	25	28	31	29.6
Kirksville	Maximum	43	44	43	55	50	53	53	53	63	54	47	69	66	49	70	73	66	39	49	53	40	50	57	51	50	35	41	49	45	55	70	52.7
	Minimum	20	10	18	20	24	29	30	29	30	37	34	26	32	27	30	44	38	29	23	37	25	25	39	32	27	26	25	24	29	25	33	28.3
Louisiana	Maximum	45	33	40	50	48	50	55	55	65	65	53	70	70	60	67	70	68	50	50	60	60	58	57	42	37	40	45	50	52	50	60	54.0
	Minimum	29	15	20	23	29	25	37	35	24	40	39	24	43	30	30	45	45	37	26	35	30	28	38	33	28	30	29	25	30	25	28	30.8
Macon§§	Maximum	34	29	44	58	52	56	54	50	65	60	50	70	60	61	72	74	45	38	52	57	47	58	61	43	35	40	45	50	45	57	53	52.1
	Minimum	21	11	15	20	24	29	32	31	30	30	34	27	27	29	30	48	43	30	24	32	26	26	33	33	27	26	25	22	27	25	35	28.1
Mexico§§	Maximum	33	29	42	53	52	50	53	52	64	61	52	71	60	48	72	73	64	38	53	64	48	56	67	40	36	42	44	51	49	57	72	53.1
	Minimum	26	14	14	22	20	29	33	33	28	34	36	30	37	34	33	45	52	33	27	30	30	26	28	33	23	23	25	25	28	25	33	29.3
St. Louis(1)	Maximum	50	27	39	55	49	54	55	49	59	63	49	67	62	50	69	70	68	56	52	70	48	51	68	53	37	42	41	50	48	53	68	53.9
	Minimum	26	18	23	31	34	36	40	36	36	43	40	35	41	36	37	51	52	35	30	37	33	30	36	37	27	30	29	32	34	35	39	34.8
Unionville	Maximum	48	26	45	60	64	56	56	52	66	60	50	72	70	53	70	73	65	38	55	54	42	53	57	52	35	36	44	47	47	55	70	53.9
	Minimum	17	8	15	20	22	28	30	30	30	35	33	26	32	26	33	45	35	26	26	34	26	24	40	30	25	25	24	22	27	24	32	27.4
Warrenton	Maximum	52	32	40	57	54	54	53	53	61	60	57	68	78	60	70	70	70	55	53	69	63	54	70	64	39	43	40	48	46	54	71	56.7
	Minimum	27	14	19	24	29	31	37	33	28	42	37	29	44	34	33	48	51	34	24	35	31	25	37	38	27	26	25	26	29	29	33	31.6
Southeast Lowlands																																	
Campbell	Maximum	57	44	57	44	59	56	57	55	60	59	64	64	74	72	74	64	70	65	52	68	59	58	71	62	45	53	52	55	58	61	70	60.0
	Minimum	29	21	25	20	36	35	45	30	31	42	34	25	37	43	40	44	44	39	34	35	37	38	32	42	33	28	27	25	26	25	26	33.2
Caruthersville	Maximum	61	38	46	57	61	56	54	52	60	59	62	63	73	68	74	65	68	65	53	67	61	57	72	71	47	51	52	55	58	61	72	60.0
	Minimum	34	26	24	29	39	44	48	38	33	46	39	34	46	50	47	50	53	45	36	40	43	42	42	46	34	32	38	34	34	33	40	39.2
Doniphan	Maximum	56	40	48	54	63	54	52	47	49	56	68	71	70	69	71	70	72	67	56	70	65	68	73	64	46	53	53	57	58	64	72	60.5
	Minimum	34	22	22	22	36	40	36	22	31	34	37	36	34	46	43	41	47	40	34	34	40	38	35	45	35	31	30	26	24	24	27	33.7
Jackson	Maximum	56	34	39	52	50	50	53	49	55	59	55	59	66	62	69	65	66	63	50	62	59	52	66	62	50	42	45	49	50	54	62	55.0
	Minimum	29	16	17	17	29	26	41	33	21	39	44	25	36	38	31	43	46	35	27	30	31	29	32	47	27	27	25	21	22	24	25	30.1
Poplar Bluff	Maximum	56	39	47	58	63	52	56	54	60	64	58	63	72	68	72	67	69	64	55	69	58	60	70	62	42	52	52	57	58	62	70	59.6
	Minimum	32	21	19	20	35	35	45	30	24	35	35	20	33	46	43	41	45	42	34	31	36	31	32	41	37	31	26	25	25	26	26	32.3
Sikeston	Maximum	59	43	44	58	57	56	54	54	56	62	60	62	70	68	73	74	72	65	52	68	65	57	68	65	62	49	51	54	57	59	69	60.1
	Minimum	32	21	20	26	33	33	46	35	33	40	36	32	40	41	39	48	50	41	35	35	37	35	54	58	32	30	29	29	29	35	30	35.9
Cairo, Ill	Maximum	52	33	41	53	54	55	55	46	57	60	57	60	69	63	71	66	69	64	49	64	55	54	68	59	39	47	48	49	53	55	67	55.9
	Minimum	32	22	23	30	41	39	45	38	34	45	40	36	47	45	43	52	53	39	36	40	37	38	39	38	30	32	32	33	34	35	40	37.7
Ozark Plateau																																	
Arcadia§§	Maximum	39	31	42	58	58	48	53	51	59	68	52	54	72	56	70	68	67	54	53	70	63	56	68	60	35	44	47	51	53	56	68	55.6
	Minimum	36	14	15	20	28	24	26	33	21	26	39	26	29	39	28	32	47	50	27	29	31	32	30	38	29	27	25	20	22	26	22	28.7
Aurora	Maximum	38	30	38	45	48	48	47	45	58	59	52	63	60	60	64	64	66	63	50	64	64	54	62	58	39	44	44	46	45	57	67	53.0
	Minimum	27	17	18	28	30	39	35	30	32	44	36	33	50	47	42	50	53	33	27	39	21	32	39	35	30	25	23	27	27	32	39	33.4
Birchtree	Maximum	51	34	43	51	57	51	54	58	60	60	58	66	70	66	69	63	71	64	51	69	63	71	68	63	46	44	49	51	53	58	69	57.9
	Minimum	30	17	19	21	31	34	43	38	25	43	50	25	43	40	39	49	50	36	28	30	35	36	46	46	33	29	24	24	25	24	28	33.6
Eldon§§	Maximum	29	21	39	46	42	40	45	40	53	49	42	61	57	50	59	62	53	35	53	69	49	59	68	51	31	38	41	50	50	57	73	48.8
	Minimum	29	14	14	20	23	30	35	34	28	30	38	29	29	42	36	36	50	35	28	29	31	31	31	38	29	28	25	25	29	25	27	29.9
Farmington	Maximum	49	31	40	59	53	47	53	50	60	69	53	64	73	57	72	63	68	46	56	72	63	55	69	61	39	41	45	51	50	56	68	55.9
	Minimum	31	16	19	28	34	29	40	34	25	40	38	29	45	38	32	43	37	34	27	31	31	30	33	39	29	27	26	24	29	27	29	31.4
Koshkonong	Maximum	50	34	45	57	58	53	55	50	61	66	61	67	68	67	70	65	68	62	52	..	70	60	70	64	42	48	47	53	54	59	70	*58.2
	Minimum	30	18	21	27	37	38	42	37	32	41	36	33	45	48	40	51	53	36	31	..	37	36	39	41	32	29	29	32	31	31	38	*35.7
Lebanon§§	Maximum	39	32	44	55	55	47	55	50	61	59	54	69	67	65	70	71	70	40	57	71	53	61	66	43	34	44	43	49	56	57	70	55.1
	Minimum	30	11	11	17	25	26	31	31	27	29	35	27	28	44	38	38	48	35	23	24	29	29	28	33	26	23	22	23	23	24	34	28.1
Mountain Grove§§	Maximum	37	31	43	54	58	44	53	51	60	63	55	67	68	63	68	62	66	47	52	69	59	54	66	50	33	44	46	52	51	57	68	54.5
	Minimum	35	14	14	19	26	31	38	34	29	33	37	30	33	42	39	41	51	46	26	27	31	31	35	38	29	26	24	25	27	28	35	31.4
Neosho	Maximum	51	38	47	56	56	64	57	52	65	63	62	71	69	68	73	71	70	65	54	71	69	67	66	65	48	48	48	50	54	60	71	60.3
	Minimum	28	14	16	23	24	34	38	31	24	42	28	25	40	45	38	48	54	32	26	37	34	30	45	36	31	24	25	20	18	20	31	31.0
Rolla	Maximum	50	33	41	52	53	49	50	49	51	49	56	66	68	65	70	69	67	65	51	71	63	56	69	54	36	43	43	49	49	55	70	55.2
	Minimum	28	15	20	26	31	33	37	34	32	34	37	39	47	41	37	50	51	34	25	37	31	36	40	33	28	28	25	27	26	27	30	32.9
Springfield	Maximum	43	29	43	53	52	46	51	48	62	54	55	68	65	63	67	66	67	60	50	68	55	60	63	52	35	42	42	46	47	56	68	54.1
	Minimum	25	14	19	29	31	40	36	31	32	38	37	34	50	48	44	53	53	32	28	39	32	35	43	35	29	27	24	29	29	33	42	34.5
Southwest Plain																																	
Appleton City	Maximum	36	32	47	57	52	49	54	52	64	61	56	72	68	68	71	72	63	47	55	66	50	63	66	53	40	45	47	51	54	61	71	56.2
	Minimum	24	13	18	22	27	35	33	26	29	38	34	29	42	41	42	49	47	31	24	36	29	31	44	36	30	26	23	25	26	26	42	31.5
Clinton	Maximum	47	34	50	52	54	50	55	54	66	64	65	74	73	72	77	76	67	48	58	68	51	63	65	58	42	48	50	55	55	67	78	59.2
	Minimum	27	14	20	30	22	35	34	32	32	40	35	47	45	40	48	48	32	25	42	32	32	45	38	32	28	24	25	35	35	33	33	33.9
Harrisonville§§	Maximum	36	33	47	61	54	50	51	52	67	61	57	75	62	65	73	74	62	39	57	62	48	61	67	46	38	45	49	53	56	63	73	56.0
	Minimum	22	12	12	20	25	27	33	24	26	37	36	29	32	36	37	45	51	30	23	27	28	28	31	38	31	25	22	23	24	29	35	29.0
Lamar§§	Maximum	39	34	49	55	55	49	54	53	65	59	60	71	70	70	73	72	68	38	53	70	57	66	67	46	39	48	47	52	55	62	72	57.0
	Minimum	31	15	15	19	27	29	35	30	29	32	35	30	32	47	45	46	53	34	25	26	32	32	33	42	32	25	24	24	26	23	28	30.8
Lamonte	Maximum	38	29	45	57	54	52	62	82	72	57	52	72	63	62	74	88	54	44	55	61	47	61	63	47	37	42	45	49	50	60	73	56.4
	Minimum	24	14	19	21	27	34	33	31	31	33	35	27	38	39	38	38	41	31	23	39	30	38	45	33	29	27	24	25	27	22	35	30.7
Marshall	Maximum	35	29	46	52	58	55	54	60	65	58	52	72	59	57	72	73	67	38	53	59	48	57	59	61	37	41	44	49	49	56	71	54.4
	Minimum	23	13	20	22	24	33	33	32	31	50	38	30	30	35	32	47	31	31	35	45	30	30	31	32	28	28	25	25	29	25	32	30.6
Nevada	Maximum	46	41	48	58	53	49	53	52	66	61	60	72	73	73	71	73	69	46	56	71	53	64	68	58	41	47	49	54	57	64	74	58.7
	Minimum	30	14	19	26	28	36	34	27	33	40	36	29	48	42	45	50	45	32	26	41	29	31	45	38	32	27	23	25	25	23	38	32.8
Warrensburg	Maximum	45	30	47	58	54	50	52	52	64	64	54	73	66	65	70	73	65	44	55	58	41	61	63	54	39	46	45	48	57	59	73	55.6
	Minimum	23	12	18	23	27	34	32	28	37	37	31	29	39	35	43	38	41	31	24	37	28	26	45	36	11	14	14	24	24	26	36	29.1
Warsaw	Maximum	50	32	45	52	55	52	55	51	64	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	72	....
	Minimum	26	15	21	25	29	35	34	31	28	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	....
Northwest Plateau																																	
Chillicothe§§	Maximum	31	29	46	59	54	58	54	52	67	57	58	52	74	57	75	75	43	39	34	54	45	57	61	41	37	38	45	51	50	51	75	52.2
	Minimum	19	9	13	19	22	29	34	22	28	32	29	28	21	32	30	41	40	28	23	24	24	25	28	33	28	26	24	20	25	30	21	25.7
Grant City	Maximum	46	28	41	58	51	52	51	49	63	52	49	74	71	49	71	74	66	36	51	50	41	55	62	56	40	36	40	49	49	57	61	52.5
	Minimum	16	6	18	21	23	33	34	20	29	35	34	29	33	28	36	46	33	27	34	32	25	27	45	37	27	25	23	28	23	34	28.6
Kansas City	Maximum	34	30	47	60	52	52	51	51	67	56	53	75	59	63	72	72	61	40	54	55	43	60	63	50	39	41	45	50	51	60	71	54.1
	Minimum	17	12	20	30	29	38	34	26	38	40	40	39	39	36	45	52	33	30	30	31	29	30	50	34	31	29	25	29	32	35	43	33.1
Kidder§§	Maximum	29	22	45	57	48	55	52	48	65	55	51	73	54	54	70	72	43	37	52	50	42	47	60	43	36	39	44	44	49	51	73	50.3
	Minimum	17	8	8	17	21	21	30	20	21	33	33	26	28	27	27	32	37	29	21	22	22	22	23	35	28	24	22	20	24	21	30	24.2
Lexington§§	Maximum	51	47	28	58	60	52	55	53	53	66	59	50	69	69	61	74	73	67	41	55	59	47	61	64	56	39	36	48	53	54	59	55.4
	Minimum	23	13	20	26	27	34	33	25	33	40	39	33	38	33	39	50	41	30	27	40	29	29	46	37	31	28	25	26	28	27	37	31.8
Maryville	Maximum	45	27	45	59	53	58	50	48	66	61	50	74	69	56	71	76	71	35	52	52	41	55	62	50	46	46	42	48	49	57	65	54.2
	Minimum	15	7	16	18	20	34	32	18	35	34	34	26	32	29	35	48	32	27	23	31	24	27	44	37	27	24	24	22	26	20	34	27.6
Oregon	Maximum	43	31	49	63	56	66	52	54	70	60	53	78	73	65	74	75	69	41	55	54	45	59	66	54	43	39	47	51	52	63	70	57.1
	Minimum	12	10	18	24	24	36	33	20	37	36	38	33	34	40	40	55	33	29	26	37	25	30	46	38	29	26	23	27	44	42	31	31.3
St. Joseph	Maximum	31	30	47	61	51	60	50	51	67	54	53	76	61	60	73	73	61	41	56	49	44	59	64	46	41	40	46	49	51	60	70	54.0
	Minimum	16	11	20	28	27	37	31	24	38	38	35	33	37	32	42	55	32	29	29	30	26	30	45	35	30	28	27	26	30	24	38	31.1
Trenton	Maximum	45	28	46	59	51	53	52	51	67	57	58	74	64	55	73	76	65	40	55	50	41	56	61	50	38	39	45	50	48	59	73	54.2
	Minimum	19	11	18	22	26	30	34	23	28	36	34	38	36	29	34	45	35	29	26	35	26	27	38	34	29	27	26	24	30	26	30	29.2

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-25-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., APRIL, 1930 No. 4

GENERAL SUMMARY

As a general rule the weather of April, 1930, was uniformly bright, mild, and relatively dry over practically all of the State of Missouri. Only four Aprils in other years back to 1888 have been warmer; but drier Aprils have occurred in eight or nine of the years running back to 1867.

Relatively cool spells prevailed for a few days at the opening of the month, and from about the 20th to the 27th. Local frosts, damaging to potatoes, roses, tender trees and shrubs, occurred on the 24th, and 25th, at the same time many apple orchards had their young fruit cut about one-half. On the other hand, about 26 stations had no injurious frost or freeze during the entire month. The warmest period of the month was from about the 9th to the 16th, when temperatures, both day and night, approximated mid-summer values. On some days the positive departures from the normal amount to as much as 25° while at many stations with long records it was the hottest of official knowledge. On 8th, 24th, and 25th, it was locally colder in the Ozark hills and its eastern slope than in any other parts of the State.

As already stated, the rainfall was deficient generally. There was hardly any during the first 13 days. And, following a rather dry March, there was a need for showers when they came. During the latter half of the month rains were rather of a local shower type, and rather insufficient for normal growth of wheat, oats, all grasses and truck. For all outdoor work, the weather was nearly ideal, and the most favorable in many springs. By the end of the month much corn had been planted and considerable was up to good stands.

There were no destructive storms of any kind.

TEMPERATURE

The monthly mean temperature for the State, 67 stations reporting, was 59.1°, or 4.0° above the normal, and the warmest April since 1925. The highest monthly mean was 64.8°, at Caruthersville; and the lowest monthly mean was 53.9° at Kidder. The highest reported temperature was 96°, at Clinton on the 11th; this value has been equaled or exceeded only in five other Aprils in more than 40 years, the maximum, 100°, occurring in 1895. The lowest temperature reported the current month was 23°, on the 1st at Tarkio, being well above low records of other years. The greatest daily range was 58°, at Lebanon on the 10th. Days with minimum 32° or lower, 1 to 3. The 10th was the warmest, when 50 stations registered 90° and higher.

PRECIPITATION

The average precipitation, 96 stations reporting, was 2.03 inches, or 1.78 inches less than the 60 years' average. The deficiency was quite marked in all divisions, and for the State as a whole was the driest April since 1924. The greatest local monthly amount was 7.72 inches, at Joplin, and the next heaviest amounts were 6.35 inches at Neosho and 6.32 inches at Dean; the least monthly amount was 0.22 inch at Marble Hill. The greatest amount in any 24 consecutive hours, was 2.50 inches, at Steffenville, Lewis County, on the 16th.

MISCELLANEOUS PHENOMENA

Fogs, dense.—2d, 3d, 14th, and 28th.
Frost, light.—8th, 19th, 23d, 24th, and 25th.
Frost, heavy.—8th, 24th, and 25th.
Frost, killing.—1st, and locally on the 24th, and 25th.
Hail.—None of a damaging nature reported.

Halos, lunar.—4th, 7th, and 10th. Solar.—1st, 4th, 5th, 8th, 11th, 15th, 17th, 19th, 22d, 23d, 26th, 28th, 29th, and 30th.

Sleet.—1st, at Kansas City; 22d, at Hannibal.

Thunderstorms.—Local 1st, 2d, 3d, 11th, 12th, 13th, 14th, 19th, 20th, 22d, and 27th. More widely distributed, on the 15th, 28th, 29th, and 30th.

Winds.—Fresh to strong on several days but no damaging winds reported.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.01	69	49	250	63	5,510	7.7	27	sw.	17
Hannibal	30.02	66	..	...	..	6,199	8.6	35	sw	29
Kansas City	29.99	68	50	298	75	6,900	9.6	28	nw.	5
St. Joseph	29.98	67	46	248	62	6,001	8.3	34	w.	11
St. Louis	30.01	63	43	273	69	7,929	11.0	36	sw.	17
Springfield	30.02	65	43	288	73	7,261	10.1	35	se.	26
Cairo, Ill.	30.04	66	46	...	..	5,585	7.8	26	sw.	1
Keokuk, Iowa	30.02	67	48	276	69	5,310	7.4	26	sw.	17

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

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COMPARATIVE DATA FOR APRIL

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	57.9	+2.8	91	20	1.83	−1.89	....	....	5	..	..	..
1889	55.7	+0.6	90	26	2.52	−1.20	....	....	8	..	..	..
1890	56.2	+1.1	93	24	3.17	−0.55	....	....	8	..	..	..
1891	56.8	+1.7	93	15	3.90	+0.18	....	....	9	..	..	..
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	....	11	9	8	13
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	....	12	8	9	13
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	T.	8	12	10	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	T.	7	14	8	8
1896	61.9	+6.8	92	17	3.51	+0.21	3.00	0.0	9	11	12	7
1897	54 4	−0.7	88	21	4.55	+0.83	3.50	T.	10	10	11	9
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	T.	10	12	9	9
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	3.8	8	12	9	9
1900	56.7	+1.6	89	21	3.36	−0.36	3.82	0.7	9	11	10	9
1901	53.3	−1.8	94	24	2.85	−0.87	2.23	1.8	8	14	7	9
1902	53.9	−1.2	95	19	2.66	−1.06	4.35	T.	11	13	11	6
1903	55.9	+0.8	91	26	3.54	−0.18	4.06	1.2	9	11	10	9
1904	49 0	−6.1	84	19	5.75	+2.03	6.10	2.7	9	15	6	9
1905	54.9	−0.2	92	20	3.19	−0.53	4.00	0.3	6	14	8	8
1906	59.5	+4.1	93	22	2.24	−1.41	2.45	0.0	8	17	7	6
1907	48.7	−6.4	89	16	3.43	−0.29	2.75	T.	8	11	8	11
1908	56.6	+1.5	90	18	5.30	+1.58	3.30	T.	11	11	8	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	T.	8	13	9	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	0.9	11	12	7	11
1911	53.5	−1.6	89	20	4.99	+1 27	4.27	T.	10	12	8	10
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	0.7	10	13	7	10
1913	56.2	+1.2	94	25	3.33	−0.45	3.90	T.	7	16	5	9
1914	55.2	+0.1	91	18	3.14	−0.74	3.00	T.	8	12	7	11
1915	61.9	+6.5	96	18	2.03	−1.82	2.08	T.	7	16	8	6
1916	53.5	−1.8	93	21	3.23	−0.69	2.35	1.9	10	11	8	11
1917	53.2	−2.3	89	19	5.97	+2.02	4.80	1.2	12	12	6	12
1918	50.8	−4.4	93	19	5.10	+1 24	3.50	0.9	11	12	6	12
1919	55.3	+0.3	94	20	3.01	−0.64	3.25	T.	9	12	7	11
1920	50.2	−4.7	89	4	3.95	+0.15	2.98	4.8	11	11	7	12
1921	56.0	+0.9	91	19	5.37	+1.52	4.20	1.1	10	13	7	10
1922	57.3	+1.9	91	24	6.21	+2.42	5.49	T.	11	13	6	11
1923	54.2	−0.6	91	16	3.12	−0.74	2.50	0.4	8	14	8	8
1924	56.6	+1.5	95	11	2.07	−1.66	2.35	T.	6	14	8	8
1925	61.0	+5.9	92	24	4.11	+0.38	3.51	0.0	10	12	9	9
1926	49.9	−5.2	91	11	2.46	−1.27	3.19	2.4	8	14	6	10
1927	57.7	+2.6	94	18	8.46	+4.73	4.85	T.	14	10	7	13
1928	51.6	−3.5	88	16	4.79	+1.06	3.78	0.2	8	13	7	10
1929	57.4	+2.3	96	27	6.15	+2.34	4.35	0.0	12	11	8	11
1930	59.1	+4.0	96	23	2.03	−1.78	2.50	0.0	8	14	8	8
.....	....	.....	..	..	....	.....	....	....	..	..	..	..
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.....	....	.....	..	..	....	.....	....	....	..	..	..	..

Climatological Data for April, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	59.2	+ 5.1	95	10	32	1†	53	1.64	−1.84	0.75	0	9	16	1	13	ne.	O. K. Benecke
Clifton Hill	Randolph	731	31	57.8	+ 4.3	93	10	29	8	47	1.03	−3.33	0.38	0	7	13	11	6	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	59.9	+ 5.0	93	10	33	8	34	1.55	−2.22	0.46	0	13	11	10	9	se.	U. S. Weather Bureau
Downing	Schuyler	876	9	55.9	.....	91	10†	27	2	38	1.21	−2.54	0.49	0	4	14	6	10	w.	James Taylor
Fayette	Howard	661	50	58.2	+ 3.9	93	10	30	8	52	1.45	−2.09	0.45	0	10	..	..	..	.....	J. D Settle
Fulton	Callaway	818	50	59.1	+ 4.8	94	10	30	25	48	1.33	−3.00	0.28	0	10	16	9	5	.....	Chamber of Commerce
Gorin	Scotland	700	41	..	.....	..	..	..	..	..	1.94	−2.06	0.97	0	7	14	3	13	nw.	J. W. Pulliam
Hannibal	Marion	534	38	58.4	+ 5.0	93	10	33	25	34	1.63	−1.56	1.00	T.	7	12	7	11	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	58.8	+ 2.7	94	10	34	1‡	48	2.23	−1.31	0.55	0	14	13	4	13	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	56.5	+ 4.8	93	10	27	2	38	2.52	−1.12	1.22	0	7	14	5	11	e.	Prof. J. S. Stokes
Louisiana	Pike	469	36	58.8	+ 5.2	94	10	27	25	47	0.83	−2.55	0.43	0	3	15	11	4	s.	Stark Bros. Nurseries
Macon	Macon	875	31	57.0	+ 3.9	93	10	30	2	45	1.57	−1.62	0.91	0	6	15	10	5	e.	W. C. Brown
Mexico	Audrain	800	41	57.8	+ 4.1	94	10	30	25	47	1.02	−2.65	0.30	0	8	26	0	4	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	J. S. Conway
St. Charles	St. Charles	456	42	60.4	+ 5.0	93	10	33	3	41	1.05	−2.63	0.49	0	5	15	9	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	61.2	+ 5.1	93	10	39	1	39	1.32	−2.49	0.62	0	6	12	14	4	s	U. S. Weather Bureau
St. Louis (2)	....do	578	18	60.6	+ 5.4	93	10	39	1†	39	1.31	−2.70	0.46	0	7	16	9	5	se.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	0.97	−2.56	0.36	0	7	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	32	57.0	+ 4.1	94	10	28	3	35	3.62	+0.01	2.50	0	6	12	14	4	e.	Frank Hall
Unionville	Putnam	1,062	37	55.3	+ 4.6	92	10	27	1†	39	1.35	−2.46	0.90	0	7	13	7	10	n.	Geo. W. Davis
Warrenton	Warren	816	18	60.7	+ 6.2	94	10	35	1	38	0.75	−3.56	0.22	0	7	12	12	6	se.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	56.8	+ 4.5	92	10	31	2	33	1.97	−1.02	1.13	0	6	11	9	10	n.	U. S. Weather Bureau
Section means and	extremes	.....	..	58.4	+ 4.6	95	10	27	1†	53	1.54	−2.16	2.50	0	7	14	8	8	se.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	60.8	.....	88	10†	34	8†	40	1.87	.....	0.88	0	9	12	8	10	s.	Jeff. King
Caruthersville	Pemiscot	265	34	64.8	+ 4.6	88	11	41	24†	31	2.35	−1.77	1.35	0	6	15	10	5	s.	Sam Smith
Doniphan	Ripley	344	26	62.0	+ 4.0	91	10†	32	7†	43	1.27	−4.10	0.60	0	3	19	8	3	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	58.1	+ 1.2	85	29	29	25	40	2.18	−2.29	1.05	0	6	10	8	12	n.	John G. Putz
Marble Hill	Bollinger	470	35	60.2	+ 3.5	88	10†	30	25	53	0.22	−4.22	0.12	0	2	15	5	10	w.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	1.25	−3.01	0.44	0	8	20	5	5	sw.	John A. Spence
Poplar Bluff††	Butler	339	26	61.2	+ 2.0	89	10	32	8	46	1.29	−3.18	0.42	0	7	16	10	4	s.	J. H. Wolpers
Sikeston	Scott.	318	29	62.0	+ 4.1	90	11	35	25	39	0.90	−3.36	0.38	0	7	16	5	9	n.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	62.2	+ 4.1	87	11	40	25	28	0.79	−2.93	0.37	0	10	10	7	13	s.	U. S. Weather Bureau
Section means and	extremes	....	..	61.4	+ 3.4	91	10	29	25	53	1.35	−3.11	1.35	0	6	15	7	8	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	58.2	+ 2.9	90	10	27	25	38	0.85	−3.77	0.50	0	3	25	0	5	se.	Arcadia College
Aurora	Lawrence	1,370	38	60.6[f]	+ 4.9	82	11	39	21†	39	1.11	−3.24	0.30	0	9	8[e]	9[e]	8[e]	sw.	W T. Troughton
Birchtree (near)	Shannon	1,000	36	61.4	+ 4.6	88	10	33	8	39	1.71	−3.01	0.42	0	7	15	10	5	sw.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	61.1	+ 3.8	89	10	33	8	43	6.32	+2.28	1.85	0	10	12	8	10	sw.	H. E. Dean
Eldon	Miller	934	34	58.7	+ 3.3	92	10	35	1†	43	2.06	−2.40	0.36	0	10	10	11	9	n.	E. H. Shepherd
Farmington	St. Francois	918	19	60.6	+ 3.7	92	11	30	25	39	1.16	−2.80	0.28	0	9	13	13	4	sw.	Robert Forsyth
Goodland	Iron	1,000	36	57.6	+ 3.0	90	10	27	8	50	2.38	−2.71	0.90	0	5	17	11	2	s.	F. M. Adams
Greenville	Wayne	381	7	58.4	.....	90	11	31	7†	39	1.15	.....	0.75	0	3	14	13	3	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	2.63	.....	1.43	0	7	18	7	5	w.	A. W. Madison
Koshkonong	Oregon	958	29	62.5	+ 4.7	91	10	39	25	40	1.43	−3.54	0.42	0	7	10	8	12	se.	R. M. Hitt
Lebanon	Laclede	1,265	43	57.6	+ 1.9	89	10†	31	9†	58	2 59	−1.59	0.65	0	8	16	9	5	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	61.2	+ 5.2	91	10	37	1	37	4.36	+0.70	1.45	0	9	16	7	7	nw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	29	60.0	+ 5.8	88	10	36	8	39	0.97	−3.81	0.25	0	9	17	6	7	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	61.2	+ 3.2	87	10†	33	8	42	6.35	+2.23	2.48	0	11	17	9	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	60.7	+ 5.7	91	10	35	25	37	1.93	−2.73	0.64	0	8	10	9	11	sw.	F. H. Lane
Salem(near)	Dent	1,173	26	59.2	+ 3.6	91	10	28	8	42	1.47	−3.08	0.49	0	7	15	8	7	sw.	A. C. Leech
Seligman	Barry	1,542	28	62.0[b]	+ 6.2	87	10	37	21	39	2.21	−1.72	0.61	0	9	16	5	9	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	58.0	+ 2.6	84	11	32	8	37	1.69	−2.27	0.46	0	5	16	7	7	s.	Ira H. Hailey
Springfield	Greene	1,324	42	60.4	+ 4.4	87	10	40	21	33	1.04	−2.82	0.34	0	12	19	7	4	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	60.0	+ 4.1	92	10†	27	8†	58	2.28	−2.02	2.48	0	8	15	8	7	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	60.2	+ 4.4	90	10	34	1	40	2.24	−2.02	0.66	0	10	12	10	8	ne.	W. G. Bigelow
Clinton	Henry	765	37	62.1	+ 6.4	96	11	35	1	48	2.34	−1.70	1.10	0	7	10	11	9	sw.	A, E. Derwent, M. D.
Harrisonville	Cass	904	52	58.8	+ 5.0	93	10	30	2	44	2.77	−0.38	0.90	0	12	6	7	17	e.	John H. Patterson
Lamar	Barton	980	43	60.0	+ 3.4	89	11	37	2†	48	3.99	−0.16	1.95	0	11	18	3	9	se.	Jesse A. Mann
Lamonte	Pettis	867	30	59.4	+ 4.3	93	10	31	8	40	2.10	−1.67	0.50	0	10	16	9	5	se.	J. E. Wheeler
Marshall	Saline	779	42	59.8	+ 5.4	92	10	32	1	47	1.52	−2.17	0.43	0	8	18	7	5	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	61.4	+ 6.3	91	10†	37	8	39	3.31	−0.48	1.38	0	7	17	4	9	sw.	George A. Kaupp
Warrensburg	Johnson	878	43	59.2	+ 3.1	91	10	31	1	39	3.18	−0.02	1.01	0	8	15	6	9	ne.	E. A. Markey
Warsaw	Benton	687	29	61.2	+ 5.4	91	10	32	8	39	4.14	−0.08	0.90	0	13	13	8	9	e.	Everett Martin
Section means and	extremes	.....	..	60.2	+ 4.9	96	11	30	2	48	2.84	−0.96	2.38	0	10	14	7	9	ne.	
Northwest Plateau																				
Bethany	Harrison	916	37	56.0	+ 4.8	93	10	27	1†	44	2.40	−0.82	1.74	0	9	14	7	9	se.	A. S. Cumming
Chillicothe	Livingston	779	20	56.9	+ 3.6	94	10	28	1	47	1.97	−2.47	0.87	0	8	15	11	4	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	41	57.2	+ 5.3	95	10	26	1	39	2.71	−0.10	1.62	0	10	9	10	11	e.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	57.8[f]	.....	94	10	27	8	46	2.77	−0.77	1.27	0	10	19	0	11	e.	Fred L. Stiff
Grant City	Worth	1,134	26	55.6	+ 4.1	93	10	25	1	38	2.06	−1.00	1.15	0	11	9	14	7	sw.	W. P. Spillman
Kansas City	Jackson	963	41	60.4	+ 5.6	92	10	31	1	35	3.13	−0.01	1.12	0	13	12	10	8	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	53.9	+ 1.5	92	10	25	2	51	2.27	−0.77	1.09	0	8	14	6	10	sw.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	2.68	.....	1.27	0	13	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	59.5	+ 5.4	86	10	30	1	36	2.17	−1.19	0.71	0	14	13	13	4	se.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	57.1	+ 7.0	93	10	31	2	37	1.24	−1.67	0.45	0	5	12	7	11	n.	J. R. Brink
Oregon	Holt	1,048	74	60.0	+ 6.1	94	10	26	1	40	3.32	+0.03	2.12	0	10	15	8	7	ne.	Mina Wright
St. Joseph	Buchanan	987	22	59.0	+ 5.1	93	10	30	1	37	2.92	−0.29	2.00	0	13	14	7	9	se.	U. S. Weather Bureau
Tarkio	Atchison	916	27	56.4	+ 4.2	94	10	23	1	44	2.26	−0.91	1.03	0	8	13	6	11	sw.	Albert Volker
Trenton	Grundy	822	34	56.1	+ 3.5	94	10	29	1	40	3.39	+0.12	1.39	0	9	15	8	7	ne.	W. H. Estes
Section means and	extremes	.....	..	57.4	+ 4.7	95	10	23	1	51	2.52	−0.76	2.12	0	10	13	9	8	sw.	
State means and	extremes	.....	..	59.1	+ 4.0	96	11	23	1	58	2.03	−1.78	2.50	0	8	14	8	8	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for April, 1930

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville‖	Missouri	.12														.01	.40	.12			.07		.04				.15	.37	.12	.01	.15		1.56
Brunswick‖	Grand															.17	.75				.08		.05	.06			.10	.15		.03	.25		1.64
Clifton Hill	Chariton															.20	.38				.08			.10		T.	.04	.21		T.	.02		1.03
Columbia***	Missouri	.13												.16	T.	.12	.29			.06	.04		.11			.03	.04	.46	.01	.08	.02		1.55
Downing	Mississippi													T.		.48	.49			T.								.06	T.		.18		1.21
Fayette‖	Missouri																.45	.10			.06	.02		.03			.09	.45	.07	.02	.16		1.45
Fulton‖	do	.13		.03											.08		.28				.18		.01	.06			.03	.28		T.	.25		1.33
Gorin	Mississippi												.02			.29	.97				.20							.25		.18	.03		1.94
Hannibal***	do													.11		.04	.22	T.			1.00		.01					.24		.01	T.		1.63
Hermann‖	Missouri	.12	.11	.01													.09		T.		.09	.02		.04			.02	.02	.06		.10		0.68
Jefferson City‖	do	.10	.12	.22										.13			.55				.23	.16	.02	.03			.15	.30	.04	.08	.10		2.23
Kirksville	Mississippi													.03		.78	1.22				.17							.04		.25	.03		2.52
Louisiana	do															.43					.20							.20					0.83
Lucerne‖	Grand															.90	.25				.19							.09		T.			1.43
Macon ‖	Chariton															.12	.91	.04			.05							.33			.12		1.57
Mexico ‖	Mississippi															T.	.30				.03	.08	.09	.02				.19	.10		.21		1.02
Milan‖	Grand														.10	.48	1.10	.12											T.		.10		1.90
Monroe City	Mississippi																																
Pacific‖	Meramec		.52	.06													.12		.12		T.	.30		.05					.15		.14		1.46
St. Charles	Missouri	T.	.49														.10	.07			.25		T.					.14					1.05
St. Louis (1)***	Mississippi	.55	.07	T.										T.	T.	.01	.08	T.			.33	T.	T.					.28	T.		T.		1.32
St. Louis (2)*	do	.46	.06													T.	.10	.27			.36		.01					.05			T.		1.31
Shelbina ‖	do																.36	.07			.16		.02	T.				.20	.08		.08		0.97
Steffenville	do			.05										T.		T.	2.50				.37							.25	T.	.30	.15		3.62
Union‖	Meramec		.40	.05															.01		.10	.18	.01	.04			.02		.15		.33		1.29
Unionville	Chariton													.05		.70	.20		T.		.15							.05		.10	.10		1.35
Valley Park	Meramec		.47	.03													.08		.06		.06	.27		T.					T.		T.		0.97
Warrenton	Mississippi	.15	.03													.08	.08				.22		T.	T.				.06	T.		.13		0.75
Keokuk, Ia.***	do													T.		.88	.34	T.			.23							.17	T.	.30	.05		1.97
Southeast Lowlands																																	
Campbell‖	St. Francis		.88	.55											.13	.03	.01		.08			.09						.07			.03		1.87
Cape Girardeau‖	Mississippi		.33	.17											.09	T.	T.	.66	.17			.05		.09	.01				T.				1.57
Caruthersville ‖	do	.72	1.35														.03	.11			.04		.10										2.35
Dexter‖	St. Francis		.51	.13		T.									.02		T.	.64	.05			.10				.06			T.	T.	.07		1.58
Doniphan	Black														.60	T.	.20			T.	.47							T.					1.27
Jackson	Mississippi		.26												.34		.32	1.05			.03							.18					2.18
Marble Hill	Mississippi														.12						.10							T.					0.22
Morehouse	do		.44	.09											.04		.25	.26			.04		.12					.01					1.25
New Madrid‖	do		.75	.58											.02	.01		.30	.16			.16		.05	.05			.01					2.09
Poplar Bluff‖	Black		.42	.21											.05		.03	.38				.13		.07									1.29
Sikeston‖	Mississippi	.38	.10												.04			.17	.08		.05			.08									0.90
Cairo, Ill.***	do	.09	.28	.09		.01									.04	T.	.03	.13			.07		T.	.02			T.	T.	T.		.03		0.79
Ozark Plateau																																	
Arcadia ‖	St. Francis		.50	.18											.17		T.		T.					T.			T.	T.					0.85
Aurora	Neosho		.14													T.	.07	.12			.12			.30			.07	.04		.03	.22		1.11
Birchtree (near)	Black		.42	.34											.33		.15				.20			.05							.22		1.71
Caplinger Mills	Osage	.02	.20													.11	.04	.15						.06			.11	.09			1.35		2.13
Dean	Neosho		.32											1.20	.55	T.	.35	.30			.75			1.85		T.		.45	T.	.10	.45		6.32
Eldon‖	Missouri		.07	.25													.34				.22	.02		.24				.35	.06	.15	.36		2.06
Farmington	St. Francis		.23	.06		T.									.28	T.	.04	T.			.28			.19			.02	.04	.02	T.			1.16
Fredericktown‖	do																.23							.23							.23		1.07
Galena‖	White		.23	.15													.03				.25										.85		2.38
Goodland	Black		.90												.35																		1.15
Greenville	St. Francis		.75	.10											.30																		2.63
Hailey	White							.25							.18			.12	.04		.30			1.43						.31			1.43
Koshkonong	Black		.33	.04										T.			.20				.42							.10	T.	.30	.04		2.59
Lebanon ‖	Osage		.65	.60												T.	.45				T.	.11		.40		T.	.12	T.	.06	.20		1.36
Leeper‖	Black		.28	T.											.50		.10	.13			T.			.20				.15					4.36
Lockwood	Osage		.12											.16		.10	1.15	.30						T.			.26	.75		.07	1.45		0.97
Mountain Grove‖	White		.06	.09											.11		.17	.05			.25	.03		.14			T.	T.			.07		6.35
Neosho	Neosho	T.	.09											T.	2.48	.05	.27	.30			.46			1.05			.10	.35		.05	1.15		0.87
Owensville ‖	Gasconade		.46																		.15	.10					.08		.08				2.43
Ozark Beach‖	White														.65		.24	.34			.24	.57					.05			.16	.18		1.93
Rolla ‖	Meramec		.41	.28													.08				.09	.05		.64				.03	T.		.35		1.47
Salem (near)	do		.35													.09	.40				.14			.28						.14	.07		2.21
Seligman	Neosho		.25												.59	.10	.14	.21			.61			.10				.16		.05			1.69
Seymour (near)	White		T.	.46										T.		T.	.35				.34		T.	.11		T.	T.	T.	T.	.43	T.		1.04
Springfield ***	do	.04	.19											.04		.10	.06	.02			.16			.02			.03	.04	T	.13	.21		1.89
Steelville‖	Meramec		.60	.15													.05				.04	.22		.43				.04	.11		.25		2.51
Stover ‖	Missouri		.01	.34													.63						.13	.22				.75			.43		3.38
Tuscumbia ‖	Osage		.36	.25													.46				.31			.47			T.	.24		1.17	.12		1.12
Williamsville‖	Black		.33	.28			.01								.29		.02	.07						.11				.01					1.30
Willow Spfgs. ‖ (near)	White		.17	.18											.22		.10				.18	.11		.10				.04			.20		
Southwest Plain																																	
Appleton City	Osage	T.	.09											T.		.03	.46	.10			.15		T.	.30		T.	.12	.13	.20	T.	.66		2.24
Clinton	Osage		1.10													.08	.10				.15						.14	.45	.32				2.34
Concordia‖	Missouri															.35	.42				.05						.34		.16	.12	.16		1.60
Harrisonville‖	Osage	.18	.01	.03												.45	.90	.01			.17			.11			.17	.13		.28	.33		2.77
Joplin‖	Neosho	.10												.78	.04	.20	1.03	.22			.32		.70	.95			.46	.52		.02	2.38		7.72
Lamar ‖	do		.08	.07											.12	.15	.32	.08			.17			.03				1.00	.02		1.95		3.99
Lamonte	Missouri	.17	.10													.16	.50						.40	.02			.13	.23		.31	.08		2.10
Marshall	do															.11	.43				T.		.16				.17	.19	.08	.17	.21		1.52
Nevada	Osage		T.											T.		.08	1.02	.20									.25	.35	T.	.03	1.38		3.31
Osceola‖	do			.14											.28	.46	.12				.10			.25			.06	.75	.10		1.18		3.44
Warrensburg	Missouri	.23	.09											T.		.91	1.01									T.	.21	.42	T.	.11	.20		3.18
Warsaw	Osage	.02	.45	.25												.20	.40	.02			.10			.28			.09	.90	.20	.43	.80		4.14
Waverly ‖	Missouri														T.	.13	.56				T.		.10				.17	.16		T.	.40		1.52
Northwest Plateau																																	
Bethany	Grand											T.	.03	.02		1.74	.08				.06						.10	.12		.15	.10		2.40
Chillicothe ‖	do														T.	.53	.87	T.			.11	T	.02	.05			.15	.12	T.	T.	.12		1.97
Conception	Missouri											T.	.10	.11		1.62	.12	.17	T.				T.				.14	.29	.06		.05	.05		2.71
Edgerton	do															1.27	.65				.04		.03	.05			.11	.13	.24		.17	.08		2.77
Gallatin ‖	Grand														.09	1.28	.62							T.			.25	.04			.26		2.54
Grant City	do											.11	.13			1.15	.05	.12	T.	T.	.07		T.			.05	.07	.08		.11	.12		2.06
Kansas City***	Missouri	T.											.01	.41	.53	.68	T.			.15	T.	.01	.13			.13	.18	.14	.13	.43	.20		3.13
Kidder ‖	Grand														.04	1.09	.50				.08			.04			.19	.20		T.	.13		2.27
King City	Missouri											.04	.04	.27		1.27	.04	.12			.07		.02			.10	.32	.19		.17	.03		2.68
Lexington	do			.07											.10	.45	.71	.03			.10		.05	.08		.02	.18	.20	.05	.03	.10		2.17
Maryville ‖	do													.43				.16			T.			T.		T.	.45	.10		T	.10		1.24
Oregon	do												.03	.47		2.12	.21	T.			.01		T.			.13	.14	.11		.07	.03		3.32
St. Joseph***	do	T.										T.	.10	.04	.51	1.49	.06			.07	T.	T.	.02			.22	.05	.27	.01	.06	.02		2.92
Tarkio	do													.24		1.03	.03				T.		.05			.10	.39			.17	.25		2.26
Trenton	Grand											T.		.10		1.39	1.29			T.	.14		T.			.02	.06	.07		.22	.10		3.39

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for April, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	58	60	74	78	75	79	68	74	89	95	91	90	80	81	62	79	74	72	77	68	74	61	68	67	63	61	55	74	85	79	..	73.7
	Minimum	32	32	35	40	42	42	42	33	36	48	57	57	53	57	57	53	52	44	44	46	39	41	39	36	37	37	46	49	52	59	..	44.6
Columbia	Maximum	61	47	72	69	73	72	60	67	82	93	90	87	82	79	77	80	74	65	74	65	72	58	60	60	60	58	61	72	83	79	..	71.1
	Minimum	33	40	43	41	47	46	41	33	50	61	67	59	58	54	65	61	50	46	46	48	44	41	44	39	38	47	44	54	60	61	..	48.7
Fayette	Maximum	51	55	76	74	75	75	63	70	84	93	91	89	84	81	77	78	70	67	73	59	75	60	65	65	62	62	57	70	81	77	..	72.0
	Minimum	32	35	40	33	37	44	41	30	32	49	54	56	51	55	57	60	61	45	42	51	39	41	42	36	31	35	46	46	54	58	..	44.4
Hannibal	Maximum	60	49	66	67	72	71	60	64	77	93	90	88	84	74	78	78	78	64	67	64	71	54	59	57	61	65	57	67	83	79	..	69.9
	Minimum	34	35	36	38	42	48	40	36	46	59	62	59	58	57	58	53	50	46	45	46	45	40	40	39	33	41	50	52	57	63	..	46.9
Jefferson City§§	Maximum	43	48	71	71	76	76	62	69	86	94	90	86	84	80	77	81	78	66	74	65	74	60	62	63	64	61	66	76	82	80	..	72.2
	Minimum	34	34	36	38	41	44	45	37	39	46	55	58	50	54	56	58	60	46	45	48	40	40	41	39	34	38	46	46	52	58	..	45.3
Kirksville	Maximum	66	56	69	72	72	72	69	68	79	93	89	87	81	70	75	64	66	65	62	62	67	57	63	63	62	60	56	61	80	74	..	69.3
	Minimum	29	27	36	49	43	44	38	34	41	59	64	58	54	50	54	42	50	40	39	46	38	34	33	32	33	39	45	50	52	59	..	43.7
Louisiana	Maximum	60	50	70	70	68	75	73	75	77	94	90	88	89	82	80	80	78	62	60	57	67	62	60	65	67	65	68	70	80	85	..	72.2
	Minimum	35	30	41	30	36	50	44	30	30	56	63	60	63	53	59	60	60	46	49	47	45	40	33	31	27	40	46	47	50	60	..	45.4
Macon§§	Maximum	52	56	70	74	74	73	62	70	81	93	91	89	84	78	78	73	70	65	72	62	72	59	62	61	65	59	54	70	83	76	..	70.9
	Minimum	31	30	31	38	42	40	40	36	39	48	62	58	54	53	55	47	47	42	41	44	39	38	35	33	36	40	44	46	50	57	..	43.2
Mexico§§	Maximum	49	50	73	69	74	73	62	69	81	94	92	91	92	80	80	77	78	67	72	65	74	58	62	62	64	64	62	72	84	80	..	72.3
	Minimum	34	33	36	37	38	43	41	34	34	47	47	57	55	53	55	55	60	44	42	42	44	38	38	33	30	39	39	41	52	56	..	43.2
St. Louis(1)	Maximum	58	49	69	64	76	70	61	63	73	93	90	87	82	76	81	78	79	62	69	63	71	56	58	56	62	62	61	75	83	82	..	70.3
	Minimum	39	39	45	45	51	54	48	43	47	54	68	67	67	62	62	62	60	49	51	52	47	42	45	41	43	51	48	54	62	62	..	52.0
Unionville	Maximum	66	64	70	73	70	72	68	68	80	92	90	90	80	70	70	55	56	66	60	56	62	58	62	60	62	60	60	64	80	78	..	68.7
	Minimum	27	27	38	36	42	40	34	32	42	56	62	54	55	50	52	40	45	37	38	46	40	32	31	30	32	38	45	48	50	58	..	41.9
Warrenton	Maximum	66	47	71	68	76	70	70	66	77	94	91	87	86	82	80	78	81	73	74	69	73	71	61	58	64	62	62	76	84	81	..	73.3
	Minimum	35	37	41	38	43	47	43	37	44	56	62	61	60	58	61	59	62	46	45	51	44	40	39	37	37	48	47	51	56	58	..	48.1
Southeast Lowlands																																	
Campbell	Maximum	68	67	68	65	76	75	67	68	64	88	88	87	86	80	83	83	80	79	78	59	75	66	65	63	65	68	78	87	84	86	..	74.9
	Minimum	45	42	42	44	42	49	52	34	39	51	48	47	49	58	58	48	59	47	41	50	38	44	41	34	34	48	51	48	55	60	..	46.6
Caruthersville	Maximum	70	64	67	67	75	75	66	68	77	87	88	87	86	80	83	83	78	76	75	73	76	77	70	72	65	65	76	87	84	84	..	76.0
	Minimum	50	49	51	48	58	54	51	42	48	56	65	57	59	62	61	60	63	54	49	54	48	53	44	41	41	52	58	59	60	65	..	53.7
Doniphan	Maximum	68	71	71	71	78	78	75	72	77	91	91	90	87	90	81	80	82	80	78	64	75	73	62	72	65	63	74	87	85	84	..	77.2
	Minimum	34	39	40	42	40	48	32	32	42	53	55	50	50	61	61	63	62	50	47	42	46	47	43	35	33	58	52	50	48	52	..	46.9
Jackson	Maximum	51	54	68	64	71	69	69	62	70	82	81	77	80	78	79	77	75	73	70	69	69	69	58	59	61	61	72	83	85	82	..	70.6
	Minimum	44	37	44	39	39	51	41	32	37	51	55	52	50	53	57	59	59	45	40	51	42	44	40	32	29	46	47	43	52	58	..	45.6
Poplar Bluff	Maximum	66	51	72	71	75	78	69	72	75	89	88	86	84	80	80	78	78	76	75	65	78	66	61	70	66	63	72	84	80	84	..	74.4
	Minimum	49	42	49	42	41	48	44	32	40	43	51	49	51	60	61	63	62	47	42	52	53	46	42	34	34	50	50	50	53	58	..	47.9
Sikeston	Maximum	68	66	68	68	72	73	66	66	74	89	90	88	86	82	82	80	78	74	73	73	72	73	66	65	63	64	77	86	84	84	..	75.0
	Minimum	46	41	48	42	46	51	48	37	41	50	60	55	55	52	58	62	64	49	43	45	43	49	42	36	35	49	53	52	58	62	..	49.1
Cairo, Ill	Maximum	65	56	69	63	70	72	62	63	73	86	87	85	83	76	80	79	73	66	72	60	70	62	60	59	60	61	75	83	82	80	..	71.1
	Minimum	45	41	48	45	49	56	51	44	48	58	63	63	63	62	63	65	63	51	48	54	48	49	43	43	40	51	54	60	62	66	..	53.2
Ozark Plateau																																	
Arcadia§§	Maximum	62	51	71	67	76	72	63	68	73	90	89	86	82	75	78	77	78	67	74	62	73	63	61	62	66	59	70	82	80	81	..	71.9
	Minimum	30	36	37	34	37	39	44	31	37	48	56	57	61	57	57	59	60	48	39	46	45	45	39	30	27	36	47	48	48	53	..	44.4
Aurora	Maximum	50	66	70	68	62	..	..	..	..	..	82	79	75	83	75	78	75	68	76	67	78	71	66	68	67	61	70	78	79	80	..	e71.7
	Minimum	44	43	44	46	45	..	..	..	..	..	..	58	57	54	64	58	56	42	42	58	39	48	42	39	43	48	47	52	58	58	..	f49.4
Birchtree	Maximum	63	63	70	70	80	72	65	72	75	88	86	83	82	79	78	80	79	71	70	67	75	70	64	67	66	59	69	81	79	79	..	73.4
	Minimum	50	40	44	43	45	56	54	33	46	54	56	53	52	58	63	60	61	58	47	52	41	43	42	37	35	49	48	55	53	56	..	49.5
Eldon§§	Maximum	39	47	71	71	73	73	62	69	81	92	87	89	84	83	77	82	73	67	77	65	70	58	58	63	62	57	65	79	81	80	..	71.2
	Minimum	35	35	39	41	41	43	42	40	40	49	57	58	58	54	56	60	62	46	44	44	42	42	40	40	41	42	42	54	57	57	..	46.2
Farmington	Maximum	62	51	70	68	80	71	64	66	72	87	92	87	81	78	77	81	79	71	75	64	76	62	61	58	61	60	69	77	85	83	..	72.3
	Minimum	40	37	45	36	41	52	47	37	40	53	62	60	61	58	59	57	62	48	42	53	57	49	41	35	30	46	50	56	55	54	..	48.8
Koshkonong	Maximum	68	61	72	69	80	73	67	71	77	91	88	86	79	81	78	78	80	75	76	64	74	72	60	67	66	65	72	81	73	79	..	74.1
	Minimum	47	43	47	48	46	51	54	43	46	51	62	58	57	59	61	60	62	49	48	52	45	50	42	42	39	41	51	56	60	57	..	50.9
Lebanon§§	Maximum	55	59	70	70	72	74	71	62	69	89	89	86	81	79	76	80	72	67	74	67	75	66	61	64	61	54	60	81	78	80	..	71.4
	Minimum	40	35	39	35	38	47	42	47	31	31	55	55	57	57	53	54	56	41	41	41	37	37	39	35	34	37	44	50	52	56	..	43.9
Mountain Grove§§	Maximum	61	56	73	72	76	72	65	68	77	88	85	83	81	79	77	77	76	69	73	65	77	72	64	68	64	55	70	80	76	78	..	72.6
	Minimum	40	41	43	42	45	48	49	36	39	49	58	57	57	53	56	58	57	42	43	50	42	44	42	37	39	43	45	56	58	58	..	47.4
Neosho	Maximum	69	69	72	76	78	73	77	74	85	87	87	84	82	81	78	78	77	69	77	74	78	77	70	66	66	66	69	80	76	79	..	75.8
	Minimum	42	42	44	36	39	36	34	33	47	59	59	48	53	50	63	58	52	37	38	55	36	49	43	40	42	48	49	49	58	55	..	46.5
Rolla	Maximum	65	51	69	67	74	70	68	68	77	91	88	86	82	81	78	80	80	66	75	69	74	74	62	63	60	60	69	80	81	79	..	72.9
	Minimum	39	37	44	40	39	55	47	37	46	54	60	57	56	56	63	59	60	44	43	53	43	44	41	41	35	48	49	51	55	60	..	48.5
Springfield	Maximum	55	61	69	70	72	71	61	68	84	87	84	81	72	78	71	76	68	65	72	66	73	66	60	63	63	56	66	78	74	77	..	70.2
	Minimum	42	42	44	48	51	46	50	45	53	62	64	60	61	58	60	58	54	43	46	46	40	48	42	46	43	49	48	55	57	58	..	50.6
Southwest Plain																																	
Appleton City	Maximum	65	50	74	75	76	77	66	72	88	90	89	86	77	81	78	79	73	69	75	67	78	72	63	65	60	55	63	76	76	77	..	73.1
	Minimum	34	38	38	41	46	44	45	40	51	54	59	54	56	51	62	58	54	41	41	50	38	42	42	41	43	45	46	49	59	57	..	47.3
Clinton	Maximum	70	52	75	75	68	80	75	73	93	94	96	93	86	89	80	76	68	70	81	73	61	61	65	72	64	56	63	80	78	78	..	74.8
	Minimum	35	40	40	45	40	43	45	36	45	68	58	55	56	55	63	55	58	50	51	52	52	42	45	46	44	45	48	52	58	60	..	49.4
Harrisonville§§	Maximum	50	50	78	79	74	79	66	70	90	93	91	90	84	78	79	76	65	70	75	59	79	59	61	67	57	50	63	72	75	77	..	71.9
	Minimum	31	30	34	35	38	42	43	42	47	52	61	56	56	53	55	58	56	42	44	47	39	40	41	41	42	44	46	47	53	57	..	45.7
Lamar§§	Maximum	44	56	74	77	77	78	66	75	87	88	89	85	72	82	77	79	69	68	77	65	76	66	64	68	69	60	65	78	73	77	..	72.7
	Minimum	41	37	42	42	42	43	47	37	39	51	60	56	56	54	57	58	57	41	41	44	39	40	44	41	44	49	48	52	57	58	..	47.2
Lamonte	Maximum	59	49	74	76	72	74	62	71	87	93	90	89	83	83	82	84	80	66	77	66	76	63	63	64	51	54	59	71	81	79	..	72.6
	Minimum	39	37	40	40	45	41	41	31	47	59	58	53	53	53	52	52	50	45	41	51	37	40	44	37	40	45	46	50	57	60	..	46.1
Marshall	Maximum	49	53	72	72	74	74	72	78	84	92	90	87	81	78	77	78	78	65	71	75	72	66	62	61	62	59	58	70	82	78	..	72.3
	Minimum	32	36	39	42	46	44	42	40	37	58	58	56	55	55	59	60	59	45	43	39	41	39	45	38	37	45	56	55	57	60	..	47.3
Nevada	Maximum	65	56	76	78	76	79	77	74	89	91	91	87	75	82	78	79	69	68	74	66	79	72	63	66	65	56	66	76	74	78	..	74.2
	Minimum	38	40	40	46	46	44	48	37	51	60	63	58	55	50	63	59	54	42	42	55	40	44	44	39	44	46	49	54	60	57	..	48.7
Warrensburg	Maximum	65	49	70	76	74	75	69	72	88	91	89	87	80	79	78	78	71	66	74	68	75	63	60	61	56	53	60	70	78	76	..	71.7
	Minimum	31	37	38	44	41	36	39	40	50	59	59	55	55	53	61	58	53	44	43	50	40	39	42	38	41	44	45	49	58	59	..	46.7
Warsaw	Maximum	68	48	71	75	74	74	70	71	87	91	89	86	79	82	77	80	81	68	76	72	77	76	66	66	62	59	65	78	78	79	..	74.2
	Minimum	35	39	40	36	40	46	46	32	51	61	61	60	58	52	66	59	59	40	40	55	39	44	43	40	38	46	47	54	57	60	..	48.1
Northwest Plateau																																	
Chillicothe§§	Maximum	54	62	76	77	74	77	64	72	86	94	91	90	80	79	77	74	63	67	71	62	70	59	65	64	59	57	54	70	82	79	..	71.6
	Minimum	28	29	29	36	39	41	38	31	45	50	63	58	53	50	51	44	44	40	39	49	34	37	34	32	35	43	44	44	49	58	..	42.2
Grant City	Maximum	52	63	73	73	74	76	73	70	82	93	90	84	74	73	68	56	54	66	62	58	61	55	63	60	54	53	54	63	76	77	..	67.7
	Minimum	25	30	42	41	39	41	38	32	45	56	63	52	56	49	56	41	45	39	40	46	40	33	35	34	40	43	45	48	52	59	..	43.5
Kansas City	Maximum	52	60	74	78	72	76	65	70	89	92	89	86	77	77	77	75	71	66	74	59	72	56	58	62	56	51	56	67	75	76	..	70.3
	Minimum	31	36	44	53	55	50	46	45	54	65	68	64	62	54	59	56	46	45	52	48	44	42	44	44	45	44	46	51	60	60	..	50.4
Kidder§§	Maximum	48	60	72	75	72	75	62	64	85	92	89	88	80	72	71	63	59	65	66	59	67	51	59	60	56	54	53	64	72	72	..	67.5
	Minimum	27	25	29	38	40	36	37	32	34	43	62	54	54	45	49	44	44	39	39	41	36	36	34	34	36	40	43	43	41	54	..	40.3
Lexington§§	Maximum	66	66	61	78	78	75	78	71	73	86	84	85	84	84	79	74	78	75	69	65	65	60	60	62	59	59	52	56	68	72	..	70.7
	Minimum	30	33	36	45	49	44	42	38	47	63	67	62	58	54	59	54	61	45	46	51	41	40	45	38	42	45	46	51	56	60	..	48.3
Maryville	Maximum	50	63	75	79	74	75	64	70	82	93	90	85	77	79	74	70	61	70	64	61	65	54	64	65	58	56	54	64	78	80	..	69.8
	Minimum	35	31	38	44	44	40	36	34	46	65	64	50	56	50	55	41	43	40	40	45	37	34	36	36	43	45	47	47	53	58	..	44.4
Oregon	Maximum	59	70	81	82	77	80	75	75	88	94	89	87	79	78	75	66	64	68	71	67	66	64	66	69	60	62	56	69	78	80	..	73.2
	Minimum	26	31	41	49	52	42	39	38	49	67	67	58	57	52	56	46	45	41	44	46	51	37	37	38	44	43	46	51	56	59	..	46.9
St. Joseph	Maximum	54	65	76	79	72	78	65	72	87	93	88	86	78	77	77	65	70	66	72	56	66	59	61	64	50	52	54	65	76	79	..	70.1
	Minimum	30	34	40	50	53	46	42	39	50	68	70	59	59	53	52	48	44	44	46	47	42	40	41	40	44	44	46	50	56	60	..	47.9
Trenton	Maximum	57	62	73	76	73	76	68	69	84	94	89	90	80	74	76	69	69	66	67	63	67	60	60	64	67	57	56	67	81	78	..	67.7
	Minimum	29	32	33	38	48	44	38	32	44	59	67	58	55	50	48	44	48	40	41	48	38	37	36	35	38	45	46	48	54	61	..	44.5

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 5-20-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., MAY, 1930 No. 5

GENERAL SUMMARY

Except a few rather severe local storms in the northwestern part of Missouri on the first day, May was comparatively free from noteworthy weather happenings, the outstanding feature probable being the continued well established tendency to scanty rainfall, brought over from March and April. In fact in most of its weather features, the present spring (March, April, and May), has been a close counter-part of the same season in 1928.

The first ten or twelve days were mainly warmer than normal over all the State; the following eight days were cooler than normal, while the remainder of the month alternated above and below the normal, ending decidedly cool, with light frosts in low places. The warmest days were the 1st, 8th, 21st, and 28th, the first eight days giving the largest excess in warmth.

May, as a whole, was drier than normal. There were only 13 stations, well scattered, that received normal or more rainfall. The plains, from southwest to northeast, and the eastern part of the Ozark Plateau were the driest areas, and the southeastern lowlands and northwest plateau were the best watered.

May, with the two preceding months completing the spring term, averaged but 60 per cent of the normal rainfall, a total of 6.83 inches compared with the normal of 11.50 inches causing quite serious scarcity of soil moisture for meadows, pastures, oats generally, and wheat generally outside the northwest. The corn crop started off in fine shape, well planted, fields well worked and cleaned.

TEMPERATURE

The monthly mean temperature for the State, 66 stations reporting, was 64.7°, or 0.3° above the normal. The highest local monthly mean was 70.8°, at Caruthersville; and the lowest was 59.8°, at Kidder. The highest temperature reported was 95°, at Louisiana, on the 21st; and the lowest was 33°, also at Louisiana, on the 30th. Temperature reached 90° or higher at nine stations, on one day.

PRECIPITATION

The average precipitation for the State, 96 stations reporting, was 3.43 inches, or 1.24 inches less than the 60 years' average. The greatest local monthly amount was 7.38 inches, at Hailey, Barry County; and the least local monthly amount was 0.97 inch, at Farmington, St. Francois County. The largest amount in any consecutive twenty-four hours was 2.88 inches, at Birchtree, Shannon County, on the 10th.

MISCELLANEOUS PHENOMENA

Fogs, dense.—At St. Louis on the 18th.

Frost, light.—Scattered localities, mostly low places, 30th, and 31st.

Hail.—1st, 6th, 8th, 17th, and 22d. (See Special Storm Notes).

Halos, lunar.—7th, 8th, and 9th.

Halos, solar.—2d, 10th, 13th, 14th, and 15th.

Thunderstorms.—1st, 2d, 5th, 6th, 7th, 8th, 10th, 13th, 17th, 18th, 19th, 22d, 23d, and 28th.

SPECIAL STORM NOTES.

The evening of May 1st was the only storm period of the month. Although five distinct tornadoes touched earth in several of the northwestern counties many more incipient funnel-shaped clouds were observed that did no damage. The storms in Holt, Andrew, and DeKalb counties occurred during daylight, traveled but six or eight miles an hour, and so gave ample time for persons in the zone of danger to reach places of safety. Only the storm in Ray and Carroll counties caused loss of life.

The first two tornadoes occurred in Holt County about 5.30 p. m. One was first observed crossing an island in the Missouri River southwest of Napier, and was doubtless the same storm noted to the north of White Cloud, Kansas. It demolished buildings on two farms, dissipated south of Napier, a total distance of about four miles.

The second tornado seemed to form southwest of Mound City, and followed a broken path for eleven miles northeast to a point north of Maitland. Eleven farms were devastated, but only one farm home demolished. The path was 50 to 100 yards in width. Near the Centre School two funnel clouds were observed but one did not reach earth. Damage estimated at $9,000 for the two storms.

Andrew County was visited also by two tornadoes that left devastation in their wakes, and many others that did not reach earth. At Rosendale it is reported that eight funnel clouds were observed at one time. The path of the two storms was generally easterly but veering at times to southeast and south. The first damage was at 6.20 p. m. four miles north of Fillmore. The tornado traveled a sinuous 100 to 200 yard path for eight miles and lifted south of Bolckow. The second storm was more violent. Forming about four miles southwest of Rosendale it swept a quarter-mile swath for two miles and then lifted for about five miles. Striking again four miles southeast of Rosendale it swung southerly to near Fountainbleau thence easterly to a point south and east of Union Star in DeKalb County. The path was nearly a mile wide in places and was ten miles long. It moved very slowly, being first noticed at about 6.30 p. m. and last seen south of Union Star, on Highway No. 4 between 7 and 7.30 p. m. One man was seriously injured by flying debris. Property damage in Andrew County estimated at $250,000 and in DeKalb County at $200,000. Heavy hail fell over more than 100 square miles just preceding the passage of the tornado. Damage from hail estimated at $500.

The fifth tornado of the day started in eastern Ray County, ten miles northwest of Norborne, Carroll County, and moved generally southeasterly to just beyond Norborne. It also seems to have dipped to earth further southeast, near Malta Bend in Saline County, but with slight damage. This storm occurred after night had fallen and traversing the populous section caused six deaths and injured 20 others. Thirty farm homes were destroyed northwest of Norborne and sixteen homes in Norborne. It struck Norborne shortly after 9 p. m. The path was 75 to 200 yards wide. Damage estimated at $350,000.

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	29.98	78	56	316	71	5,539	7.4	30	w.	1
Hannibal	29.99	76	..	...	..	6,983	9.4	40	sw.	7
Kansas City	29.95	73	57	344	77	7,400	9.9	40	sw.	7
St. Joseph	29.94	76	57	282	63	6,223	8.4	39	nw.	7
St. Louis	29.99	73	50	291	65	9,140	12.3	50	sw.	7
Springfield	30.00	79	57	322	73	7,282	9.8	33	se.	6
Cairo, Ill.	30.02	78	56	...	..	5,269	7.1	31	sw.	2
Keokuk, Iowa	29.98	73	54	307	69	6,106	8.2	37	sw.	7

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation			Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	62.1	− 2.3	93	30	5.35	+0.58	....	0	5	..	..	..
1889	63.5	− 0.9	96	28	6.56	+1.79	....	0	5	..	..	..
1890	62.8	− 1.6	96	32	3.47	−1.30	....	0	6	..	..	..
1891	61.5	− 2.9	97	28	4.26	−0.51	....	0	8	..	..	..
1892	60.7	− 3.7	91	28	7.80	+3.03	3.90	0	17	5	9	17
1893	66.8	− 2.6	94	30	5.89	+1.12	5.83	0	10	11	11	9
1894	63.7	− 0.7	95	22	3.99	−0.78	4.20	0	8	13	11	7
1895	64.6	+ 0.2	103	28	4.08	−0.69	3.43	0	9	13	12	6
1896	70.1	+ 5.7	96	32	9.09	+4.52	4.66	0	12	12	12	7
1897	62 4	− 2.0	93	28	2.56	−2.21	3.82	0	7	16	11	4
1898	65.2	+ 0.8	97	31	7.90	+3.13	5.50	0	14	12	10	9
1899	66.9	+ 2.5	96	34	6.26	+1.49	5.28	0	2	10	13	8
1900	66.3	+ 1.9	97	29	3.69	−1.06	4.00	0	10	14	11	6
1901	63.8	− 0.6	98	30	1.47	−3.30	3.04	0	6	15	10	6
1902	69.4	+ 5.0	98	39	5.03	+0.25	4.35	0	11	13	11	7
1903	65.1	+ 0.7	92	23	7.10	+2.33	3.10	0	15	9	10	12
1904	63.1	− 1.3	95	32	5.03	+0.26	4.33	0	12	13	10	8
1905	64.9	+ 0.5	94	34	4.87	+0.10	4.55	0	10	12	11	8
1906	66.3	+ 1.9	98	27	2.16	−2.61	3.83	0	7	15	10	6
1907	59.5	− 4.9	91	17	5.56	+0.79	4.33	0	10	14	6	11
1908	66.1	+ 1.7	96	24	6.92	+2.15	5.65	0	12	12	10	9
1909	63.3	− 1.1	96	23	5.34	+0.57	5.26	0	9	15	9	7
1910	60.1	− 4.3	94	32	6.62	+1.85	4.30	0	13	11	8	12
1911	68.8	+ 4 4	101	27	1.55	−3.22	2.06	0	5	19	7	5
1912	67.6	+ 3.2	97	30	3.86	−0.91	4.90	0	7	18	8	5
1913	65.8	+ 1.3	101	33	3.05	−1.93	2.95	0	8	16	7	8
1914	66.6	+ 2.0	98	31	1.47	−3.40	3.00	0	5	17	9	5
1915	63.7	− 1.4	97	30	7.86	+3.04	7.10	0	12	12	7	12
1916	65.6	+ 0.7	96	33	5.61	+0.89	4.10	0	11	15	8	8
1917	58.7	− 6.2	91	30	4.33	−0.47	2.60	0	10	15	7	9
1918	68.3	+ 3.8	100	28	5.49	+0.68	5.25	0	10	16	8	7
1919	62.0	− 2.5	93	35	5.80	+0.87	4.50	0	13	10	10	11
1920	63.8	− 0.8	97	32	4.85	+0.04	3.70	0	12	9	9	13
1921	66.4	+ 2.0	102	28	3.69	−1.20	4.12	0	7	17	8	6
1922	67.2	+ 2.3	97	38	3.17	−1.77	2.50	0	10	14	10	7
1923	62.7	− 1.9	97	25	4.59	−0.49	3.48	T.	12	11	10	10
1924	58.6	− 6.0	96	31	4.67	−0.03	3.90	0	10	13	8	10
1925	61.2	− 3.4	98	24	2.14	−2.56	2.86	0	7	14	9	8
1926	67.0	+ 2.4	100	32	2.73	−1.97	5.80	0	7	16	9	6
1927	64.6	0.0	94	34	6.98	+2.28	4.62	0	12	11	10	10
1928	65.8	+ 1.2	95	29	2.84	−1.86	2.80	0	8	16	9	6
1929	61.7	− 2.9	95	28	7.52	+2.82	6.00	0.3	13	9	10	12
1930	64.7	+ 0.3	95	33	3.43	−1.24	2.88	0	9	16	8	7
.....	....	.....	..	..	....	.....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..

Climatological Data for May, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	65.4	+ 1.1	90	22	42	18	41	3.16	−1.73	0.97	0	10	18	2	11	ne.	O. K. Benecke
Clifton Hill	Randolph	731	31	63.8	− 0.4	88	21	38	18†	39	1.75	−3.39	0.57	0	9	17	8	6	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	64.2	− 0.1	88	21	44	20	32	2.88	−1.58	1.21	0	11	13	10	8	s.	U. S. Weather Bureau
Downing	Schuyler	876	9	62.9	.....	86	21†	38	18†	34	3.53	−0.88	0.80	0	11	18	5	8	s.	James Taylor
Fayette	Howard	661	50	63.2	− 1.1	86	8†	38	31	39	3.11	−1.51	1.25	0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	64.4	− 0.6	89	9	40	31	36	2.20	−2.57	0.70	0	10	19	8	4	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	2.22	−2.39	0.65	0	7	18	1	12	sw.	J. W. Pulliam
Hannibal	Marion	534	38	64.7	+ 1.1	89	21	40	31	36	2.08	−2.27	0.66	0	11	14	10	7	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	65.2	+ 0.3	87	8	41	31	36	1.87	−2.68	0.43	0	11	14	6	11	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	62.8	+ 0.3	86	21	38	18	34	3.01	−2.20	0.60	0	9	17	2	12	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	67.3	+ 3.5	95	21	33	30	46	2.27	−2.29	0.65	0	6	18	8	5	s.	Stark Bros. Nurseries
Macon	Macon	875	31	63.6	− 0.3	88	8†	39	18	41	2.11	−2.46	0.62	0	8	16	8	7	sw.	W. C. Brown
Mexico	Audrain	800	41	64.6	+ 0.3	90	21	40	31	39	1.48	−3.28	0.40	0	9	22	0	9	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	J. S. Conway
St. Charles	St. Charles	456	42	66.0	+ 3.0	89	8	44	30	33	1.69	−2.49	0.55	0	7	13	9	9	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	67.3	+ 0.3	88	8	46	30	27	1.69	−2.65	0.98	0	8	15	10	6	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	66.8	+ 0.7	88	8	47	29†	26	1.01	−3.23	0.39	0	11	17	11	3	se.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	2.17	−2.81	1.38	0	8	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	32	63.4	− 0.7	90	21	38	18	42	2.11	−2.84	0.70	0	7	17	8	6	s.	Frank Hall
Unionville	Putnam	1,062	37	62.0	− 0.4	87	9†	36	30	36	4.90	−0.06	1.30	0	10	17	4	10	sw.	Geo. W. Davis
Warrenton	Warren	816	48	66.4	+ 1.4	89	8	42	30	32	1.91	−2.88	0.52	0	8	13	13	5	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	63.8	0.0	89	21	38	17	30	2.18	−1.75	0.51	0	13	15	7	9	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	64.6	+ 0.5	95	21	33	30	46	2.35	−2.28	1.38	0	9	16	7	8	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	67.5	.....	90	1†	43	24	42	5.08	.....	1.50	0	12	15	8	8	s.	Jeff. King
Caruthersville	Pemiscot	265	34	70.8	+ 1.3	88	28	50	15†	29	5.48	+1.22	1.20	0	12	9	6	16	s.	Sam Smith
Doniphan	Ripley	344	26	66.4	− 0.5	89	5†	43	25	42	4.20	+0.04	2.05	0	6	21	7	3	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	65.6	− 0.2	88	8	38	31	38	2.16	−2.20	0.61	0	12	10	7	14	s.	John G. Putz
Marble Hill	Bollinger	470	35	66.2	+ 0.5	89	2†	38	31	46	2.44	−1.79	1.70	0	4	15	10	6	w.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.. ..	..	..	..	..	..	3.03	−1.13	0.95	0	7	18	9	4	sw.	John A. Spence
Poplar Bluff‡‡	Butler	329	26	66.8	− 1.2	87	1†	43	31	36	3.43	−1.60	1.08	0	11	17	11	3	s.	J. H. Wolpers
Sikeston	Scott.	318	29	69.0	+ 0.4	90	2†	45	24†	34	2.72	−1.44	0.84	0	10	15	4	12	s.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	68.4	0.0	86	28	51	31	25	2.49	−1.22	0.98	0	10	11	8	12	s.	U. S. Weather Bureau
Section means and	extremes	....	..	67.6	0.0	90	1†	38	31	46	3.45	−1.02	2.05	0	9	14	8	9	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	63.3	− 1.3	85	1†	35	31	38	1.13	−3.65	0.53	0	4	23	1	7	w.	Arcadia College
Aurora	Lawrence	1,370	38	64.6	− 1.3	84	8†	44	31	32	3.09	−2.37	1.13	0	6	17	5	9	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	65.3	+ 0.1	85	1†	42	31	33	6.63	+2.32	2.88	0	8	16	11	4	s.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	65.0	− 0.8	86	1†	40	31	38	6.27	+0.31	2.15	0	11	17	8	6	s.	H. E. Dean
Eldon	Miller	934	34	64.2	− 0.3	87	8	39	31	41	2.16	−2.70	0.88	0	8	3	22	6	sw.	E. H. Shepherd
Farmington	St. Francois	918	19	65.8	+ 2.0	88	6†	39	25	42	0.97	−4.53	0.35	0	7	17	9	5	sw.	Robert Forsyth
Goodland	Iron	1,000	36	64.2	− 0.3	87	2†	35	31	42	2.39	−2.23	0.65	0	7	16	10	5	s.	F. M. Adams
Greenville	Wayne	381	7	68.8[i]	.....	90	1†	40	30	48	....	.....	1.30	0	..	11[i]	8[i]	2[i]	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	7.38	.....	2.05	0	11	21	7	3	w.	A. W. Madison
Koshkonong	Oregon	958	29	66.8[b]	0.0	86	1	41	16	36	5.19	+0.35	2.00	0	11	16	5	10	s.	R. M. Hitt
Lebanon	Laclede	1,265	43	62.9	− 2.7	86	8	35	31	42	3.24	−2.37	0.90	0	8	22	4	5	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	65.0	+ 0.4	85	8†	45	30	31	4.64	−0.44	1.04	0	8	19	7	5	sw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	29	63.7	− 0.2	85	1	41	30†	32	7.32	+2.47	2.15	0	11	15	9	7	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	65.0	− 1.2	85	8	37	31	39	6.46	+0.39	1.85	0	10	22	5	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	66.4	− 1.9	91	24	41	31	45	2.09	−2.92	0.49	0	11	11	10	10	s.	F. H. Lane
Salem(near)	Dent	1,173	26	64.5	− 0.8	86	1	36	31	37	2.68	−1.86	0.78	0	9	17	8	6	sw.	A. C. Leech
Seligman	Barry	1,542	28	65.4°	+ 0.5	83	1†	43	31	34	6.37	+0.78	1.98	0	9	14[b]	9[b]	6[b]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	61.8	− 2.3	84	1	35	31	33	5.13	−0.57	1.65	0	7	18	5	8	s.	Ira H. Hailey
Springfield	Greene	1,324	42	63.8	− 0.7	83	8	46	20	28	4.40	−0.79	1.27	0	12	19	8	4	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	64.8	− 0.6	91	24	35	31	48	4.32	−1.05	2.88	0	8	17	8	6	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	64.0	− 1.1	86	8	43	15†	36	2.49	−3.05	0.70	0	5	12	14	5	sw.	W. G. Bigelow
Clinton	Henry	765	37	67.6°	+ 2.4	94	8†	41	31	43	2.25	−3.19	0.76	0	5	13°	10°	5°	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	63.0	− 1.0	87	8	42	15	38	3.02	−1.79	1.78	0	9	9	5	17	sw.	John H. Patterson
Lamar	Barton	980	43	64.3	− 1.6	85	8†	43	31	34	4.32	−1.14	0.92	0	9	14	13	4	sw.	Jesse A. Mann
Lamonte	Pettis	867	30	64.4	− 0.3	88	8	42	20	38	2.25	−2.70	0.65	0	5	23	4	4	sw.	J. E. Wheeler
Marshall	Saline	779	42	65.6	+ 1.5	88	8†	41	18	34	3.24	−1.62	0.92	0	8	24	4	3	sw.	Sec Chamber of Commerce
Nevada	Vernon	862	37	63.7	− 0.9	86	28	44	15†	37	1.63	−4.09	0.71	0	3	17	7	7	s.	George A. Kaupp
Warrensburg	Johnson	878	43	64.0	− 1.3	86	8†	41	18†	37	2.84	−1.82	0.97	0	8	19	6	6	sw.	E. A. Markey
Warsaw	Benton	687	29	65.6	− 0.2	87	8†	37	31	42	2.34	−2.89	0.69	0	6	21	5	5	s.	Everett Martin
Section means and	extremes	.....	..	64.7	− 0.3	94	8†	37	31	43	2.71	−2.48	1.78	0	6	18	7	6	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	62.0	− 0.6	86	27	39	31	38	3.42	−1.56	0.79	0	11	18	8	5	s.	A. S. Cumming
Chillicothe	Livingston	779	20	62.2	− 4.9	88	21†	37	30	41	6.13	+1.42	1.89	0	12	16	8	7	s.	Wm. J. Olenhouse
Conception	Nodaway	980	41	62.9	+ 0.9	87	28	39	17†	38	4.80	+0.03	1.26	0	11	11	12	8	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	62.4[b]	.....	86	27	38	31	39	3.55	−1.90	1.00	0	14	20	1	10	s.	Fred L. Stiff
Grant City	Worth	1,134	26	61.4	− 0.7	86	27	38	18	37	3.29	−1.44	0.70	0	12	11	15	5	sw.	W. P. Spillman
Kansas City	Jackson	963	41	63.9	− 0.9	86	21	41	18	32	4.39	−0.26	1.80	0	9	12	13	6	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	59.8	− 3.3	84	21	37	18	38	4.74	−0.47	1.22	0	10	18	7	6	se.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	5.49	.....	1.53	0	13	..	..	..	....	H. L. Yates
Lexington	Lafayette	688	45	64.0	− 0.4	83	28†	42	18	32	5.31	+0.25	2.15	0	12	17	8	6	s	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	62.4	+ 1.3	89	27	38	17†	38	4.17	−1.58	1.55	0	7	19	0	12	n.	J. R. Brink
Oregon	Holt	1,048	74	64.8	+ 1.6	88	27	40	18	38	4.57	−0.29	1.21	0	11	15	9	7	sw.	Mina Wright
St. Joseph	Buchanan	987	22	63.2	− 0.8	86	21	41	18	36	4.45	+0.34	1.34	0	12	13	10	8	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	27	62.0	− 1.3	88	27	39	17	40	4.63	−0.03	1.61	0	9	9	8	14	se.	Albert Volker
Trenton	Grundy	822	34	63.6	− 0.2	87	21	39	30	38	5.50	+0.16	1.31	0	11	17	7	7	s.	W. H. Estes
Section means and	extremes	.....	..	62.7	− 1.0	89	27	37	18†	41	4.64	−0.31	2.15	0	11	15	9	7	s.	
State means and	extremes	.....	..	64.7	+ 0.3	95	21	33	30	48	3.43	−1.24	2.88	0	9	16	8	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for May, 1930

Stations	Drainage-basins	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville‖	Missouri	.01	1.09				.01	.58	.01			.50						.12	.33	.03				.34						.07			3.09
Brunswick‖	Grand	.03	.70		.03			.55				.97	.06	.04				.07	.07	T.				.33									3.16
Clifton Hill	Charitou	.16	.40				.08	.03			.57			.04				.34	.04	T.			.08	.12					.10	.13			1.75
Columbia***	Missouri	1.20	.01		T.	T.	.08	.08			.70	T.						.40	.80					.60					T.	.01			2.88
Downing	Mississippi	.55	.15		.05		.50	.08	.09			.30						.03	.35	.02				.36									3.53
Fayette‖	Missouri		1.25					.65				.45						.03	.36	.03				.12						.56			3.11
Fulton‖	....do	T.	.70		.02			.18	.01			.02						.20	.36					.12									2.20
Gorin	Mississippi	.65			.06		.15				.23				T.	T.		.14	.47					.52					.01				2.22
Hannibal***	....do	.42	.24		.32		.01	.15			.38							.06	.03	.15				.31									2.08
Hermann‖	Missouri		.70			T.		.36	.01		.05	.10						.03	.65	.10				.30	.03					.36			2.69
Jefferson City‖	....do		.04	.02			.03	.30	.05			.17						.15	.43	.08				.17						.43			1.87
Kirksville	Mississippi						.52	.03		.58	.43							.22	.50	.07				.60					.06				3.01
Louisiana	....do	.55			T.			.40			.25							.20	.22					.65									2.27
Lucerne‖	Grand	.66	.14				.33		.15		.18	.64						.20					.75					.02				3.82
Macon ‖	Chariton	.08	.62					.20				.25						.95						.47						.04			2.11
Mexico ‖	Mississippi		.32		.08		.02	.28	.07										.30	.15				.23						.03			1.48
Milan‖	Grand	.40	.75					.25	.85		.45						.15		.40	.05				.80									5.15
Monroe City	Mississippi																	.20	1.50														....
Pacific‖	Meramec		.43		.04	.05		.15			.08	.02						.20	.45	.18				.06	.05					.16			1.89
St. Charles	Missouri		.55		T.	.19		.15			T.							.40	T.	.11				.14						.15			1.69
St. Louis (1)***	Mississippi	.18	.06		T.	.10	T.	T.			.04			T.		T.		.97	.03	T.				.10						.21			1.69
St. Louis (2)*	....do	.15	.09		T.	.03	.07				.04			.01		T		.39	.02	.01				.06						.14			1.01
Shelbina ‖‖	....do		1.38		.02			.07				.37							.09	.01				.21						.02			2.17
Steffenville	....do	.20	.70				.10	T.			.56			T.				.15	.10					.30					T.				2.11
Unionl‖	Meramec		.38		.01	.01		.33			.12	.06						.06	.66	.62				.11	.05					.40			2.81
Unionville	Chariton	.55	.10		.20	T.	.65	.10	1.30		.45							.10	.75	T				.70									4.90
Valley Park	Meramec		.32		T.	T.	T.	T.			T.							.25	.70	.25	T.			T.						.17			1.69
Warrenton	Mississippi		.52		T.	T.	T.	.32			.05							.52	.10	.14				.18						.08			1.91
Keokuk, Ia.***	....do	.26	.09		.51		T.	.12		.01	.39	T.		.01	T.	T.		.19	.12	.01			.02	.44					.01				2.18
Southeast Lowlands																																	
Campbell‖	St. Francis						.10	.17		.17	1.50	1.45		.30	.10			.03	.63	.31				.28	.04							.07	5.08
Cape Girardeau‖	Mississippi	.02		.18		.04	.09	.06			.82	.56		.19	.19		.01	.01	.10	.11				.15	.01								2.61
Caruthersville ‖	....do	.01		.22			.28		.28	1.02	.58			.53		.15	.08	1.20	.52				.61										5.48
Dexter‖	St. Francis					T.	.11	.10		.02	1.02	1.95		.11	.02				.20	.30				.05	.02								3.99
Doniphan	Black									.24	2.05	.15						.29	.28					1.19									4.20
Jackson	Mississippi					.06	.05	.10		.04	.37	.61		.50		.04		.06	.04					.22						.07			2.16
Marble Hill	Mississippi				T.			.33		.04	.91	.95		.16			T.	T.	.63					1.70						.12			2.44
Morehouse	....do					.02		.06	.32	.01	.83	.35		.15	.32				.51	.55	.05			T.						.01			3.08
New Madrid‖	....do							.13	.12		1.08	.65		.08					.30	.23				.23	.03								3.42
Poplar Bluff‖	Black			.38	.20													.03	.65					.03						T.			2.48
Sikeston‖	Mississippi					.03	.14	.16			.84	.62	.17	.05										.03						.02			2.72
Cairo, Ill.***	.. do		.03	T.	T.	.05	T.	.10	T.	.01	.98			.54			.13	T.	.60	T.													2.49
Ozark Plateau																																	
Arcadia‖	St. Francis				T.						.38	.18						T.	.53	.04				T.									1.13
Aurora	Neosho				.37	.12	.20	.69									T.	.58						1.13									3.09
Birchtree (near)	Black				.25	.07		.31			2.88			1.23			.11	1.32						.46									6.63
Caplinger Mills	Osage							.59			.68							2.50						.83									4.09
Dean	Neosho		T.	.80	.42	.12	.18	.55		.15	.38			.82		.15		2.15						.55									6.27
Eldon‖	Missouri							.88	.01			.26						.24	.47	.01				.24						.05			2.16
Farmington	St. Francis		.01			T.	T.					.25	.04					.35	.04					.23						.05			0.97
Fredericktown‖	... do																																....
Galena‖	White						.05		.18		.08	.55			.35			.71	.38					.78									3.11
Goodland	Black				.48			.50				.65						.35	.05	.02				.34									2.39
Greenville	St. Francis										1.30				.40																		....
Hailey	White			.20	.40	.15		.75		.15	2.05			.43		.04		2.04	.42					.75									7.38
Koshkonong	Black		.20	.40	.37	.10	.20	.30		.20	2.00							.93	.07					.42									5.19
Lebanon ‖	Osage	.42			.15	T.		.61			.29	.75						.02	.90	.05				.20									3.24
Leeper‖	Black					T.	T.	T.			.80	.25		.15			.15	.10	.38					T.									1.98
Lockwood	Osage				.15	T.	T.	T.										.66	1.04					.82									4.64
Mountain Grove‖	White				T.	.10	.10	.55		.42	.95							.52	1.16	.45				.94	.07								7.32
Neosho	Neosho				T.	.45	.05	T.	.66			.52	2.15		.35			.60	.10					1.69									6.46
Owensville ‖	Gasconade				T.	.71		.04	.82		.22	1.85			.33		.10	.08	.70	.90				.15	.10					.42			3.02
Ozark Beach‖	White								.47			.10	.10					.46	.03					.72									5.44
Rolla ‖	Meramec	.03				T.		.49				.21	.15					.14	.45	.10				.37	.08					.05	.02		2.09
Salem (near)	....do				.04	.03	T.	.46			.78	.12		T.				.29	.02	.18				.76									2.68
Seligman	Neosho		.02		1.35	.19		.82		.24	1.98			.24		T.		.83						.70									6.87
Seymour (near)	White			T.	.18		T.	.65			1.65			.27			T.	.69	T.	.93				.76						T.			5.13
Springfield***	....do			T.	.42	.10	.58	.04	T.	.31	.96			.11		.01	.08	.73	T.	T.			.64	.42						T.			4.40
Steelville‖	Meramec				.05	T.		.37		.03	.15	.25						.05	.53	.12				.42	.05					.06			2.08
Stover ‖	Missouri							.85				.40						.12	.32	T.				.21		.18							2.08
Tuscumbia ‖	Osage	.13			T.	T.	T.	.48			T.	.30						.13	.61	T.				.24						.24			2.13
Williamsville‖	Black			.13	.19	.02	.04	.03			.70	.21		.03	.05		.16	.32	.31	.06			.26	.03								2.54
Willow Sprgs. ‖ (near)	White				.17	.19		.92			.95	1.00		1.08			.02	.37	.99	.03				.62									6.34
Southwest Plain																																	
Appleton City	Osage					T.		.25	.24			.65					T		.65					.70									2.49
Clinton	Osage							.28	.29			.52							.40					.76									2.25
Concordia‖	Missouri								.25										.20	.20				.80									1.45
Harrisonville‖	Osage							.05	.18	.17			1.78		.09				.07	.05	.01			.62									3.02
Joplin‖	Neosho					.15		1.38			.05	.82			.45		.12	.02	.72					.65	.30								4.66
Lamar ‖	....do		.52	T.			.17		.92		T.	.07	.63		.11				.28	.90					.72									4.32
Lamonte	Missouri							.40	.15			.45							.60	T.					.65									2.25
Marshall	... do		.92		T.	.48	.48	.10				.52							.17	.09					.48					T.				3.24
Nevada	Osage								.45						T.				.71						.47									1.63
Osceola‖	....do								.85				.72						.23	.45					.67									2.92
Warrensburg	Missouri							.18	.10			.54			.05		T.		.42	.07					.97						.51			2.84
Warsaw	Osage								.69				.65						.05	.48					.46						.01			2.34
Waverly ‖	Missouri			1.36		T.				.10		.86			.10				T.	T.	T.				.86									3.28
Northwest Plateau																																	
Bethany	Grand		.30			.30		.79	.20	.03		.33	T.							.47	.03			.18	.47					.32			3.42
Chillicothe ‖	....do		.36	.51		.02	.02		1.89	.28			1.23						.03	.69	.04			1.03	.03								6.13
Conception	Missouri		.14	.62		.10		1.26	.14	T.		.32	T.						.15	.85				.12	.99					.11			4.80
Edgerton	....do		1.00	.08				.58	.20	.35	.02	.57		.02	T.			.01	.26	.20	.01	T.		.03	.22								3.55
Gallatin ‖	Grand		1.15	.65					.64	.18			.67						.03	1.07					.62	T.				T.				5.01
Grant City	... do		.16			.06	T.	.70	.18	.21		.62	.06						.08	.58	.04			.10	.50									3.29
Kansas City***	Missouri		1.80		T.	T.	T.	.51	.33			1.03	.01	T.			T.	T.	.33	.01	.01	T		.36									4.39
Kidder ‖	Grand		.12	1.22		.20			.70	.24			.87						.02	1.10	.02				.25									4.74
King City	Missouri		.47	1.53		.05		.83	.16	.18		.48		.05					.13	.53	.02			.41	.65									5.49
Lexington	....do			2.15		.05	.06		.72	.10			1.20		.09				.12	.15	.05				.52						.10			5.31
Maryville ‖	....do		.15	T.		T.		.15	1.35	.10	T.		.17							.70	T.			1.55									4.17
Oregon	....do		.40					.81	1.21			.20	.20						.37	.78	.01			.47	.08					.04			4.57
St. Joseph***	....do		.47		T.	.02	T.	1.15	.20	.24	.01	.46	.08	T.	T.		T.		.68	.02	T.	T.		1.11	.01								4.45
Tarkio	....do		.17					1.61	.81	.04		.35	.37						.36	.54				.38						T.			4.63
Trenton	Grand		1.31	.19		.24		.76	.03	.24		.77	T.						.26	.93	.05			.72									5.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for May, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	85	79	84	86	89	80	74	89	86	68	72	76	72	63	70	72	52	54	62	82	89	90	72	82	82	84	89	77	72	73	79	76.9
	Minimum	62	59	55	60	72	67	58	54	60	67	61	51	52	49	49	48	45	42	47	43	48	64	50	46	51	53	55	63	50	43	46	53.9
Columbia	Maximum	84	76	79	83	85	76	72	87	83	79	76	76	71	57	63	69	55	57	58	76	88	85	68	74	78	79	84	75	67	66	76	74.3
	Minimum	58	59	56	65	68	60	57	57	66	64	58	52	53	49	51	48	44	46	50	44	59	61	50	45	49	53	55	55	52	45	44	54.0
Fayette	Maximum	83	79	80	83	85	79	72	86	80	82	71	76	73	60	65	70	52	56	60	77	82	86	74	78	79	79	86	77	69	70	77	75.0
	Minimum	53	57	49	55	64	66	57	53	60	66	60	50	55	49	50	45	46	43	44	41	43	57	51	44	44	45	50	61	52	43	38	51.3
Hannibal	Maximum	84	75	79	85	84	81	74	88	86	80	83	76	72	60	61	66	55	55	59	77	89	86	76	74	80	80	86	72	68	68	76	75.3
	Minimum	60	55	50	63	68	67	57	57	68	64	60	54	53	50	50	43	46	43	49	50	60	68	50	46	51	56	56	52	48	44	40	54.1
Jefferson City§§	Maximum	86	80	82	85	85	79	76	87	82	81	81	78	76	63	66	74	53	62	60	76	86	85	70	77	80	80	84	81	70	70	77	76.5
	Minimum	61	61	52	62	66	68	55	57	63	66	60	51	55	45	48	45	48	45	47	50	49	73	78	86	85	70	77	80	80	84	81	70
Kirksville	Maximum	78	77	77	80	83	76	68	84	83	78	67	72	65	56	60	67	66	49	58	78	86	85	79	73	78	77	85	75	69	68	77	73.8
	Minimum	60	56	53	60	66	63	57	52	63	63	59	49	55	47	49	43	40	38	47	44	59	64	49	43	52	52	56	52	43	41	46	52.3
Louisiana	Maximum	85	85	80	87	85	80	73	85	87	84	85	80	80	63	64	70	63	61	60	77	95	93	82	75	90	89	87	85	80	79	85	79.8
	Minimum	60	60	44	66	63	60	60	55	63	68	67	65	55	50	50	40	43	43	50	48	53	68	50	55	60	52	50	62	60	33	46	54.8
Macon§§	Maximum	82	76	81	84	87	77	70	88	87	83	73	75	70	60	64	69	53	55	60	79	88	88	69	75	80	80	86	73	70	70	78	75.2
	Minimum	59	55	52	58	65	65	57	53	60	67	60	49	54	48	49	43	43	39	49	44	47	61	48	44	49	54	55	60	45	40	44	52.1
Mexico§§	Maximum	85	77	82	87	87	78	73	89	87	82	82	79	76	62	66	73	51	57	59	79	90	88	69	76	81	82	88	74	69	68	78	76.6
	Minimum	60	60	50	60	62	66	56	55	60	66	60	51	56	48	50	45	45	43	43	44	51	62	49	44	50	52	55	61	50	41	40	52.7
St. Louis(1)	Maximum	87	76	80	86	83	82	77	88	80	79	83	79	79	64	65	74	59	68	62	76	84	86	73	73	79	80	84	75	68	66	74	76.4
	Minimum	62	61	61	63	69	68	68	61	66	66	64	58	57	52	54	54	49	53	56	54	58	62	54	54	57	59	60	58	47	46	53	58.2
Unionville	Maximum	78	80	80	82	84	77	66	83	87	80	70	72	70	56	62	70	62	50	60	78	87	84	66	72	76	78	86	80	70	70	75	73.9
	Minimum	60	52	50	60	65	60	50	60	64	54	58	47	52	45	46	44	43	38	46	42	60	62	42	42	50	47	55	55	40	36	42	50.2
Warrenton	Maximum	86	84	81	85	83	81	79	89	84	82	83	80	78	72	64	72	70	57	59	77	86	85	80	76	80	81	85	81	72	67	78	78.0
	Minimum	59	58	54	60	65	66	58	58	65	64	61	53	58	49	52	48	46	49	52	46	57	61	49	48	51	54	55	63	49	42	46	54.7
Southeast Lowlands																																	
Campbell	Maximum	90	87	73	89	87	86	84	87	81	82	82	81	76	78	71	77	81	72	79	77	86	90	79	75	80	83	85	89	76	70	80	81.1
	Minimum	56	63	60	57	62	60	59	52	62	62	61	50	58	49	44	47	59	55	61	48	51	53	60	44	43	46	48	55	57	46	44	53.9
Caruthersville	Maximum	87	85	78	87	86	86	85	86	78	77	84	82	73	77	71	77	76	69	77	76	84	87	80	76	79	80	87	88	80	74	79	80.4
	Minimum	62	68	62	63	68	69	62	65	66	64	65	60	63	65	50	60	65	64	64	54	68	63	58	50	55	56	58	62	62	52	52	61.1
Doniphan	Maximum	85	87	88	82	89	86	89	88	89	80	84	82	76	79	71	73	70	74	72	76	84	88	79	71	72	79	78	89	78	71	75	80.1
	Minimum	50	52	54	50	49	51	52	50	53	63	63	53	59	49	45	59	59	62	61	45	50	59	53	51	43	45	46	47	58	47	59	52.8
Jackson	Maximum	86	86	81	82	83	85	79	88	85	81	79	79	76	72	71	75	74	73	72	74	81	86	85	73	77	81	81	85	84	68	75	79.3
	Minimum	57	60	53	59	61	63	61	53	58	60	61	50	53	45	42	52	53	53	61	43	47	57	51	41	39	43	45	54	49	41	39	51.8
Poplar Bluff	Maximum	87	86	78	84	82	81	81	85	79	79	82	79	75	76	67	76	67	72	72	77	83	85	71	78	80	80	84	87	70	72	77	78.5
	Minimum	55	66	59	61	65	63	60	54	64	63	63	52	59	49	45	56	60	59	62	48	51	53	58	44	44	47	48	53	58	45	43	55.1
Sikeston	Maximum	89	90	84	87	85	88	83	87	88	81	81	82	79	76	75	73	73	72	76	74	83	88	80	75	75	83	87	90	85	70	77	81.2
	Minimum	58	64	58	61	63	64	62	58	66	63	62	56	61	52	47	57	61	61	63	49	55	58	56	45	47	55	53	59	57	45	45	56.8
Cairo, Ill	Maximum	86	86	81	83	83	84	81	83	77	78	81	78	72	70	68	70	69	70	72	73	80	83	74	72	75	79	84	86	66	66	74	76.9
	Minimum	63	68	62	64	67	68	65	65	66	64	66	61	59	56	53	58	62	64	59	55	59	63	54	52	54	54	60	63	53	52	51	60.0
Ozark Plateau																																	
Arcadia§§	Maximum	85	83	77	83	82	80	78	85	76	76	80	79	77	69	65	73	63	71	61	74	80	82	66	72	74	77	81	82	66	65	73	75.3
	Minimum	61	63	52	58	52	61	59	50	61	60	61	51	51	45	49	52	52	50	58	44	50	52	59	38	38	41	43	52	50	41	35	51.3
Aurora	Maximum	82	76	71	78	75	76	78	84	82	78	72	76	71	68	66	70	67	76	70	70	80	84	76	72	74	77	82	84	74	64	76	75.1
	Minimum	61	64	62	56	63	63	54	57	63	56	58	48	54	49	46	54	52	55	48	45	56	63	48	46	48	48	53	58	57	45	44	54.0
Birchtree	Maximum	85	85	79	81	80	79	79	84	78	78	77	77	79	73	73	73	67	72	68	76	79	81	78	74	75	79	80	85	72	67	74	77.0
	Minimum	60	63	60	63	63	63	59	61	63	62	57	47	47	47	52	54	52	57	56	43	50	52	54	43	43	47	48	52	56	43	42	53.6
Eldon§§	Maximum	84	81	80	85	86	67	76	87	81	79	76	77	75	66	57	75	54	64	60	78	86	86	69	77	78	78	85	85	69	69	77	75.7
	Minimum	60	63	52	56	65	67	57	58	59	63	61	49	50	47	46	48	50	48	50	42	45	60	51	50	50	52	51	54	52	41	39	52.8
Farmington	Maximum	87	84	82	87	86	88	81	88	81	78	84	79	80	69	71	78	68	51	68	81	83	86	77	74	81	81	85	85	67	66	74	78.5
	Minimum	62	59	61	59	64	64	61	58	59	62	63	51	54	46	48	51	51	51	52	44	62	55	52	44	39	44	45	52	48	43	40	53.0
Koshkonong	Maximum	86	80	79	82	79	72	79	84	78	75	78	66	77	..	..	77	69	71	70	75	82	82	76	74	73	78	81	81	75	67	76	76.6
	Minimum	60	65	60	64	65	62	57	58	62	61	61	53	60	..	..	41	57	67	56	48	57	60	55	50	50	51	55	59	59	48	48	56.9
Lebanon§§	Maximum	85	82	78	84	83	79	76	86	79	77	77	78	75	68	60	74	67	78	57	79	83	83	68	75	77	77	81	85	78	68	77	76.6
	Minimum	56	59	54	55	65	64	53	56	56	60	57	45	45	44	39	40	51	42	42	39	41	58	49	40	45	47	49	50	53	37	35	49.2
Mountain Grove§§	Maximum	85	83	74	80	78	77	77	83	75	71	75	75	77	70	65	74	65	73	59	75	79	79	68	75	72	72	79	82	69	69	70	74.5
	Minimum	58	61	59	61	63	62	54	55	59	60	59	48	53	47	42	50	54	52	52	43	50	57	55	43	50	50	52	55	54	41	41	52.9
Neosho	Maximum	83	79	77	81	81	78	79	85	81	78	72	79	78	75	69	72	76	75	74	80	84	81	80	75	76	78	80	84	80	69	76	77.9
	Minimum	58	60	51	60	62	64	52	58	61	58	55	43	54	46	44	55	55	59	49	43	56	63	49	40	44	44	47	51	57	43	37	52.2
Rolla	Maximum	87	84	77	85	83	82	76	87	82	77	79	78	76	71	63	71	70	75	69	75	84	84	80	91	78	77	82	82	75	64	74	78.0
	Minimum	63	65	57	64	65	66	57	57	64	62	61	50	58	47	49	52	50	52	50	44	59	63	53	46	47	47	53	60	50	46	41	54.8
Springfield	Maximum	82	76	71	77	77	73	76	83	75	69	69	76	72	67	61	69	66	76	56	74	82	82	65	71	72	72	78	81	69	64	71	72.6
	Minimum	62	64	59	63	63	55	55	60	64	59	56	51	56	50	47	53	52	55	48	46	59	60	49	51	51	54	55	60	55	46	46	55.0
Southwest Plain																																	
Appleton City	Maximum	80	80	78	81	82	73	77	86	81	77	66	75	75	67	66	70	61	57	56	79	84	84	75	76	75	76	83	85	70	68	76	74.9
	Minimum	61	62	52	63	63	64	54	58	61	61	54	47	55	46	43	51	47	46	47	43	56	65	48	48	48	50	52	56	53	43	45	53.0
Clinton	Maximum	87	85	87	88	87	83	82	94	89	90	..	..	.	70	65	80	61	65	60	85	90	90	80	81	80	85	91	94	78	75	80	°81.6
	Minimum	62	62	60	65	64	65	56	53	61	62	..	..	..	46	44	50	48	48	49	42	58	65	49	45	48	49	52	58	54	43	41	°53.5
Harrisonville§§	Maximum	81	81	79	83	82	72	76	87	83	73	63	76	73	65	65	69	51	52	56	81	85	81	72	78	77	79	84	74	69	70	77	74.1
	Minimum	59	59	54	58	64	65	55	55	58	62	53	46	52	43	42	46	45	43	43	43	50	64	45	46	50	52	53	59	52	43	48	51.8
Lamar§§	Maximum	83	77	77	80	80	76	76	85	79	72	67	76	73	70	64	71	67	71	61	79	83	83	68	76	75	76	81	85	69	68	75	74.9
	Minimum	58	62	56	61	64	67	56	58	63	61	55	48	51	49	46	48	53	52	50	47	49	63	50	46	49	51	53	56	56	45	43	53.7
Lamonte	Maximum	83	80	81	83	86	75	75	88	84	79	66	78	74	58	66	70	58	53	56	80	87	87	69	78	79	79	84	80	71	71	79	75.4
	Minimum	63	62	52	65	65	65	56	55	63	63	56	47	54	45	48	50	45	44	48	42	58	59	49	50	50	50	57	60	52	43	44	53.5
Marshall	Maximum	83	81	80	83	84	82	73	88	86	81	78	75	74	65	63	65	66	64	55	79	88	87	82	75	78	79	85	85	71	67	74	76.6
	Minimum	62	59	54	65	65	65	57	55	63	65	57	49	57	46	51	48	43	41	43	45	59	65	47	53	54	55	64	51	42	44	54.5
Nevada	Maximum	81	80	77	81	80	76	71	84	80	70	66	76	73	69	64	70	62	60	60	79	84	83	77	75	77	81	86	72	70	76	74.7
	Minimum	62	52	54	53	62	53	55	60	65	60	55	48	56	49	44	53	50	50	47	45	61	64	49	49	45	51	55	49	45	44	48	52.7
Warrensburg	Maximum	81	80	80	81	82	75	74	86	83	78	65	75	70	65	64	68	60	55	56	79	84	86	78	76	78	78	85	79	79	67	79	75.0
	Minimum	62	62	52	65	64	65	55	54	64	62	55	47	56	42	44	49	45	41	47	42	59	65	47	46	49	51	55	61	51	41	44	53.0
Warsaw	Maximum	84	83	79	82	85	83	77	87	83	79	67	77	78	65	67	75	67	66	59	80	85	87	82	79	78	80	85	87	74	72	79	77.8
	Minimum	62	66	51	66	65	68	57	56	63	65	60	51	55	46	42	49	52	52	48	40	56	66	50	42	44	47	50	57	55	42	37	68.5
Northwest Plateau																																	
Chillicothe§§	Maximum	80	80	82	83	85	74	68	86	87	80	65	74	66	61	64	71	46	51	61	80	88	86	70	79	78	79	88	71	72	71	89	74.7
	Minimum	58	52	49	60	63	62	55	51	62	64	57	47	52	45	46	43	40	39	40	40	47	63	45	40	47	49	55	60	45	37	41	50.1
Grant City	Maximum	76	77	78	81	80	75	65	80	82	77	65	70	65	56	62	68	59	46	56	80	82	78	70	75	74	75	86	79	69	69	74	71.9
	Minimum	60	54	53	63	67	60	51	51	53	64	54	47	49	44	47	44	39	38	45	43	58	51	47	45	52	57	63	51	45	40	45	51.0
Kansas City	Maximum	81	78	79	82	82	72	71	85	84	75	63	72	68	59	62	67	58	49	56	81	86	83	70	77	76	78	85	76	66	66	77	73.0
	Minimum	59	64	61	66	67	59	54	56	64	61	53	50	55	46	49	52	42	41	46	49	65	51	50	53	60	56	62	56	52	46	51	54.8
Kidder§§	Maximum	79	76	77	80	80	72	65	82	82	76	63	71	64	58	62	66	45	47	58	79	84	82	68	75	75	76	82	69	63	62	74	70.7
	Minimum	54	54	51	55	63	64	53	50	52	61	55	45	48	43	44	43	39	37	38	41	46	62	44	44	48	48	53	59	43	38	43	49.0
Lexington§§	Maximum	77	77	77	80	79	78	70	82	78	78	67	72	72	65	63	67	67	51	56	77	81	79	76	75	74	73	83	83	70	68	75	73.2
	Minimum	64	59	54	66	67	67	57	55	64	65	58	50	57	46	49	50	44	42	47	45	56	65	49	48	54	52	58	64	52	43	48	54.7
Maryville	Maximum	79	82	80	80	82	76	65	82	80	77	68	72	70	58	68	70	65	48	55	82	86	80	73	78	76	76	89	78	71	67	76	73.8
	Minimum	58	50	55	62	65	60	50	51	64	64	54	45	45	43	46	44	38	38	44	44	63	52	45	42	48	57	58	54	51	41	46	50.9
Oregon	Maximum	83	81	83	85	84	79	65	85	87	78	66	72	70	62	67	75	68	48	56	85	87	82	74	79	78	79	88	87	76	75	79	76.2
	Minimum	60	54	57	65	67	60	52	53	68	63	52	48	51	43	49	46	41	40	45	47	68	51	47	47	54	55	59	62	50	42	60	53.4
St. Joseph	Maximum	82	78	80	84	82	72	67	83	83	73	64	72	65	60	63	70	52	48	56	83	86	78	70	77	77	78	86	73	70	69	77	72.8
	Minimum	59	57	57	65	68	58	54	54	68	63	54	49	50	45	48	48	42	41	46	47	65	51	50	48	56	56	61	57	50	45	50	53.6
Trenton	Maximum	80	79	78	82	85	76	66	85	85	82	66	73	68	62	64	70	62	56	62	81	87	86	70	79	78	79	86	78	70	69	77	74.9
	Minimum	60	55	52	63	64	63	54	52	63	62	60	59	53	47	50	43	41	40	47	43	59	60	49	43	48	49	56	51	45	39	50	52.3

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 6-13-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., JUNE, 1930 No. 6

GENERAL SUMMARY

There were no outstanding weather features about June in Missouri, except a rather strong tendency to drought in the southeast quarter. Relatively cool and warm spells alternated every three or four days. It was decidedly cool from about the 6th to the 10th, and for two days, 21st, and 22d, day temperatures ranged around the 100° value quite widely. The State mean, 72.4°, is only a little below the normal, but warmer than June, 1929, and 1928.

The month was dry in the southeastern lowlands and the eastern half of the Ozark Plateau and generally below normal over central areas from Benton County to Charitan and thence eastward but the distribution was good. Over the western fourth of the State from south to north and northeast there was, as a rule, ample moisture for needs. The harvesting of small grains had favorable weather. Corn was clean and well cultivated and started off in good shape. Pastures, gardens, and most truck were unsatisfactory as a general rule, and, at the close of the month such crops were showing marked deterioration. The one unsatisfactory feature about the trend to drouthy conditions, is the ground water-table-the subsoil moisture-is low over the eastern half of the State; ponds, creeks, small rivers all are unusually low.

TEMPERATURE

The monthly mean temperature for the State, 67 stations reporting, was 72.4° or 0.8° below the normal. The highest local monthly mean was 79.0°, at Caruthersville; and the lowest local monthly mean was 68.0°, at Seymour. The highest temperature reported was 109°, at Sikeston on the 22d, and the lowest was 36°, at Goodland on the 1st. The greatest daily range was 50°, at Doniphan on the 4th. Day temperatures reached 90° or higher on four to eighteen days, and 100° or higher on two days, the 21st, and 22d, at 22 stations. The southeastern lowlands and eastern Ozarks were the warmest sections.

PRECIPITATION

The average precipitation for the State, 96 stations reporting, was 3.83 inches, or 1.04 inches less than the 60 years' average. The largest local monthly amount was 10.35 inches, at Hannibal; and the least local monthly amount was 0.30 inch, at Marble Hill. The greatest amount that fell in any twenty-four consecutive hours was 5.20 inches, at Hannibal on the 19th, and 20th. All of the southeastern lowlands and most of the Ozark Plateau were drier than normal. All other parts of the State were fairly well watered.

MISCELLANEOUS PHENOMENA

Hail, light.—King City on the 4th, and Warrensburg and St. Joseph on the 25th.

Halos, lunar.—None observed.

Halos, solar.—1st, 4th, 5th, 9th, 10th, 14th, 15th, 19th, and 25th.

Thunderstorms, local.—4th, 14th, 15th, 17th, 19th, 20th, 21st, 24th, and 26th. General, 5th, 23d, 25th, 29th, and 30th.

Wind.—In the vicinity of Downing, Schuyler County, strong wind on the 5th unroofed several homes and barns and blew down some small outbuildings; damage estimated at about $1,500.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	29.94	79	56	336	75	4,546	6.3	25	sw.	29
Hannibal	29.94	73	..	...	..	5,560	7.9	25	se.	25
Kansas City	29.92	71	53	389	87	5,999	8.3	34	sw.	29
St. Joseph	29.91	75	56	331	74	5,299	7.4	32	nw.	25
St. Louis	29.95	65	45	322	72	7,760	10.8	41	sw.	30
Springfield	29.98	73	53	348	79	6,470	9.0	35	nw.	25
Cairo, Ill.	29.97	70	50	...	..	4,565	6.3	39	n.	25
Keokuk, Iowa	29.94	72	52	325	72	4,913	6.8	24	w.	30

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

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COMPARATIVE DATA FOR JUNE

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	72.6	−0.5	103	37	6.20	+1.26	....	0	7	..	..	..
1889	70.7	−2.4	100	38	4.66	−0.28	....	0	6	..	..	..
1890	77.2	+4.1	105	50	2.59	−2.35	....	0	6	..	..	..
1891	73.3	+0.2	103	46	6.94	+2.00	....	0	13	..	..	..
1892	74.5	+1.4	100	38	3.18	−1.76	4.25	0	7	15	9	6
1893	72.6	−0.5	98	42	4.61	−0.31	3.60	0	9	12	12	6
1894	74.5	+1.4	105	30	3.92	−1.02	3.48	0	7	16	11	3
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	0	10	12	11	7
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	0	9	12	11	7
1897	73.6	+0.5	102	38	6.18	+1.24	6.40	0	12	9	14	7
1898	75.3	+2.2	100	42	5.88	+0.94	6.05	0	9	13	12	5
1899	74.3	+1.2	101	42	3.87	−1.07	4.48	0	9	15	10	5
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	0	10	12	12	6
1901	77.9	+4.8	110	40	2.13	−2.81	2.99	0	6	18	10	2
1902	70.9	−2.2	100	37	6.57	+1.63	6.08	0	12	11	10	9
1903	67.3	−4.2	95	36	3.25	−1.69	4.90	0	9	15	9	6
1904	70.5	−2.6	93	45	6.42	+1.58	5.41	0	11	12	12	6
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	0	7	15	10	5
1906	72.7	−0.4	101	40	4.95	+0.01	4.07	0	10	15	9	6
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	0	11	14	10	6
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	0	11	13	10	7
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	0	11	11	13	6
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	0	8	16	7	7
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	0	6	18	8	4
1912	69.5	−3.6	100	42	4.78	−0.16	5.60	0	9	14	8	8
1913	75.4	+2.6	107	33	2.57	−2.22	3.05	0	6	18	8	4
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	0	5	18	7	5
1915	70.8	−2.5	98	38	6.51	+1.87	4.86	0	12	11	10	9
1916	70.0	−3.2	100	42	6.99	+1.17	6.75	0	10	14	9	7
1917	71.0	−2.3	103	35	3.78	−0.59	4.19	0	8	19	7	4
1918	77.2	+3.9	110	48	3.15	−1.36	4.28	0	7	17	8	5
1919	75.0	+1.9	104	44	5.59	+1.11	4.21	0	11	14	10	6
1920	72.7	−0.5	104	41	2.35	−2.16	3.74	0	6	18	7	5
1921	76.6	+3.4	105	44	5.71	+1.15	4.14	0	12	12	10	8
1922	76.5	+3.1	108	43	1.66	−2.89	2.30	0	5	19	8	3
1923	73.5	+0.2	103	45	5.48	+1.02	4.42	0	11	14	9	7
1924	72.5	−1.0	101	38	7.39	+2.72	4.39	0	14	12	12	6
1925	76.5	+3.0	103	46	6.10	+1.43	8.14	0	9	15	10	5
1926	70.9	−2.6	101	37	3.62	−1.05	2.94	0	8	15	9	6
1927	70.3	−3.2	99	41	5.77	+1.10	5.23	0	10	15	7	8
1928	67.7	−5.8	91	40	11.17	+6.50	7.34	0	15	8	11	11
1929	71.3	−1.9	99	39	5.77	+0.90	6.25	0	10	16	8	6
1930	72.4	−0.8	109	36	3.83	−1.04	5.20	0	7	18	8	4
.....	....	.....	..	..	....	.....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	..	..	..	..	..

Climatological Data for June, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	73.2	0.0	103	22	45	8	34	3.69	−1.50	1.02	0	9	19	5	6	se.	O. K. Benecke
Clifton Hill	Randolph	731	31	71.8	− 1.2	100	21†	41	8	41	4.00	−0.34	1.25	0	10	22	4	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	72.0	− 0.8	98	22	45	8	32	3.10	−1.66	0.92	0	9	12	12	6	s.	U. S. Weather Bureau
Downing	Schuyler	876	9	70.8	.....	94	22	44	8	34	6.16	+1.78	2.28	0	9	19	6	5	w.	James Taylor
Fayette	Howard	661	50	71.8[a]	− 1.5	99	22	41	9	40	3.20	−1.34	1.01	0	10	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	72.1	− 1.5	99	22	41	9	38	3.36	−0.84	1.08	0	8	23	4	3	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	6.19	+2.28	3.02	0	7	16	6	8	nw.	J. W. Pulliam
Hannibal	Marion	534	38	72.8	+ 0.3	99	23	43	8	33	10.35	+6.45	5.20	0	7	14	9	7	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	72.4	− 1.6	97	21†	46	8†	34	3.77	−0.25	2.04	0	9	19	6	5	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	71.0	− 1.2	95	22	46	7†	31	5.66	+1.39	2.55	0	8	20	3	7	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	73.0	+ 0.9	105	22	40	7†	42	4.77	+0.82	1.90	0	7	15	12	3	s.	Stark Bros. Nurseries
Macon	Macon	875	31	71.8	− 1.2	98	22	45	7†	36	7.19	+2.78	2.75	0	7	20	8	2	w.	W. C. Brown
Mexico	Audrain	800	41	71.8	− 1.9	103	22	42	8†	40	4.21	−0.57	1.70	0	7	24	0	6	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.. ..	..	..	..	..	..	6.27	.....	2.62	0	8	13[1]	5[1]	3[1]	ne.	J. S. Conway
St. Charles	St. Charles	456	42	73.4	− 0.8	101	22	44	8	33	3.31	−0.65	1.08	0	7	13	10	7	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	75.1	+ 0.1	101	22	52	8	27	2.63	−1.19	1.23	0	8	14	11	5	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	74.4	− 0.5	102	22	51	8	27	2.20	−1.56	1.15	0	9	20	9	1	sc.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	6.40	+1.69	2.71	0	8	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	32	69.4	− 3.8	99	22†	41	8	47	5.60	+1.50	1.50	0	11	14	12	4	s.	Frank Hall
Unionville	Putnam	1,062	37	70.3	− 1.5	93	21†	43	8	35	6.28	+1.60	3.30	0	8	21	3	6	s.	Geo. W. Davis
Warrenton	Warren	816	48	73.7	+ 0.1	101	22	44	8	33	2.37	−1.59	0.92	0	5	7	19	4	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	72.2	− 0.3	97	22	46	8	28	4.06	−0.07	1.32	0	10	10	12	8	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	72.3	− 0.9	103	22	40	7†	47	4.76	+0.42	5.20	0	8	17	8	5	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	75.6	.....	105	22	42	1	44	0.81	.....	0.66	0	3	16	14	0	s.	Jeff. King
Caruthersville	Pemiscot	265	34	79.0	+ 1.2	102	23	54	8†	29	5.12	+1.14	4.02	0	2	9	19	2	s.	Sam Smith
Doniphan	Ripley	344	26	75.8	+ 1.0	105	22	40	4	50	0.40	−3.98	0.25	0	2	19	10	1	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	72.8	− 1.3	101	28†	39	1	41	1.30	−2.99	0.45	0	6	1	11	18	s.	John G. Putz
Marble Hill	Bollinger	470	35	74.8	+ 0.9	103	22†	38	1	46	0.30	−3 87	0.30	0	1	8	21	1	w.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	0.46	−8.42	0.41	0	2	20	8	2	s.	John A. Spence
Poplar Bluff††	Butler	329	26	74.6	− 0.8	104	22	42	1	40	0.94	−4.08	0.57	0	3	22	8	0	s.	J. H. Wolpers
Sikeston	Scott	318	29	77.4	+ 2.9	109	22	48	8†	35	0.82	−3.06	0.82	0	1	18	8	4	s.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	76.1	− 0.2	99	22	54	8	27	1.59	−2.24	1.20	0	7	12	12	6	s.	U. S. Weather Bureau
Section means and	extremes	....	..	75.8	+ 0.5	109	22	38	1	50	1.30	−2.81	4.02	0	3	14	12	4	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	70.1	− 1.9	101	22	38	1†	41	0.68	−3.90	0.38	0	3	27	0	3	w.	Arcadia College
Aurora	Lawrence	1,370	38	71.6	− 2.2	93	22	44	8	32	4.87	−0.11	1.54	0	8	19	9	2	sw	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	73.0	+ 0.3	95	22	42	9	36	1.00	−3.53	0.60	0	3	27	1	2	sw	V. H. Kirkendall
Dean ††	McDonald	1,000	31	71.0	− 2.0	95	22†	42	1	42	5.88	+0.61	1.62	0	7	19	8	3	sw.	H. E. Dean
Eldon	Miller	934	34	70.7[d]	− 2.5	97	21	43	9	38	3.49	−0.82	1.20	0	8	7	15	8	sw.	E. H. Shepherd
Farmington	St. Francois	918	19	74.2	+ 1.6	106	22	40	1	43	1.70	−2.93	0.90	0	7	12	16	2	nw.	Robert Forsyth
Goodland	Iron	1,000	36	69.1	− 3.0	102	22	36	1	48	1.35	−2.75	0.45	0	5	23	7	0	w.	F. M. Adams
Greenville	Wayne	381	7	75.0	.....	106	22	41	9	45	0.90	.....	0.60	0	2	19	9	2	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	4.33	.....	1.12	0	5	26	0	4	w.	A. W. Madison
Koshkonong	Oregon	958	29	75.2	+ 0.9	100	25	49	8	37	1.79	−2.69	1.14	0	4	19	7	4	sw.	R. M. Hitt
Lebanon	Laclede	1,265	43	69.8	− 3.3	96	25	38	1	43	3.57	−1.36	1.03	0	5	22	2	6	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	72.5	− 1.5	94	25	46	8	31	7.46	+2.66	2.68	0	9	21	3	6	sw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	29	71.0	− 0.6	96	25	42	8	36	1.95	−2.61	1.02	0	5	18	8	4	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	71.6	− 2.3	93	22†	40	8	35	6.65	+1.22	3.11	0	9	24	3	3	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	72.6	− 0.2	97	23	45	1†	35	1.74	−2.39	0.63	0	6	8	7	15	s.	F. H. Lane
Salem (near)	Dent	1,173	26	71.1	− 1.7	99	25	39	9	39	1.65	−2.65	0.85	0	6	22	2	6	sw.	A. C. Leech
Seligman	Barry	1,542	28	71.0[b]	− 1.5	91	22	43	8	35	3.91	+0.38	1.03	0	6	25	2	3	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	68.0	− 4.0	91	21	39	9	35	2.87	−1.76	1.68	0	6	21	6	3	s.	Ira H. Hailey
Springfield	Greene	1,324	42	71.4	− 1.1	92	25	50	8	25	4.31	−0.87	1.90	0	5	22	5	3	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	71.6	− 1.5	106	22	36	1	48	3.16	−1.35	3.11	0	6	20	6	4	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	71.8	− 3.0	95	21	47	8	30	6.44	+1.45	2.02	0	10	11	17	2	se.	W. G. Bigelow
Clinton	Henry	765	37	74.8	+ 1.4	100	22	47	8†	37	4.60	−0.13	1.40	0	8	20	7	3	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	71.8	− 1.6	99	21	47	8	32	4.10	−0.36	1.65	0	10	9	9	12	s.	John H. Patterson
Lamar	Barton	980	43	71.8	− 2.6	95	25	45	1	34	7.16	+2.20	2.50	0	10	22	3	5	sw.	Jesse A. Mann
Lamonte	Pettis	867	30	73.0	− 1.3	99	21†	46	8†	34	4.22	−0.27	1.18	0	9	25	3	2	s.	J. E. Wheeler
Marshall	Saline	779	42	73.3	− 0.6	99	22†	46	8	35	3.63	−0.69	0.85	0	10	19	9	2	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	72.5	− 1.1	92	21†	46	8	29	5.44	+0.33	2.17	0	7	16	8	6	sw.	George A. Knapp
Warrensburg	Johnson	878	43	72.7	− 1.5	100	21	46	8	31	4.12	−0.64	0.99	0	8	24	3	3	sw.	E. A. Markey
Warsaw	Benton	687	29	73.5	− 0.2	96	21†	42	9	37	4.08	−1.09	1.85	0	7	22	5	3	s.	Everett Martin
Section means and	extremes	.....	..	72.8	− 1.2	100	21†	42	9	37	4.87	+0.09	2.50	0	9	19	7	4	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	70.3	− 2.1	96	22	43	8	32	5.88	+1.40	1.44	0	7	25	2	3	sw.	A. S. Cumming
Chillicothe	Livingston	779	20	71.1	− 3.1	97	22	41	8	39	6.37	+1.30	2.77	0	8	21	7	2	sw.	Wm. J Olenhouse
Conception	Nodaway	980	41	71.5	− 0.1	97	22	46	8	33	4.75	+0.20	2.23	0	7	13	12	5	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	71.3[b]	.....	93	21†	43	9	32	3.93	−1.18	1.47	0	9	24	1	5	s.	Fred L. Stiff
Grant City	Worth	1,134	26	70.1	− 1.2	94	21†	46	7	27	6.16	+1.61	2.22	0	7	14	13	3	sw.	W. P. Spillman
Kansas City	Jackson	963	41	73.4	− 0.2	97	21	52	8	25	3.78	−1.21	1.83	0	9	19	7	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	68.9	− 3.5	93	21†	43	8	35	3.82	−0.54	1.58	0	8	18	7	5	se.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	4.66	.....	2.60	0	7	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	72.6	− 0.2	95	21	48	8	26	5.13	+0.36	1.45	0	10	20	8	2	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	70.5	+ 0.9	97	23	40	7	37	2.52	−2.11	1.59	0	5	25	0	5	n.	J. R. Brink
Oregon	Holt	1,048	74	72.6	+ 0.3	98	21	47	8	29	7.90	+3.17	3.06	0	9	21	6	3	sw.	Mina Wright
St. Joseph	Buchanan	967	22	72.0	− 1.6	97	22	47	8	25	5.32	+0.23	2.24	0	10	17	8	5	se.	U. S. Weather Bureau
Tarkio	Atchison	916	27	70.6	− 2.1	97	21	45	7†	34	5.72	+0.91	2.00	0	6	17	8	5	se.	Albert Volker
Trenton	Grundy	822	34	71.8	− 0.8	98	22	45	8	34	5.59	+1.29	1.45	0	10	22	4	4	s.	W. H. Estes
Section means and	extremes	.....	..	71.3	− 1.1	98	21†	40	7	39	5.11	+0.42	3.06	0	8	20	6	4	s.	
State means and	extremes	.....	..	72.4	− 0.8	109	22	36	1	50	3.83	−1.04	5.20	0	7	18	8	4	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for June, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Total
Northeast Plain																																	
Boonville‡‡	Missouri					.48	.19					.76	.67		T.	.40	.02			.10	.03				.02		.34				.35		3.86
Brunswick‡‡	Grand					.75	.06					.04	.15			.95					.20						.47			.05	1.02		8.69
Clifton Hill	Chariton					.36	.03					.10	.04			.85				.01	.14				1.20					.02	1.25		4.00
Columbia***	Missouri					.66		T				.92	.01			.39				.07	.11			T		.59				.01	.34		3.10
Downing	Mississippi					.30						.16	.12		1.15	2.28				.48	.43					.66					.58		6.16
Fayette‡‡	Missouri				.18	.19						.37	.14			.82	.05				.10				.03		1.01				.31		3.20
Fulton‡‡	do						.14		T.			.63	.18			.25	.03			T.	.03						1.08				1.02		3.36
Gorin	Mississippi					.70						.24			.49	2.53										1.45				.01	.77		6.19
Hannibal***	do					.05				T.		.18	T.			.86				4.99	.21					2.58					1.48		10.35
Hermann‡‡	Missouri						T					.35	1.02			.05	.06				T.	.01					.33				.02		1.84
Jefferson City‡‡	do						.04		.05			.83				.20	.17		.02		.30						2.04				.12		3.77
Kirksville	Mississippi				T.	.38						.16			.05	2.55				.27	.12					.80					1.33		5.66
Louisiana	do											.20	.30			.22				.15						1.90	.80				1.20		4.77
Lucerne‡‡	Grand					1.35						T.			.55	1.56				.43						.15	.34				.80		5.18
Macon ‡‡	Chariton					T.	.30						.30			1.19					.85				.05		1.75				2.75		7.19
Mexico ‡‡	Mississippi						.02					.27	.25			.37					.20						1.70			1.40			4.21
Milan‡‡	Grand					.61	.12								.15	1.25										.40	.32				2.10		4.95
Monroe City	Mississippi				T.	T.					.02	.02				.71	.13			.38						1.57	.82				2.62		6.27
Pacific‡‡	Meramec								.05			.60	.69				.03				.12						1.10				.17		2.76
St. Charles	Missouri					T.		T.		.05		.75				T.		.40		.22	.04				1.08						.77		3.31
St. Louis (1)***	Mississippi					T.	T.	.09				1.23				T.		T.		.06	.03			T.		.63	.03			.16	.40		2.68
St. Louis (2)*	do					.02		.07				1.15				T.		T.		.06	.07					.43	.04			.08	.28		2.20
Shelbina ‡‡	do					.01	.12						.41	.01		.87		T.			.51						1.76				2.71		6.40
Steffenville	do					.40	.75					.30		T.	.80			.10		.30	.30				.15	1.50				.15	.85		5.60
Union‡‡	Meramec											.62	.70				.09				.05						1.96				.26		3.68
Unionville	Chariton				T.	1.40						.05	.03		.80	2.50		T.		.50						.45					.55		6.28
Valley Park	Meramec						.10					.50	1.09								.08						.76				.17		2.70
Warrenton	Mississippi					T.		T.				.92	.30							.08	T.					.43	T.			T	.64		2.37
Keokuk, Ia.***	do					.27	.01					.08	.15	T.	.08	.64		T.		.31	T.					1.32				.01	1.19		4.06
Southeast Lowlands																																	
Campbell‡‡	St. Francis						.11										.66														.04		0.81
Cape Girardeau‡‡	Mississippi						.01										.75										.30				.09		1.15
Caruthersville ‡‡	do															1.10															4.02		5.12
Dexter‡‡	St. Francis						.28						T.				.30														.03		0.61
Doniphan	Black					.15																									.25		0.40
Jackson	Mississippi															.15	.45					.08				.10	.31				.21		1.30
Marble Hill	Mississippi					.30																											0.30
Morehouse	do																.41														.05		0.46
New Madrid‡‡	do						.01										.65	.15															0.81
Poplar Bluff‡‡	Black						.57		T.								.27														.10		0.94
Sikeston‡‡	Mississippi																.82													T.			0.82
Cairo, Ill.***	do					.26						T.	T.			.52	.68	.02			T.	.02			T.	.06	T.			T.	.03		1.59
Ozark Plateau																																	
Arcadia ‡‡	St. Francis						T.									T.	.06				T.					T.	.38				.24		0.68
Aurora	Neosho					1.15	.09				.62	1.04			.09	1.54									.12		.12				.10		4.87
Birchtree (near)	Black											.60	.08			.32																	1.00
Caplinger Mills	Osage					1 03					.42	2.14	.22		.75	2.67									.10						.05		7.38
Dean	Neosho					1.05	T.				1.20	.55	.68			1.62									.73		.05						5.88
Eldon‡‡	Missouri						.39					1.20	.28			.33	.34								.65		.75				.15		3.49
Farmington	St. Francis					.02	.06					.37	.16			.10		T.									.09	.90						1.70
Fredericktown‡‡	do																																
Galena‡‡	White					.05	.15				.25	1.25	.05			.10	.92								.35								3.12
Goodland	Black					.23	.11					.45	.41												.15									1.35
Greenville	St. Francis					.60																									.30		0.90
Hailey	White					.91					1.04	.75				1.12									.51								4.33
Koshkonong	Black					.27						.32	1.14			.06																	1.79
Lebanon ‡‡	Osage						.95					1.03	.85			T.	.70								T.	.04					T.		3.57
Leeper‡‡	Black											T.	.25				.10														1.11		1.46
Lockwood	Osage					.78	.32				.50	1.90	.16			2.68									.21		.66			T.	.25		7.46
Mountain Grove‡‡	White						.11						.40	1.02				.39							T.		.03				T.		1.95
Neosho	Neosho					1.00	.08				1.12	.45	.19			3.11									.46		.08		T.		.16		6.65
Owensville ‡‡	Gasconade											.40	.72								.12						1.40						2.64
Ozark Beach‡‡	White						.58					1.42	.92				.41								.34								3.67
Rolla ‡‡	Meramec						.18					.53	.63				.02								.01		.37						1.74
Salem (near)	do					T.	.26					.85	.30			.06				.02							.16				T.		1.65
Seligman	Neosho					1.03					.80	.63				.63									.80		.02						3.91
Seymour (near)	White					.23	.19				.20	1.68				.49											.08						2.87
Springfield***	do					.78					.54	.82				1.90				T.				T.	T.	.27			T.	T.			4.31
Steelville‡‡	Meramec						.19		.03			.35	.51				T.										.23				.08		1.39
Stover‡‡	Missouri					.12	.32					1.22	.20			.52				.20					.05		.62						3.25
Tuscumbia ‡‡	Osage						.40					1.37	.40			.06	.12				.08						.58				.07		3.08
Williamsville‡‡	Black						.29						.05				.32														.35		1.01
Willow Sprgs. ‡‡ (near)	White						.16					.10	1.01				.09																1.36
Southwest Plain																																	
Appleton City	Osage					1.02					.10	2.02	.01			1.92				.01					.23		1.03			.01	.09		6.44
Clinton	Osage					.75						1.40	.15			1.30				.08				.34		.50					.08		4.60
Concordia‡‡	Missouri					.85	.18					.50	.10			.90									1.24	.39					.33		4.49
Harrisonville‡‡	Osage					1.65	.02					.30	.01			1.20				.01	.02				.36		.37				.16		4.10
Joplin‡‡	Neosho					.85				.23	2.45	.20	.12			1.98								.84	.35	.47					.68		8.17
Lamar‡‡	do					.90	.15				.10	2.50	.70			1.10	.55								.20		.90					.06		7.16
Lamonte	Missouri					.70						.95	.01			1.08				.02	.10				.13	1.18				.05			4.22
Marshall	do					.49	.16					.33				.85	.85			.07					.21	.28				.02	.37		3.63
Nevada	Osage					.67					.57	2.17				.90									.55		.50			.08			5.44
Osceola‡‡	do					.56	.20					2.45	.53			1.98									.21		.06				.19		6.18
Warrensburg	Missouri					.98						.53				.95				T.	T.				.22	.99	.03			.22	.20		4.12
Warsaw	Osage					.30	.11				T.	1.85	.36			1.21				T.					.21		.04						4.08
Waverly ‡‡	Missouri					1.05	.10					T.	T.			1.00					.45				.12		.50				.39		3.61
Northwest Plateau																																	
Bethany	Grand				1.44	1.06									.32	.82				.03						1.14				1.07		5.88
Chillicothe ‡‡	do					.86	.18					T.	.07			2.77				T	.94					.54	.41				.60		6.37
Conception	Missouri				.19	2.23						T.			.22	.55				.13						.66					.77		4.75
Edgerton	do					1.47	.02					.02			.04	.57				.76	.37	.01		T.		.67				T.			3.93
Gallatin ‡‡	Grand					1.03	.52						.11			.91					.09					.75	.35				.04		3.80
Grant City	do	T.		T.	.40	.93	.02					T.			.52					.80					1.27				T.	2.22		6.16
Kansas City***	Missouri			T.	.78	1.05						.19			.09	.71				.17				.51		.27				.01			3.78
Kidder ‡‡	Grand					1.58	.24						T.		T.	1.00					.49					.03	.31				.10	.07		3.82
King City	Missouri				1.00	2.60						T.			.15	.55			.08						.15				T.	.13			4.66
Lexington	do					1.45	.27					.11	.16			.91					1.10				.07		.85			.04	.17			5.13
Maryville ‡‡	do	T				.12									.23											.55	.03				1.59			2.52
Oregon	do		.15		1.95	3.06						T.			.28	.86				.25	.28					.93					.14			7.90
St. Joseph***	do		T.	T.	1.58	.67						.01			1.46	.22				.27	.02				.01	1.06				.02			5.82
Tarkio	do					1.12									1.88	.02				.44						.26					2.00		5.72
Trenton	Grand				T.	.86	.33					.06		.02	.52	1.05				.12						1.14				.04	1.45		6.59

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‡‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for June, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	84	90	90	92	79	75	70	76	64	84	69	86	92	92	84	81	79	62	80	90	95	103	97	95	83	87	91	92	92	90	..	84.8
	Minimum	50	62	65	67	63	54	53	45	46	51	55	56	66	73	62	63	59	55	59	62	64	73	74	69	70	67	65	64	68	65	..	61.5
Columbia	Maximum	82	86	87	89	74	69	68	71	78	78	65	84	87	87	77	80	75	79	78	90	94	98	96	89	81	83	86	89	87	86	..	82.4
	Minimum	52	61	64	69	60	53	49	45	46	52	56	60	66	72	65	61	58	54	61	62	73	72	73	70	66	65	62	61	74	65	..	61.6
Fayette	Maximum	83	87	88	89	76	..	70	75	81	81	66	84	88	83	80	82	82	82	78	91	98	99	97	92	84	85	90	91	87	90	..	[a]84.8
	Minimum	45	57	63	66	63	..	46	42	41	49	53	55	62	67	64	61	57	52	56	58	61	64	69	68	70	64	60	59	67	65	..	[a]58.8
Hannibal	Maximum	82	88	88	88	78	68	67	74	79	79	62	85	88	90	80	79	73	81	79	84	92	98	99	90	81	83	85	88	90	85	..	82.8
	Minimum	56	64	68	70	64	52	50	43	46	51	57	61	69	74	65	64	61	58	57	59	72	74	75	71	67	69	62	64	75	64	..	62.7
Jefferson City§§	Maximum	82	86	89	89	80	74	71	76	80	78	66	83	86	88	77	83	80	81	81	91	97	97	97	92	91	84	87	91	90	86	..	84.4
	Minimum	50	57	59	66	64	54	49	46	46	51	55	55	59	68	65	60	57	55	58	61	66	71	72	69	70	65	63	62	69	67	..	60.3
Kirksville	Maximum	81	87	87	85	81	69	67	71	77	78	77	84	87	85	81	78	76	77	74	80	93	95	92	89	86	82	86	87	88	83	..	82.1
	Minimum	52	61	64	66	61	55	46	46	46	50	53	58	67	69	61	60	56	53	56	59	65	70	74	65	65	62	60	60	70	63	..	59.8
Louisiana	Maximum	86	85	86	88	90	76	75	70	80	82	77	85	85	92	87	80	80	84	84	85	100	105	100	96	80	83	83	89	95	86	..	85.8
	Minimum	44	60	54	62	64	59	40	40	40	46	60	63	66	67	65	63	58	54	62	60	70	69	75	72	65	70	60	59	70	65	..	60.1
Macon§§	Maximum	84	89	89	89	77	87	71	75	85	82	63	85	89	89	80	82	75	80	73	86	95	98	97	89	80	83	86	88	90	85	..	84.0
	Minimum	49	62	63	66	62	55	45	45	49	52	54	56	62	70	63	61	57	54	55	59	62	70	73	66	69	63	61	62	60	62	..	59.6
Mexico§§	Maximum	84	89	91	91	77	73	70	75	82	82	64	86	90	91	79	83	77	83	76	93	101	103	101	95	81	84	82	92	86	86	..	84.9
	Minimum	46	56	59	63	64	54	46	42	42	49	55	55	61	64	64	62	58	54	55	60	63	72	71	70	71	63	61	60	63	58	..	58.7
St. Louis(1)	Maximum	81	85	87	88	84	71	69	73	78	81	66	84	87	89	83	85	79	79	80	91	97	101	100	94	89	85	87	90	95	84	..	84.7
	Minimum	55	60	62	68	68	60	55	52	56	60	58	59	66	67	71	66	64	61	67	64	77	79	79	79	66	69	69	71	71	67	..	65.5
Unionville	Maximum	80	86	88	84	76	74	66	75	80	83	76	86	90	84	82	80	74	77	72	82	93	93	92	90	83	83	86	86	90	82	..	82.4
	Minimum	50	58	63	64	60	50	46	43	45	50	55	58	67	64	60	60	54	52	54	55	64	70	71	62	62	60	60	60	70	60	..	58.2
Warrenton	Maximum	83	87	89	90	85	77	70	75	79	79	76	85	87	91	86	83	80	83	79	92	99	101	100	94	90	84	88	92	91	84	..	86.0
	Minimum	50	56	58	62	66	55	50	44	52	54	55	59	62	66	67	63	59	56	57	62	72	74	74	73	65	67	64	65	70	64	..	61.4
Southeast Lowlands																																	
Campbell	Maximum	86	90	93	92	91	80	78	76	85	84	84	91	93	95	94	91	86	87	96	100	100	105	103	98	104	96	94	97	101	100	..	92.3
	Minimum	42	46	50	52	54	60	49	47	47	52	59	61	60	58	62	66	59	57	57	68	69	70	69	74	69	69	58	58	60	69	..	59.0
Caruthersville	Maximum	84	88	90	91	89	80	80	77	86	86	87	88	90	90	92	88	86	87	92	99	99	101	102	99	100	96	94	96	97	99	..	91.1
	Minimum	55	61	65	65	69	64	55	54	54	57	64	70	66	70	70	69	65	64	67	72	74	76	76	81	76	74	67	67	71	72	..	67.0
Doniphan	Maximum	86	89	91	90	90	80	78	75	78	81	86	92	89	92	93	91	90	92	96	100	101	105	103	99	102	97	97	98	103	98	..	92.1
	Minimum	58	60	43	40	60	53	62	45	54	52	50	60	58	60	61	63	55	55	60	59	66	69	68	79	69	73	58	61	62	68	..	59.4
Jackson	Maximum	80	87	90	90	90	77	73	73	80	81	80	85	90	90	89	88	85	83	89	92	100	98	101	98	101	90	88	93	97	96	..	88.5
	Minimum	39	47	52	55	64	58	45	43	40	45	53	57	63	63	55	65	55	56	53	54	63	74	67	76	68	62	57	56	62	68	..	57.2
Poplar Bluff	Maximum	82	86	88	89	85	78	78	77	83	81	77	85	88	89	90	90	86	86	93	98	100	104	101	98	100	96	94	96	97	96	..	89.7
	Minimum	42	48	52	55	59	60	50	48	45	50	59	61	61	60	63	66	58	56	58	67	67	69	68	77	68	70	60	59	61	69	..	59.5
Sikeston	Maximum	83	89	92	92	90	80	77	75	83	85	84	88	92	91	89	88	91	88	94	99	101	109	104	99	103	96	94	97	98	98	..	91.6
	Minimum	49	55	59	62	66	62	52	48	48	52	62	62	64	66	68	67	59	61	60	71	71	75	73	78	73	68	63	65	66	74	..	63.3
Cairo, Ill	Maximum	80	85	87	86	86	74	73	72	77	80	79	84	87	87	87	86	79	82	86	90	95	99	98	93	97	90	86	88	94	94	..	86.0
	Minimum	56	61	66	67	68	62	56	54	55	59	63	62	67	70	69	68	64	64	64	74	73	74	76	79	70	68	68	69	70	71	..	66.2
Ozark Plateau																																	
Arcadia§§	Maximum	79	83	86	86	81	70	70	70	78	78	62	82	85	85	85	85	79	82	88	94	96	101	99	94	98	85	88	92	93	86	..	84.7
	Minimum	38	48	51	54	60	57	44	41	38	45	55	55	59	57	50	62	54	50	51	60	70	73	64	75	63	65	56	54	60	55	..	55.5
Aurora	Maximum	76	80	82	86	82	76	67	70	70	65	70	82	86	86	76	86	83	80	88	99	90	93	89	89	92	89	87	91	89	85	..	82.5
	Minimum	54	48	59	61	62	53	49	44	51	54	54	59	62	65	61	58	57	53	66	67	68	70	77	66	71	65	62	64	72	72	..	60.8
Birchtree	Maximum	79	84	84	86	81	75	74	74	77	75	65	82	84	87	83	87	82	82	90	90	92	95	93	92	92	92	92	92	92	91	..	84.8
	Minimum	43	48	55	58	59	59	45	46	42	50	52	58	61	63	60	63	65	65	62	73	75	79	75	75	67	72	67	62	69	72	..	61.3
Eldon§§	Maximum	83	87	88	90	78	71	71	71	80	71	74	83	80	88	87	83	79	81	84	91	97	88	96	92	..	..	..	..	80	89	..	[b]82.6
	Minimum	45	55	55	61	64	54	50	44	43	47	50	50	60	65	65	62	59	55	56	62	68	70	70	67	69	..	..	..	72	70	..	[b]58.8
Farmington	Maximum	83	89	91	90	85	78	74	71	78	79	69	82	89	90	84	87	84	86	89	98	100	106	103	98	102	88	88	98	90	90	..	88.2
	Minimum	40	52	58	62	63	53	48	44	43	51	56	56	62	63	63	62	58	52	55	68	74	78	69	71	73	64	62	65	65	72	..	60.1
Koshkonong	Maximum	80	84	88	88	82	74	74	73	79	75	72	83	87	89	85	86	84	85	91	95	96	99	98	95	100	92	94	97	99	93	..	87.2
	Minimum	51	52	51	61	63	60	52	49	52	57	58	57	64	64	66	64	60	59	65	72	70	74	76	77	72	72	62	67	72	77	..	63.2
Lebanon§§	Maximum	81	84	88	89	78	70	70	74	79	73	67	82	85	86	73	81	76	81	88	89	93	94	94	90	96	85	88	94	87	89	..	83.5
	Minimum	38	53	54	58	62	54	45	39	39	40	46	52	63	63	64	57	54	49	51	64	66	67	66	65	65	63	56	57	61	70	..	56.0
Mountain Grove§§	Maximum	75	79	82	83	78	74	74	72	75	70	62	78	82	83	74	83	80	84	88	91	95	95	94	94	96	88	93	92	90	89	..	83.1
	Minimum	47	55	57	59	63	55	44	42	43	50	53	53	60	64	65	58	53	51	59	66	68	68	71	68	68	66	57	59	70	71	..	58.8
Neosho	Maximum	80	84	84	84	80	77	74	74	77	70	73	81	87	86	85	84	83	85	88	90	91	93	91	91	93	91	89	93	93	89	..	84.7
	Minimum	45	53	56	59	60	53	43	40	45	54	55	58	63	66	61	53	55	50	64	63	66	68	62	68	72	62	56	59	73	71	..	58.4
Rolla	Maximum	80	84	85	86	82	76	68	69	77	75	66	81	84	86	82	82	80	78	87	91	95	96	97	91	96	87	87	92	89	89	..	83.9
	Minimum	45	53	57	61	68	56	49	47	45	51	55	60	63	69	70	60	57	62	58	71	68	71	71	69	67	66	61	59	75	74	..	61.3
Springfield	Maximum	76	80	82	83	74	67	69	69	70	63	64	79	83	83	75	80	75	78	86	87	90	91	89	87	92	81	83	89	90	84	..	80.0
	Minimum	55	60	63	64	61	54	52	50	51	55	53	60	65	67	62	61	61	58	69	71	71	72	69	67	67	66	64	65	74	73	..	62.7
Southwest Plain																																	
Appleton City	Maximum	81	85	86	86	79	71	72	72	74	63	72	82	86	84	79	83	78	81	85	91	95	94	92	88	94	86	86	90	84	91	..	83.0
	Minimum	51	58	60	65	60	51	49	47	48	52	53	61	67	68	62	58	57	56	63	68	67	68	70	67	73	65	62	65	65	65	..	60.7
Clinton	Maximum	85	92	93	95	80	80	80	76	82	67	74	85	92	90	81	93	85	83	90	99	99	100	96	93	94	90	92	94	84	92	..	87.9
	Minimum	48	55	61	63	60	52	48	47	47	50	54	66	65	70	64	60	58	55	62	69	70	70	70	71	71	70	62	63	76	70	..	61.6
Harrisonville§§	Maximum	82	85	87	86	78	76	72	71	75	63	70	82	86	85	82	87	78	79	86	92	99	97	94	89	89	87	84	88	82	92	..	83.4
	Minimum	50	58	62	63	59	50	50	47	50	52	54	54	64	68	62	61	57	55	62	62	69	68	69	65	65	63	61	65	72	69	..	60.2
Lamar§§	Maximum	79	84	85	85	77	71	74	73	75	78	69	81	86	85	74	85	81	78	89	89	90	93	92	88	95	84	88	91	85	88	..	83.1
	Minimum	45	57	61	64	61	54	50	50	51	53	56	58	63	62	62	61	58	58	56	59	68	69	72	67	69	65	62	65	67	72	..	60.5
Lamonte	Maximum	83	88	90	89	78	69	69	76	80	77	68	85	87	88	80	80	77	83	83	92	99	99	99	92	87	84	87	92	86	88	..	84.5
	Minimum	51	61	64	66	61	51	51	46	46	51	55	62	67	71	63	61	57	54	62	68	70	70	70	67	68	65	62	63	72	69	..	61.5
Marshall	Maximum	82	87	88	89	89	76	78	72	79	79	66	84	89	88	86	82	79	79	78	93	94	99	99	93	85	84	87	91	88	87	..	85.0
	Minimum	47	63	64	65	59	53	53	46	47	53	55	62	69	68	62	60	59	55	59	65	71	72	72	68	67	65	65	64	74	66	..	61.6
Nevada	Maximum	81	84	86	86	80	72	72	75	73	68	69	83	85	83	78	81	77	80	86	90	92	92	92	86	92	87	85	90	85	88	..	82.6
	Minimum	52	59	60	65	60	51	50	46	51	55	55	62	70	69	62	60	59	55	67	71	69	71	75	66	75	63	63	66	72	73	..	62.4
Warrensburg	Maximum	81	86	90	88	89	69	68	73	79	70	70	83	86	87	81	80	75	82	85	93	100	99	89	93	88	85	88	92	86	88	..	84.1
	Minimum	53	59	65	65	61	51	51	46	48	53	53	61	67	71	63	62	58	55	62	62	71	71	70	66	68	64	62	64	68	69	..	61.3
Warsaw	Maximum	83	87	89	90	85	78	73	77	79	74	66	85	87	88	79	83	80	82	88	92	96	95	95	91	96	94	87	92	87	91	..	85.6
	Minimum	52	58	64	67	65	53	46	43	42	47	55	61	68	73	64	59	56	54	62	70	70	69	71	68	73	66	58	60	76	73	..	61.4
Northwest Plateau																																	
Chillicothe§§	Maximum	84	89	89	87	79	70	69	76	81	82	71	86	89	88	84	79	78	85	72	90	93	97	93	91	82	80	90	90	87	86	..	83.9
	Minimum	48	57	62	62	60	51	43	41	42	46	50	55	65	71	59	59	55	57	56	58	67	71	72	68	62	61	58	61	70	62	..	58.3
Grant City	Maximum	78	84	86	79	71	68	63	72	76	78	67	84	85	79	84	77	75	80	71	80	94	94	94	88	83	84	85	86	91	83	..	80.6
	Minimum	51	62	63	65	60	51	46	48	50	53	52	57	68	65	60	61	54	55	58	57	68	71	73	62	61	60	63	64	73	58	..	59.6
Kansas City	Maximum	81	86	87	86	78	68	69	71	75	71	67	84	86	85	81	80	76	81	77	88	97	97	92	90	87	85	88	91	88	88	..	82.7
	Minimum	57	64	68	61	59	54	55	52	58	56	55	63	70	70	64	66	61	61	62	66	75	76	67	67	65	68	68	71	76	66	..	64.0
Kidder§§	Maximum	80	85	86	85	75	68	66	70	75	72	64	84	86	83	80	77	72	79	71	85	93	93	91	87	82	84	85	87	89	85	..	80.6
	Minimum	48	59	61	60	58	49	45	43	45	50	48	53	63	70	58	59	53	52	56	56	58	70	72	62	62	59	59	60	66	61	..	57.2
Lexington§§	Maximum	79	85	85	84	83	76	67	73	77	77	65	82	85	85	83	81	78	80	77	88	95	92	86	89	82	85	86	88	87	82	..	82.1
	Minimum	53	63	66	66	61	53	50	48	51	55	55	62	69	73	62	64	59	57	62	64	73	74	76	68	70	66	65	67	75	67	..	63.1
Maryville	Maximum	80	89	87	81	77	70	70	74	76	81	72	85	85	85	85	84	76	82	78	83	95	95	97	89	86	87	87	89	92	85	..	83.4
	Minimum	49	62	64	64	59	50	40	43	48	48	53	57	68	64	57	59	52	56	60	58	58	68	75	61	61	52	58	64	64	57	..	57.6
Oregon	Maximum	79	89	88	80	76	72	74	76	78	78	79	86	85	84	86	82	80	86	76	85	98	97	96	92	87	88	87	90	88	87	..	84.3
	Minimum	50	60	70	63	59	51	51	47	50	54	54	60	70	67	62	59	54	57	60	59	71	71	76	63	63	59	65	66	75	60	..	60.9
St. Joseph	Maximum	80	87	87	82	76	69	69	72	75	76	64	85	86	80	82	78	76	81	73	82	95	97	95	89	86	86	85	89	90	84	..	81.9
	Minimum	56	66	69	60	56	53	50	47	51	52	56	62	72	65	62	64	57	59	61	61	73	76	75	67	64	64	63	67	70	65	..	62.1
Trenton	Maximum	78	83	89	86	78	69	70	75	80	81	70	85	89	82	85	79	76	82	70	86	96	98	94	90	86	85	90	88	90	85	..	83.2
	Minimum	50	60	63	64	62	53	47	45	46	51	53	59	68	72	60	61	56	55	58	62	68	70	75	62	60	65	68	62	70	64	..	60.3

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 7-16-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., JULY, 1930 No. 7

GENERAL SUMMARY

Severe heat and drought were the outstanding features of July, 1930, over every part of Missouri. The month had the third highest mean temperature since the beginning of such records in 1888, being exceeded only by the means of 1916 and 1901. It was the driest July, with only 0.97 inch, for the State as a whole, in more than 60 years, and besides it was the sixth consecutive month with deficient precipitation, beginning with February. At the close of July the total rainfall for the crop season, beginning with April, was only 10.26 inches, about 60 per cent of the normal. Only one station, Joplin in the extreme southwest, received more than 3 inches as monthly total; and but 11 stations got 2 inches or more, while 33 stations had 0.50 inch or less, and two stations, Lucerne and St. Charles received but a trace for the entire month.

Over most of the State there were three distinct hot spells of three to five days each with maxima of 100° or higher, the first spell coming along about the 9th, the second about the 18th, and third wave about the 26th; some relief spells slipped in between. In the southeast part of the State there were 14 to 19 days of 100° and higher, also northeast stations experienced 14 or 15 days of the same high values: in the southwestern plain more than half the days were as hot as 100° and higher, and in the northwestern plateau there were 4 to 13 such hot days. The maximum for the month 113°, occurred at Mexico, and while this is the highest value ever recorded at that station, one of more than 40 years records, it fell 3° short of maximum for the State, occurring in 1901 at Marble Hill, Bollinger County. At a number of stations it was the hottest known, but at others with long records not as hot as July, 1901.

Grain crops harvested before July gave good yields. Hay was short. At the end of July the corn crop was nearly a total failure, as well as meadows, pastures and most forage. Cow peas and soy beans were holding up. Apples and grapes were deteriorating rapidly. Forest trees were dying. Wells and and creeks were dry, and the main rivers were as low as ever known. Many localities were suffering because of the lack of water for domestic and livestock purposes. Fires from careless acts of passing highway tourists had become a prevalent danger.

TEMPERATURE

The monthly mean temperature for the State, based upon the records of 66 stations, was 81.2°, or 3.9° above the normal. Only two other Julys since 1888 had higher mean temperatures, 1916, and 1901. The highest local monthly mean was 84.5°, at Sikeston; and the lowest was 78.2°, at Kidder. The greatest daily range was 54°, at Lebanon, on the 17th. The highest temperature recorded was 113°, at Mexico on the 28th. This value is 1° higher than prior records at this one station, but is 3° lower than the State's high record, occurring at Marble Hill, July, 1901. On the average there were 20 days with 90° or higher, and 11 days with 100° or higher.

PRECIPITATION

The average precipitation for the State, 96 stations reporting, was 0.97 inch, or 3.03 inches less than the 60 years' average; and the driest July of record. The greatest local amount was 3.42 inches, at Joplin; and the least local amount was a trace, at Lucerne, and St. Charles. The greatest amount that fell during any 24 consecutive hours was 2.09 inches, at Eldon on the 24-25th.

MISCELLANEOUS PHENOMENA

Hail.—Light and of little importance at Kansas City, St. Joseph, Edgerton, and Warrensburg on the 6th, or 7th.

Halos, lunar.—On the 3d.

Halos, solar.—On the 2d, 5th, 6th, 12th, 13th, 17th, 22d, 29th, and 30th.

Thunderstorms, local 4th, 5th, 10th, 12th, 22d 23d, 27th, and 29th. More general on 6th, 7th, 13th, 21st, 24th, and 25th.

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	29.99	66	43	398	88	4,356	5.9	19	sw.	21
Hannibal	29.99	67	..	...	..	4,657	6.3	21	e.	6
Kansas City	29.97	59	38	410	90	6,280	8.4	30	n.	6
St. Joseph	29.95	65	40	373	82	4,497	6.0	31	nw.	6
St. Louis	29.98	60	38	382	84	6,619	8.9	27	sw.	20
Springfield	30.03	64	40	401	90	5,292	7.1	22	n.	13
Cairo, Ill.	29.98	69	42	...	..	4,571	6.1	31	ne.	10
Keokuk, Iowa	29.99	64	43	368	81	4,017	5.4	21	se.	5

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JULY

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	79.3	+ 2.3	111	50	3.31	−0.98	....	0	7	..	..	..
1889	77.1	+ 0.1	107	46	3.75	−0.54	....	0	8	..	..	..
1890	79.6	+ 2.6	106	52	2.98	−1.31	....	0	5	..	..	..
1891	72.7	− 4.3	103	40	3.55	−0.74	....	0	8	..	..	..
1892	75.8	− 1.2	101	45	4.99	+0.70	4.75	0	8	12	10	9
1893	77.3	+ 0.3	101	51	4.91	+0.62	6.44	0	8	14	12	5
1894	76.5	− 0.5	109	42	2.48	−1.81	4.90	0	5	18	10	3
1895	74.4	− 2.6	106	45	6.79	+2.50	6.52	0	10	10	12	9
1896	77.3	+ 0.3	108	48	5.87	+1.58	8.00	0	9	15	11	5
1897	78.7	+ 1.7	106	48	3.22	−1.07	4.05	0	6	19	9	3
1898	76.1	− 0.9	104	42	5.58	+1.29	8.15	0	9	16	10	5
1899	76.0	− 1.0	102	43	4.51	+0.22	4.48	0	9	15	11	5
1900	76.9	− 0.1	102	46	4.11	−0.18	7.03	0	8	17	10	4
1901	85.4	+ 8.4	116	46	2.02	−2.27	3.78	0	5	19	10	2
1902	77.0	0.0	103	50	4.59	+0.30	5.30	0	8	17	11	3
1903	77.4	+ 0.4	102	51	3.22	−1.07	3.26	0	8	17	10	4
1904	74.2	− 2.8	100	47	4.65	+0.36	4.15	0	10	15	11	5
1905	73.4	− 3.6	101	48	7.45	+3.16	7.60	0	12	12	10	9
1906	74.7	− 2.3	100	48	3.53	+0.76	4.46	0	8	17	10	4
1907	78.4	+ 1.4	105	47	4.57	+0.28	6.70	0	8	19	8	4
1908	76.5	− 0.5	101	49	2.23	−2.06	2.65	0	8	18	9	4
1909	76.7	− 0.3	102	41	6.41	+2.12	10.71	0	10	17	8	6
1910	76.8	− 0.2	109	46	6.70	+2.41	5.80	0	9	16	9	6
1911	78.0	+ 1.0	113	43	3.95	−0.34	4.20	0	8	16	9	6
1912	78.8	+ 1.8	104	52	2.74	−1.55	3.17	0	7	18	9	4
1913	80.2	+ 3.2	108	47	3.13	−1.16	3.62	0	7	18	9	4
1914	80.5	+ 3.7	109	45	2.67	−1.66	4.45	0	17	17	9	5
1915	74.6	− 2.4	102	42	6.05	+1.59	6.77	0	2	14	9	6
1916	81 6	+ 4.6	109	52	1.25	−3.15	2.55	0	3	25	5	1
1917	77.5	+ 0.2	107	42	2.96	−1.22	3.40	0	8	20	8	3
1918	77.1	+ 0.2	110	41	1.76	−2.49	3.75	0	6	19	8	4
1919	80.0	+ 2.3	115	50	2.33	−1.37	4.55	0	5	23	6	2
1920	76.3	− 0.9	105	47	3 25	−0.84	3.84	0	7	18	8	5
1921	80.3	+ 2.9	109	46	2.32	−1.77	2.25	0	5	20	8	3
1922	76.8	− 0.7	108	46	5.85	+1.82	12.25	0	8	17	9	5
1923	78.2	+ 0.7	105	50	3.07	−0.89	7.42	0	6	18	8	5
1924	73.3	− 4.1	103	40	5.39	+1.34	7.14	0	10	15	11	5
1925	77.9	+ 0.5	106	46	2.71	−1.34	3.25	0	7	16	10	5
1926	78.0	+ 0.6	108	40	3.14	−0.91	6.00	0	7	17	9	5
1927	75.8	− 1.6	101	48	4.13	+0.08	4.65	0	8	18	9	4
1928	77.2	− 0.2	102	48	2.97	−1.08	3.30	0	7	17	10	4
1929	77.8	+ 0.5	104	50	4.12	+0.12	4.95	0	8	16	10	5
1930	81.2	+ 3.9	113	42	0.97	−3.03	2.09	0	3	22	7	2
.....	....	.....	...	..	....	.....	....	..	..	..	..	..
.....	....	.....	...	..	....	.....	....	..	..	..	..	..
.....	....	.....	...	..	....	.....	....	..	..	..	..	..

Climatological Data for July, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	81.8	+ 6.1	106	27	50	15	50	0.23	−4.41	0.23	0	1	23	5	3	sw.	O. K. Benecke
Clifton Hill	Randolph	731	31	80.6	+ 4.2	109	27	46	15	45	0.19	−3.69	0.12	0	2	27	2	2	.....	Dr. A. J. Bradshet
Columbia	Boone	784	40	81.1	+ 4.2	108	28	51	15	38	0.50	−2.99	0.34	0	4	15	10	6	sw.	U. S. Weather Bureau
Downing	Schuyler	876	9	79.8	+ 3.4	108	27	48	15	38	0.02	−4.91	0.01	0	2	21	8	2	sw.	James Taylor
Fayette	Howard	661	50	80.2	+ 2.8	109	28	46	15†	48	0.27	−3.38	0.14	0	2	..	..	..	.....	J. D. Settle
Fulton ††	Callaway	818	50	80.4	+ 2.5	107	28	47	15	42	0.46	−3.53	0.18	0	4	24	7	0	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.. ....	..	..	..	..	..	0.41	−3.62	0.23	0	2	19	8	4	sw.	J. W. Pulliam
Hannibal	Marion	534	38	80.5	+ 3.7	106	27	50	15	38	0.76	−2.33	0.72	0	2	16	12	3	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	81.7	+ 3.6	104	10†	53	15†	41	2.72	−0.73	1.82	0	5	24	5	2	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	79.4	+ 3.3	106	27	50	15	37	0.22	−4.23	0.15	0	3	24	6	1	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	80.0	+ 3.6	109	28	43	15	50	0.54	−2.58	0.27	0	2	17	14	0	s.	Stark Bros. Nurseries
Macon	Macon	875	31	79.7	+ 2.3	107	27	49	15	42	0.99	−3.67	0.05	0	2	28	2	1	w.	W. C. Brown
Mexico	Audrain	800	41	81.4	+ 4.1	113	28	47	15	44	0.07	−3.68	0.07	0	1	29	2	0	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	0.59	.....	0.59	0	1	23	7	1	ne.	J. S. Conway
St. Charles	St. Charles	456	42	82.7	+ 4.6	112	28	50	15	47	T.	−3.23	T.	0	0	19	12	0	n.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	83.6	+ 4.8	108	28	57	15	29	0.25	−2.73	0.21	0	3	19	12	0	w.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	83.1	+ 3.0	107	28	57	15	28	0.22	−2.53	0.20	0	3	27	4	0	w.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	0.19	−3.97	0.17	0	2	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	32	79.0	+ 1.0	108	27	42	15	52	0.13	−4.30	0.10	0	2	18	11	2	sw.	Frank Hall
Unionville	Putnam	1,062	37	80.0	+ 3.4	110	27	46	15†	49	0.16	−4.14	0.10	0	2	25	1	5	s.	Geo. W. Davis
Warrenton	Warren	816	48	83.0	+ 5.2	110	28	49	15	39	0.10	−3.32	0.06	0	2	14	16	1	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	80.5	+ 3.8	107	27	55	15	31	0.30	−3.11	0.24	0	4	14	13	4	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	81.0	+ 3.7	113	28	42	15	52	0.38	−3.38	1.82	0	2	21	8	2	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	82.8	.....	111	28	49	16	44	0.69	.....	0.40	0	4	22	0	9	s.	Jeff. King
Caruthersville	Pemiscot	265	34	84.3	+ 3.7	108	28	62	3	32	1.08	−2.33	0.96	0	2	23	5	3	s.	Sam Smith
Doniphan	Ripley	344	26	83.2	+ 5.0	110	28	50	15†	48	1.09	−3.64	0.87	0	4	13	18	0	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	81.2	+ 3.8	107	11†	50	17	46	1.16	−2.36	0.61	0	4	15	8	8	s.	John G. Putz
Marble Hill	Bollinger	470	35	84.0	+ 6.7	111	28	47	16	51	0.42	−4.26	0.30	0	2	15	14	2	w.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	0.66	−4.11	0.33	0	5	24	7	0	sw.	John A. Spence
Poplar Bluff	Butler	339	26	81.1	+ 2.4	109	28	51	16	43	0.50	−3.05	0.22	0	5	21	10	0	s.	J. H. Wolpers
Sikeston	Scott.	318	29	84.5	+ 6.4	110	12†	55	15	43	0.43	−4.34	0.25	0	2	29	2	0	s.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	83.2	+ 3.6	106	28	60	16	28	0.04	−3.03	0.03	0	2	14	13	4	s.	U. S. Weather Bureau
Section means and	extremes	....	..	83.0	+ 4.5	111	28	47	16	48	0.67	−3.39	0.96	0	3	20	8	3	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	78.8	+ 2.9	104	11†	43	16	45	1.62	−2.62	0.90	0	4	29	0	2	w.	Arcadia College
Aurora	Lawrence	1,370	38	80.2	+ 2.4	99	27†	54	15†	35	1.91	−3.45	1.25	0	4	26	3	2	sw.	W T. Troughton
Birchtree (near)	Shannon	1,000	36	80.6	+ 4.2	106	28	51	17	44	0.84	−3.15	0.38	0	3	29	2	0	ne.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	80.3	+ 2.7	109	28	45	16	49	1.75	−2.30	0.75	0	3	27	4	0	sw.	H. E. Dean
Eldon	Miller	934	34	81.0	+ 4.0	106	28	52	2†	42	2.65	−1.01	2.09	0	4	13	12	6	sw.	E. H. Shepherd
Farmington	St. Francois	918	19	82.5	+ 7.2	109	28	52	3	40	1.02	−2.53	0.58	0	4	22	7	2	sw.	Robert Forsyth
Goodland	Iron	1,000	36	78.8	+ 3.2	108	11	42	15†	53	1.99	−2.19	0.95	0	3	27	3	1	w.	F. M. Adams
Greenville	Wayne	381	7	81.2	.....	109	28	45	16	51	0.90	.....	0.70	0	2	25	6	0	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	1.30	.....	1.30	0	1	28	2	1	sw.	A. W. Madison
Koshkonong	Oregon	958	29	86.0[a]	+ 7.7	107	27†	59	2†	39	0.04	−3.88	0.04	0	1	26	4	1	sw.	R. M. Hitt
Lebanon	Laclede	1,265	43	80.2	+ 3.3	105	28	48	16†	54	1.24	−2.88	0.70	0	4	27	2	2	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	80.6	+ 3.0	103	28	54	16	40	1.30	−3.57	0.92	0	2	27	3	1	sw	C. S. Crow
Mountain Grove(near)	Wright	1,463	29	81.4	+ 5.4	105	11†	50	15	39	1.50	−2.50	0.61	0	6	24	7	0	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	79.5	+ 1.9	102	28	46	16	46	2.56	−1.62	1.19	0	4	26	5	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	81.6	+ 4.2	105	28	50	16	43	1.35	−2.74	0.65	0	5	16	7	8	s.	F. H. Lane
Salem(near)	Dent	1,173	26	80.2	+ 3.3	106	28	44	16	47	0.79	−2.71	0.40	0	4	23	7	1	sw.	A. C. Leech
Seligman	Barry	1,542	28	81.1[c]	+ 4.5	103	28	54	15	30	0.58	−3.82	0.28	0	4	24[b]	4[b]	1[b]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	78.4[f]	+ 2.9	104	28	45	16	43	0.47	−4.28	0.27	0	3	26	5	0	sw.	Ira H. Hailey
Springfield	Greene	1,324	42	80.2	+ 3.4	100	28	56	15	30	0.62	−3.59	0.35	0	4	26	5	0	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	80.7	+ 3.9	109	28	42	15†	54	1.29	−2.87	2.09	0	3	25	5	1	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	80.4	+ 2.1	106	28	51	15	39	1.60	−3.03	0.70	0	5	17	14	0	sw.	W. G. Bigelow
Clinton	Henry	765	37	82.8	+ 5.3	112	28	52	16	44	2.05	−1.89	1.25	0	5	23	8	0	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	80.6	+ 2.8	106	27†	52	15	42	2.35	−1.43	1.27	0	4	16	7	8	s.	John H. Patterson
Lamar	Barton	980	43	80.4	+ 1.9	102	22	52	15	42	1.90	−2.34	1.09	0	2	23	7	1	sw.	Jesse A. Mann
Lamonte	Pettis	867	30	81.5	+ 2.0	108	28	48	15	41	1.19	−2.81	0.55	0	4	25	6	0	s.	J. E. Wheeler
Marshall	Saline	779	42	82.2	+ 4.9	106	27	47	15	37	0.29	−3.67	0.24	0	3	20	10	1	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	80.9	+ 0.7	104	28	50	15	42	0.62	−3.31	0.37	0	3	22	5	4	sw.	George A. Kaupp
Warrensburg	Johnson	878	43	83.0	+ 4.2	109	28	49	15	41	1.12	−2.83	0.65	0	3	25	3	3	sw.	E. A. Markey
Warsaw	Benton	687	29	82.6	+ 4.3	109	28	47	16	52	0.88	−3.42	0.40	0	5	26	5	0	s.	Everett Martin
Section means and	extremes	.....	..	81.6	+ 3.1	112	28	47	16	52	1.33	−2.75	1.27	0	4	22	7	2	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	79.8	+ 3.8	108	27	45	15	40	0.40	−4.11	0.40	0	1	26	5	0	w.	A. S. Cumming
Chillicothe	Livingston	779	20	80.0	− 0.2	107	27	51	16	47	0.25	−4.41	0.18	0	3	25	6	0	e.	Wm. J Olenhouse
Conception	Nodaway	980	41	81.2	+ 4.8	106	27	52	15	37	1.23	−3.07	1.10	0	3	21	9	1	s.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	80.0	.....	106	27	45	15	48	0.46	−4.34	0.20	0	7	27	3	1	s.	Fred L. Stiff
Grant City	Worth	1,134	26	79.5	+ 3.3	106	27	51	15	39	0.69	−4.47	0.57	0	2	19	12	0	sw.	W. P. Spillman
Kansas City	Jackson	963	41	82.8	+ 4.7	104	27	59	15	31	1.39	−2.74	0.81	0	5	20	7	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	78.2	+ 1.3	106	27	46	15	41	0.60	−3.33	0.30	0	4	21	6	4	sw.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	0.51	.....	0.45	0	3	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	81.2	+ 4.1	103	27	53	15	32	1.05	−3.67	0.56	0	3	20	11	0	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	80.2	+ 4.6	107	27	52	15	35	0.71	−4.68	0.41	0	4	30	0	1	s.	J. R. Brink
Oregon	Holt	1,048	74	82.0	+ 6.4	107	27	54	14†	35	1.36	−2.96	0.72	0	4	26	4	1	sw.	Mina Wright
St. Joseph	Buchanan	967	22	81.5	+ 2.9	106	27	55	15	32	1.46	−1.66	0.59	0	5	21	7	3	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	27	79.8	+ 2.8	105	27	51	14†	39	0.67	−3.04	0.49	0	2	19	11	1	se.	Albert Volker
Trenton	Grundy	822	34	80.7	+ 3.8	109	27	49	15	42	0.20	−4.13	0.14	0	4	21	8	2	s.	W. H. Estes
Section means and	extremes	.....	..	80.5	+ 3.5	109	27	45	15	47	0.78	−3.59	1.10	0	4	23	7	1	s.	
State means and	extremes	.....	..	81.2	+ 3.9	113	28	42	15†	54	0.97	−3.03	2.09	0	3	22	7	2	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for July, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Beeker	Missouri	.84												T.									T.		T.								0.84
Boonville‖	do																						.23		.12	.17	T.						0.29
Brunswick‖	Grand																																0.23
Clifton Hill	Chariton													.07								.12											0.19
Columbia***	Missouri						T.	.02						T.								.34		T.	.13	.01				T.			0.50
Downing	Mississippi				.01								T.	T.									T.						.01		T.		0.02
Fayette‖	Missouri							.13																		14							0.27
Fulton‖	do																																
Gorin	Mississippi				.18																	.23											0.41
Hannibal***	do				T.			T.					T.	.04								.72		T.		T.				T.		T.	0.76
Hermann‖	Missouri	1.31						.20						T.									.01	T.	.13	.21						T.	1.86
Jefferson City‖	do	.25						.05															.25	1.82	.35								2.72
Kirksville	Mississippi				.01									.06								.15											0.22
Louisiana	do																						.27				27						0.54
Lucerne‖	Grand																						T.				T.						T.
Macon ‖	Chariton													.05									.04										0.09
Mexico ‖	Mississippi													.07									T.										0.07
Milan‖	Grand													.12								.09								.11			0.32
Monroe City	Mississippi					T.																.59											0.59
Pacific‖	Meramec	.85						.08						T.									.06		.65							T.	1.64
St. Charles	Missouri																								T.							T.	T.
St. Louis (1)***	Mississippi							T.						.01								.21			.03	T.						T.	0.25
St. Louis (2)*	do							T.						.01								.20			.01	T.						T.	0.22
Shelbina ‖	do					.02								T.									.17										0.19
Steffenville	do				T.								T.	.03								.10								T.			0.13
Union‖	Meramec	1.10						.90						.05									T.	T.		.75							2.80
Unionville	Chariton				.05								T.												T.		.10					T.	0.15
Valley Park	Meramec	1.00						T.						.02											.09	T.							1.11
Warrenton	Mississippi							.04						T.								.06			T.								0.10
Keokuk, Ia.***	do				.23	.02	T.						.02	T.								T.	T.					.03		T.			0.30
Southeast Lowlands																																	
Campbell‖	St. Francis	.10										.04			.40								.15										0.69
Cape Girardeau‖	Mississippi	.25						.01															.21	.01	.18	.01							0.67
Caruthersville ‖	do								.12				.96																				1.08
Dexter‖	St. Francis								T.					T.	T.								T.			.19	T.						0.19
Doniphan	Black								.37					.26											.24	.22							1.09
Jackson	Mississippi							.26														.61	.18		.11								1.16
Marble Hill	Mississippi																						.30		.12								0.42
Morehouse	do	.01												.20									.02		.10	.33							0.66
New Madrid‖	do	1.35								.15				.10											.10	.04							1.74
Poplar Bluff‖	Black	.03							T.	.03													.22			.07	.15						0.50
Sikeston‖	Mississippi													.25											.18								0.43
Cairo, Ill.***	do													T.								T.	.01		.03	T.						T.	0.04
Ozark Plateau																																	
Arcadia ‖	St. Francis								T.				T.										.90	.27	.40	.05						T.	1.62
Aurora	Neosho								.19														.45	1.25								.02	1.91
Birchtree (near)	Black																						.38	.26	.20								0.84
Caplinger Mills	Osage																					.45	T.	.50	T.							T.	0.95
Dean	Neosho								.35														T.	.65								.75	1.75
Eldon‖	Missouri								.08														.48		1.04	1.05							2.65
Farmington	St. Francis							.20					T.	T.									.04	.20	.58								1.02
Galena‖	White								.10	.10													.10	1.35	.28								1.93
Goodland	Black							.09															.95		.95								1.99
Greenville	St. Francis							.70															.20										0.90
Hailey	White																							1.30	T.								1.30
Koshkonong	Black																						T.		T.	.04							0.04
Lebanon ‖	Osage								.19														.70	T.	.25	.10						T.	1.24
Leeper‖	Black								.25			.45											.30			.20							1.20
Lockwood	Osage																						.38	.92								T.	1.30
Mountain Grove‖	White	T.							.02	.04													.24	.47	.12	.61							1.50
Neosho	Neosho								.09														1.19	1.05								.23	2.56
Owensville ‖	Gasconade																						.20	.82	T.	.12							1.14
Ozark Beach‖	White								1.58														.12	.45	.68								2.83
Rolla ‖	Meramec	.02																					.30	.03	.65	.35							1.35
Salem (near)	do							T.															.40	T.	.35	.02						.02	0.79
Seligman	Neosho				.07				T														.04	.28								.19	0.58
Seymour (near)	White							.14														.06	T.	.27	T.						T.	0.47
Springfield**	do							T.	T.													.26	.09	.24	T.					T.	.03	0.62
Steelville‖	Meramec								1.48														.20		.25	.20							2.13
Stover ‖	Missouri								.07					T.									1.08		1.05	.54							2.74
Tuscumbia ‖	Osage														T.								.76		.32	.47							1.55
Williamsville‖	Black							.04				.29											.14	.01		.14							0.62
Willow Sprgs. ‖ (near)	White								.59															.11	.25	1.55							2.50
Southwest Plain																																	
Appleton City	Osage							.59						T.								.70		T.	.20	.02					T.	.09	1.60
Clinton	Osage						.67							.03											1.25	.05							.05	2.05
Concordia‖	Missouri																								1.09								1.09
Harrisonville‖	Osage							1.27																	1.05	.02						.01	2.35
Joplin ‖	Neosho								T.													.45	.18	2.71								.08	3.42
Lamar ‖	do									T.													.81		1.09								1.90
Lamonte	Missouri						.50	.13						.01											.55								1.19
Marshall	do								.02																.24	.03							0.29
Nevada	Osage																					T.	.37	.18	.07							T.	0.62
Osceola‖	do																						.17		.33	.10							0.60
Warrensburg	Missouri							.44						.03								T.	T.		.65	T.				T.	T.		1.12
Warsaw	Osage							.09						T.									.29		.40	.02						.08	0.88
Waverly ‖	Missouri							T.																	.22	.04							0.26
Northwest Plateau																																	
Bethany	Grand																					.40											0.40
Chillicothe ‖	do													T.									.18			.04	.03						0.25
Conception	Missouri			T.									T.	.07								1.10	T						.06	T.			1.23
Edgerton	do						.05	.05					T.	.06								T.		.03	.20					.06	.01		0.46
Gallatin ‖	Grand																						.11		.09				T.	T.	T.		0.20
Grant City	do						T.						T.	T.								.57			.12								0.69
Kansas City***	Missouri			T.			.80	.01						T.								T.	T.	.06	.14	.37				.01	T.		1.39
Kidder ‖	Grand							T.						T.									.30			.08					.20	.02	0.60
King City	Missouri						T.						T.	.02								.45								.03	.01		0.51
Lexington	do							.56																	.24	.25							1.05
Maryville ‖	do													.10								.15	.41			T.				.05			0.71
Oregon	do			.07			.54															.72								.03	T.		1.36
St. Joseph***	do			.02			.59						T.	T.								.58		T.	.06					.21	T.		1.46
Tarkio	do			.18																		.49											0.67
Trenton	Grand													.02								.14				.01			.03	T.			0.20

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for July, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	81	88	90	95	97	103	103	104	104	104	105	103	81	79	85	97	104	105	105	105	96	87	92	95	104	105	106	104	95	96	95	97.2
	Minimum	61	58	60	65	66	72	70	69	72	74	73	74	73	59	50	52	54	65	67	70	76	67	62	66	70	74	78	74	68	61	63	66.5
Columbia	Maximum	79	79	84	93	96	95	96	95	99	101	103	100	86	77	80	91	99	102	102	101	96	85	86	87	97	104	104	108	91	95	92	93.6
	Minimum	58	58	61	68	74	75	72	67	73	74	74	75	68	60	51	53	64	65	73	72	73	68	67	69	74	78	77	76	72	66	73	68.6
Fayette	Maximum	81	84	86	95	97	97	99	98	100	103	105	101	85	80	85	94	100	103	103	92	96	87	90	93	100	105	107	109	94	99	95	95.6
	Minimum	58	56	59	64	69	71	69	65	69	72	70	72	76	61	46	46	54	60	64	64	73	67	58	63	68	73	75	72	70	61	63	64.8
Hannibal	Maximum	76	78	81	90	89	98	96	98	99	100	102	101	83	73	80	90	98	102	101	100	93	83	87	92	97	104	106	102	84	93	89	92.4
	Minimum	60	58	62	66	74	77	74	71	76	77	76	77	70	60	50	52	60	68	74	73	72	66	61	65	73	80	83	78	66	60	68	68.6
Jefferson City§§	Maximum	81	80	88	95	95	99	97	98	101	104	104	101	89	83	84	93	101	103	103	103	102	91	96	86	97	100	102	104	94	96	93	95.6
	Minimum	62	56	57	62	71	72	71	66	72	75	76	77	77	63	53	53	60	64	70	73	75	69	68	68	68	73	76	75	72	62	67	67.8
Kirksville	Maximum	80	73	80	79	94	94	95	95	97	98	100	98	81	80	82	93	97	100	100	100	90	82	86	93	99	103	106	98	85	91	92	91.6
	Minimum	55	55	60	62	70	72	70	70	75	77	80	75	70	65	50	55	65	70	70	72	72	60	60	61	62	77	77	83	67	63	62	67.2
Louisiana	Maximum	82	76	86	90	90	100	95	96	98	100	101	103	90	77	80	94	100	105	101	102	100	86	89	95	106	107	107	109	92	95	91	94.9
	Minimum	62	51	55	55	68	74	76	74	74	72	73	77	69	58	43	44	55	61	69	72	70	60	55	62	70	78	75	82	70	55	60	65.1
Macon§§	Maximum	78	81	84	88	95	97	97	96	98	99	100	99	80	77	80	93	99	102	102	101	96	83	91	94	100	106	107	102	87	94	94	93.5
	Minimum	56	54	58	61	70	73	70	70	72	74	74	74	71	57	49	51	62	65	69	71	74	62	62	62	65	72	78	73	67	64	62	65.9
Mexico§§	Maximum	79	79	85	94	97	98	98	99	101	104	106	105	86	78	81	93	101	105	105	104	100	87	92	95	103	107	110	113	92	98	96	96.5
	Minimum	58	53	58	58	69	73	70	66	73	73	76	75	74	59	47	49	56	65	71	72	74	66	59	68	70	76	77	78	68	59	66	66.3
St. Louis(1)	Maximum	80	78	82	91	96	97	93	98	100	103	104	103	90	76	80	89	96	101	102	100	99	90	91	87	98	102	105	108	91	94	89	94.0
	Minimum	67	60	63	67	73	75	73	76	82	83	84	85	70	62	57	64	67	73	79	81	76	74	73	71	74	79	83	83	75	70	72	73.3
Unionville	Maximum	78	80	85	80	95	97	95	95	101	103	102	90	82	80	85	95	105	103	107	103	95	85	93	100	100	106	110	104	90	92	94	94.5
	Minimum	55	50	58	65	70	72	68	72	72	72	75	73	68	52	46	46	65	70	72	70	72	58	60	60	70	75	78	76	67	62	58	65.4
Warrenton	Maximum	85	82	84	93	96	96	95	99	100	104	105	105	97	77	81	93	101	105	105	104	104	89	93	90	102	106	107	110	104	97	94	96.9
	Minimum	61	55	57	63	72	74	69	67	75	76	78	80	74	60	49	59	62	68	73	73	77	69	70	68	71	77	78	79	73	65	69	69.1
Southeast Lowlands																																	
Campbell	Maximum	93	86	86	95	103	104	105	103	105	107	108	110	108	86	84	91	97	103	105	103	106	99	96	99	94	107	110	111	102	98	99	100.1
	Minimum	65	55	53	56	59	67	69	68	69	72	69	73	74	65	55	49	50	55	68	70	71	69	69	68	69	71	72	68	71	70	68	65.4
Caruthersville	Maximum	91	83	85	91	97	100	98	99	101	104	104	106	102	87	86	86	88	92	98	99	100	97	98	98	91	103	106	108	101	98	92	96.4
	Minimum	66	64	62	65	70	71	75	72	74	76	75	76	70	70	74	63	69	70	70	76	78	77	73	74	76	79	78	78	75	75	67	72.2
Doniphan	Maximum	89	89	92	96	103	105	105	102	105	107	108	109	108	90	86	93	99	105	104	100	102	95	93	98	95	105	108	110	102	98	99	100.0
	Minimum	54	56	58	55	60	69	72	70	70	71	73	75	73	69	50	50	53	57	66	69	75	71	69	70	74	74	74	70	71	74	71	66.5
Jackson	Maximum	91	85	86	92	101	102	98	101	103	104	107	105	102	87	84	88	95	102	104	100	100	89	87	88	95	104	106	107	101	96	94	96.9
	Minimum	62	55	51	55	60	69	68	67	68	71	84	74	73	61	51	47	50	56	68	70	71	68	66	68	71	72	74	70	75	66	71	65.5
Poplar Bluff	Maximum	91	88	89	91	100	101	101	99	101	105	106	105	105	81	87	81	97	91	97	94	92	89	84	96	95	96	104	109	102	94	97	95.7
	Minimum	67	56	53	56	60	69	71	70	68	71	70	74	74	67	57	51	54	56	66	69	75	70	69	70	72	72	70	69	74	72	71	66.5
Sikeston	Maximum	94	89	88	94	101	102	103	105	106	107	109	110	108	84	83	91	96	102	104	101	102	100	97	95	99	105	109	110	99	98	96	99.6
	Minimum	66	59	56	60	66	74	73	72	76	73	75	76	65	65	55	57	58	63	73	73	75	73	71	71	74	75	77	77	76	72	74	69.4
Cairo, Ill	Maximum	85	79	84	89	96	97	97	100	100	101	105	104	101	80	80	87	90	97	99	96	97	89	89	90	94	101	104	106	96	94	90	94.1
	Minimum	67	61	60	63	69	75	77	76	77	78	77	78	76	67	61	60	63	69	77	76	77	76	75	73	76	77	79	78	79	73	75	72.4
Ozark Plateau																																	
Arcadia§§	Maximum	84	81	86	92	94	98	96	98	100	102	104	101	95	81	81	88	95	100	101	98	98	83	86	85	93	99	101	104	93	94	91	93.6
	Minimum	57	52	50	55	61	68	69	64	66	68	71	70	73	60	49	43	53	61	67	71	74	67	64	65	68	71	71	67	74	62	71	63.9
Aurora	Maximum	83	85	83	91	91	93	93	93	95	95	98	96	93	82	81	89	93	96	96	96	97	91	84	93	95	98	99	99	96	93	89	92.1
	Minimum	60	56	61	66	71	72	70	68	69	71	72	74	78	61	54	54	62	67	70	74	75	67	63	71	74	76	78	78	69	67	67	68.2
Birchtree	Maximum	89	86	88	92	94	97	97	96	100	104	104	104	90	88	89	94	95	99	98	98	101	90	87	93	93	102	103	106	100	95	93	95.6
	Minimum	62	53	54	62	65	72	70	63	72	75	74	72	62	56	54	53	51	59	64	70	70	69	65	71	71	70	72	70	70	75	70	73	65.7
Eldon§§	Maximum	83	85	89	97	97	101	99	98	102	103	104	103	90	84	84	95	98	101	103	103	102	90	88	86	97	100	103	106	93	96	93	95.9
	Minimum	59	52	56	59	69	69	72	64	68	74	76	76	75	63	52	54	59	61	61	66	75	70	68	68	67	72	74	73	72	62	63	66.1
Farmington	Maximum	83	81	88	96	96	104	96	100	102	104	105	107	98	79	79	93	102	105	106	102	105	92	92	81	98	104	106	109	94	96	94	96.7
	Minimum	61	54	52	61	62	64	63	64	72	74	74	73	76	59	54	58	68	72	76	78	79	73	73	72	74	77	78	71	75	62	67	68.3
Koshkonong	Maximum	90	88	91	95	99	101	103	100	103	103	105	105	105	85	84	92	..	102	101	99	102	97	87	95	100	104	107	107	100	99	92	*98.0
	Minimum	66	59	59	64	70	73	78	80	74	83	85	87	81	70	60	60	..	63	82	82	75	80	70	72	73	85	75	80	77	78	75	*73.9
Lebanon§§	Maximum	81	88	91	96	97	100	99	97	101	102	104	104	94	88	85	95	102	101	101	101	102	89	87	90	98	101	104	105	97	100	94	96.6
	Minimum	54	54	49	59	66	70	66	65	64	64	69	69	73	55	50	48	48	60	65	70	75	68	67	66	68	72	75	73	68	63	65	63.8
Mountain Grove§§	Maximum	89	90	82	93	97	98	98	96	103	104	105	102	101	88	87	94	97	100	99	97	101	92	87	94	98	100	103	105	97	97	94	96.4
	Minimum	58	52	58	62	67	70	71	68	65	70	72	73	74	59	50	55	62	66	72	70	72	68	63	63	70	73	75	75	72	68	67	66.5
Neosho	Maximum	87	85	92	91	92	93	93	93	96	97	98	97	96	84	81	92	95	98	98	99	99	95	95	94	98	100	100	102	100	93	92	94.5
	Minimum	56	53	58	66	66	69	67	67	65	66	64	68	71	58	49	46	54	60	65	68	72	68	67	71	70	72	72	75	66	65	65	64.5
Rolla	Maximum	83	83	87	95	96	99	98	97	98	101	103	101	97	81	80	90	99	102	102	100	102	97	88	83	94	101	104	105	101	94	90	95.2
	Minimum	60	56	54	65	74	72	72	67	71	74	74	75	75	63	56	50	56	66	72	73	76	70	69	68	72	75	76	74	74	67	66	68.1
Springfield	Maximum	80	84	82	90	90	92	92	89	94	96	98	96	92	80	79	90	93	95	95	95	96	84	78	90	94	97	98	100	91	94	88	90.7
	Minimum	62	59	65	68	72	73	71	68	70	76	76	78	68	63	56	60	66	69	71	72	71	67	66	73	74	76	78	78	75	71	68	69.7
Southwest Plain																																	
Appleton City	Maximum	84	84	86	91	94	95	95	95	99	99	100	100	94	80	83	94	97	100	97	100	97	86	82	89	97	101	102	106	93	91	93	93.7
	Minimum	60	57	62	66	69	72	68	68	69	70	72	72	73	61	51	55	62	63	67	69	71	69	69	67	72	74	75	71	71	67	67	67.1
Clinton	Maximum	87	89	88	95	98	102	100	100	104	105	107	105	92	85	89	96	103	106	105	105	105	90	87	90	100	104	105	112	98	96	96	98.2
	Minimum	60	57	60	63	70	70	68	68	70	71	72	72	77	62	56	52	63	65	65	68	72	70	68	68	72	74	75	71	71	68	68	67.3
Harrisonville§§	Maximum	84	86	86	94	98	99	95	96	98	100	100	100	84	80	86	96	99	103	100	104	91	86	80	88	99	105	106	106	91	88	95	94.3
	Minimum	58	57	63	64	68	74	64	70	70	74	74	73	72	58	52	54	61	65	66	71	74	68	69	67	68	73	74	71	70	68	67	67.0
Lamar§§	Maximum	83	86	86	91	93	93	93	95	99	99	100	97	86	82	82	95	95	97	99	101	102	87	82	90	99	99	98	101	94	95	94	93.3
	Minimum	62	57	62	67	70	73	71	70	67	69	71	72	74	62	52	53	60	65	69	71	72	66	68	68	72	74	74	74	71	70	67	67.5
Lamonte	Maximum	82	85	88	96	99	100	99	97	101	102	104	101	84	79	84	96	101	105	103	103	95	86	85	89	99	105	106	108	96	96	94	95.7
	Minimum	58	57	62	66	66	68	69	68	70	73	79	73	72	59	48	55	63	66	71	72	72	67	67	68	73	76	74	73	70	62	69	67.3
Marshall	Maximum	86	83	88	97	99	100	97	97	100	101	103	100	99	81	82	95	100	104	102	102	98	83	86	90	99	105	106	103	97	95	92	95.8
	Minimum	60	57	61	65	72	74	69	70	73	76	75	75	75	59	47	58	67	68	74	72	73	61	64	68	78	73	79	76	72	65	68	68.5
Nevada	Maximum	82	84	84	91	93	94	96	96	98	99	99	100	88	86	83	94	96	99	98	100	99	86	81	88	97	100	101	104	94	93	91	93.4
	Minimum	61	58	57	67	73	73	71	73	69	71	73	73	73	60	50	52	68	70	71	72	75	70	67	68	72	74	76	74	74	68	66	68.4
Warrensburg	Maximum	82	87	92	96	99	102	97	98	104	102	104	103	93	79	83	99	101	103	102	104	95	86	86	90	100	105	106	109	95	96	96	96.6
	Minimum	68	55	62	66	72	73	66	68	81	74	74	75	72	59	49	58	67	68	74	75	75	67	68	67	73	82	86	73	68	65	68	69.3
Warsaw	Maximum	86	90	91	98	98	101	100	99	103	104	105	103	96	86	89	99	102	103	103	104	102	91	92	92	101	105	106	109	100	98	98	98.5
	Minimum	56	53	60	68	71	75	70	67	68	70	70	71	77	61	49	47	56	59	67	67	74	70	68	69	73	76	80	71	74	67	67	66.8
Northwest Plateau																																	
Chillicothe§§	Maximum	82	84	92	91	97	99	97	98	100	105	103	99	81	79	87	98	101	97	104	103	89	86	91	94	98	106	107	99	88	95	97	95.1
	Minimum	54	53	59	61	70	71	67	68	71	72	74	72	69	55	54	51	60	63	73	69	80	59	56	61	69	78	73	64	58	56	64.8
Grant City	Maximum	78	83	84	84	96	96	96	97	99	101	99	89	84	76	85	96	99	102	101	102	91	84	86	93	96	103	106	92	90	83	92	92.4
	Minimum	55	56	56	67	71	68	67	70	74	74	75	73	67	54	51	57	66	68	76	71	70	63	61	63	70	76	80	74	63	66	63	66.6
Kansas City	Maximum	83	85	87	94	97	99	96	97	100	100	99	99	88	77	83	95	99	102	99	101	87	83	77	89	99	103	104	99	86	89	90	93.1
	Minimum	63	63	66	71	76	68	71	76	76	78	81	81	71	61	59	67	74	76	80	79	75	69	70	68	73	83	84	77	69	70	68	72.4
Kidder§§	Maximum	79	82	85	94	97	92	96	95	98	99	99	96	84	75	84	95	100	102	101	102	85	84	80	92	100	104	106	98	86	91	93	92.7
	Minimum	52	52	57	60	62	70	66	69	70	71	72	72	67	53	46	54	58	66	68	69	71	59	59	61	69	70	78	75	64	57	58	63.7
Lexington§§	Maximum	82	82	85	89	96	98	96	97	98	98	99	95	95	78	84	93	97	100	98	100	86	83	82	89	97	102	103	96	88	76	92	92.2
	Minimum	60	59	63	66	75	77	69	73	75	77	77	77	74	60	53	61	68	70	77	76	78	66	66	68	71	81	80	78	69	64	65	70.1
Maryville	Maximum	83	83	87	92	98	96	99	98	102	102	100	95	90	74	86	95	100	103	102	103	97	86	86	92	97	103	107	99	89	85	94	94.3
	Minimum	54	57	62	68	74	69	69	69	71	71	70	71	67	54	52	60	67	70	71	71	68	60	60	62	71	71	81	80	72	65	60	66.0
Oregon	Maximum	85	88	89	96	100	99	100	99	101	103	100	94	88	83	89	100	102	106	103	104	92	86	83	93	100	105	107	95	93	85	94	95.5
	Minimum	55	60	62	70	75	68	71	75	76	77	77	77	68	54	54	65	70	72	78	76	70	64	65	66	75	59	79	76	65	65	61	68.5
St. Joseph	Maximum	81	85	84	94	99	98	96	97	98	100	100	96	86	77	84	96	100	103	101	103	85	83	80	91	100	104	106	94	86	84	88	92.9
	Minimum	58	60	63	71	76	67	72	75	76	78	78	80	68	59	55	64	73	75	80	78	70	66	64	67	73	82	82	73	65	63	62	70.1
Trenton	Maximum	79	81	84	89	99	97	99	99	101	103	102	97	85	75	85	96	101	104	104	103	96	84	89	93	101	106	109	97	89	91	94	94.6
	Minimum	58	55	62	64	76	74	68	69	73	74	76	74	70	55	49	54	63	68	74	73	70	62	58	61	68	77	85	76	67	61	57	66.8

*, b, °, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 6-19-30—955.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., AUGUST, 1930 NO. 8

GENERAL SUMMARY

August weather was largely a continuation of the general and outstanding features that characterized the preceding month of July, excessive sunshine, high temperatures, low state of atmospheric humidity and general drought, with these exceptions, however, there were more local showers than in July, and the heat was less intense during the latter half of August. For Missouri, as a whole, August made the seventh consecutive month of deficient precipitation, the total received during that period being only 15.26 inches, or nearly 11 inches short of the normal.

As averages go, it was the hottest August since 1918 and the driest since 1913. As compared with the maximum of any single day, the value 114°, at two stations on the 9th, was the highest ever recorded in any August since the beginning of authentic temperature records in 1888. On or about the same date 12 stations recorded 111°, and 19 stations had 110°, and these high values were general. The previous high August record was 111°.

As compared with other years back to 1867, seven other Augusts were drier than the current month, namely in 1913, 1909, 1901, 1894, 1889, 1881, and 1873. Leaving out the northwestern plateau, comprising about 16 counties that received about 89 per cent of the normal rainfall, the remainder of the State was, doubtless, as dry or even drier than any August in the past, getting generally less than half the normal, while most of the east-central and southeast counties received less than one-fourth the usual August rainfall.

The heat was mitigated along about the 10th to the 15th, along with some fairly good local showers. This change brought a welcome relief to man and his livestock, to the wild birds, and fishes, as most of the creeks and smaller rivers had dwindled to mere puddles. The corn crop, as a future grain yield, had been all but ruined; but in the more favored localities where the rains were heavy enough, ground was plowed and put to rye and wheat for fall pastures; legumes were helped, and domestic and stockwater supplies were replenished.

TEMPERATURE

The monthly mean temperature for the State, as shown by the records of 67 stations, was 78.5°, or 2.5° above the normal. The highest local monthly mean was 81.8° at Clinton Henry County; the lowest was 74.4° at Arcadia, Iron County. The highest temperature recorded was 114° at Campbell, Dunklin County, and Clinton, Henry County on the 9th; the lowest was 47° at Steffenville, Lewis County on the 11th; the greatest daily range was 52° at Marble Hill on the 3d. Temperatures were 90° or higher on 19 days, 100° or higher 8 days.

PRECIPITATION

The average precipitation for the State, 97 stations reporting, was 2.02 inches, or 1.73 inches less than the 60 years' average, and 0.48 of an inch less than August, 1929. The greatest local monthly amount reported was 4.81 inches at Maryville, Nodaway County; the least local monthly amount was 0.04 inch at Valley Park, St. Louis County. The average number of days with .01 inch or more rain was 8 to 9 north of the Missouri River, and 5 south, the latter being less than normal.

MISCELLANEOUS PHENOMENA

Fogs, dense.—14th, 15th, and 19th.

Halos, lunar.—None. Solar.—2d, 15th, and 16th.

Hail.—None.

Thunderstorms.—Local and usually moderate, 3d, 4th, 5th, 7th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 21st, 28th, 29th, 30th, and 31st.

ERRATA

July, 1930: Campbell, days partly cloudy and cloudy, 9 and 0. Fulton, date highest temperature 29th; date lowest temperature 16th. Jackson, lowest temperature 47 on 16th. King City, days with .01 inch or more rain 4. Poplar Bluff, days clear and partly cloudy, 20 and 11.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.01	74	47	291	69	3,916	5.3	17	n.	18
Hannibal	30.04	73	..	...	..	4,053	5.4	21	sw.	3
Kansas City	29.98	64	43	358	85	5,609	7.5	21	nw.	16
St. Joseph	29.98	73	49	282	66	4,218	5.7	30	nw.	16
St. Louis	30.01	62	39	250	59	5,800	7.8	24	sw.	3
Springfield	30.03	64	42	364	87	5,224	7.0	29	w.	16
Cairo, Ill.	30.01	71	47	...	..	4,249	5.7	23	n.	10
Keokuk, Iowa	30.04	70	47	281	73	3,350	4.5	18	sw.	3

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	74.0	− 1.6	110	48	7.25	−3.80	....	0	11	..	..	..
1889	73.5	− 2.1	101	52	1.96	−1.49	....	0	14	..	..	..
1890	73.3	− 2.3	104	49	4.84	+1.39	....	0	9	..	..	..
1891	73.2	− 2.4	108	38	5.34	+1.89	....	0	8	..	..	..
1892	74.3	− 1.3	100	40	2.42	−1.03	4.55	0	6	17	8	6
1893	72.8	− 2.8	100	40	2.20	−1.25	5.60	0	4	18	10	3
1894	77.0	+ 1.4	111	39	1.58	−1.87	3.07	0	5	14	16	1
1895	75.3	− 0.3	104	48	4.23	+0.78	3.50	0	8	15	11	5
1896	76.6	+ 1.0	108	41	3.25	−0.20	4.80	0	6	17	10	4
1897	74.1	− 1.5	108	41	2.39	−1.06	5.00	0	6	19	9	3
1898	75.8	+ 0.2	103	44	3.03	−0.42	4.75	0	5	17	10	4
1899	78.8	+ 3.2	107	49	3.35	−0.10	4.28	0	7	18	10	3
1900	80.3	+ 4.7	105	52	3.51	+0.06	2.77	0	6	19	9	3
1901	78.4	+ 2.8	109	47	1.88	−1.57	4.33	0	5	19	9	3
1902	75.0	− 0.6	103	47	6.16	+2.71	7.84	0	10	14	11	6
1903	74.4	− 1.2	102	43	5.40	−1.95	6.40	0	10	16	11	4
1904	73.7	− 1.9	100	43	5.46	+2.01	4.43	0	8	16	10	5
1905	76.4	+ 0.8	102	48	4.69	+1.24	3.94	0	8	19	7	5
1906	76.6	+ 1.0	101	40	4.72	+0.27	3.55	0	11	14	10	7
1907	77.3	+ 1.7	109	47	3.71	+0.26	6.30	0	9	17	8	6
1908	76.4	+ 0.8	102	46	3.87	+0.42	3.57	0	8	17	9	5
1909	79.5	+ 3.9	110	40	0.55	−2.90	4.00	0	2	24	6	1
1910	74.7	− 0.9	103	40	2.77	−0.68	5.80	0	6	15	9	7
1911	75.4	− 0.2	109	41	4.20	+0.55	5.17	0	7	15	8	8
1912	76.2	+ 0.6	104	41	4.19	−0.74	2.62	0	9	17	8	6
1913	82.8	+ 6.9	110	41	1.06	−2.51	3.51	0	3	22	7	2
1914	78.0	+ 1.8	106	49	4.25	+0.60	8.50	0	9	15	9	7
1915	69.8	− 6.5	98	37	7.86	+4.15	8.20	0	12	12	9	10
1916	79.2	+ 2.9	107	41	4.05	+0.49	6.48	0	7	19	7	5
1917	73.3	− 2.9	104	38	4.45	+0.94	5.20	0	9	16	8	7
1918	81.8	+ 5.8	111	45	3.34	−0.27	3.42	0	8	17	9	5
1919	75.7	− 0.5	106	44	4.29	+0.49	7.00	0	8	17	9	5
1920	73.1	− 3.0	102	43	4.78	+0.89	5.77	0	9	15	8	8
1921	76.8	+ 0.8	109	48	5.27	+1.63	5.20	0	9	14	0	7
1922	77.5	+ 1.2	107	46	2.40	−1.60	3.87	0	6	18	18	5
1923	77.3	+ 1.3	108	42	3.99	+0.31	5.25	0	8	16	9	6
1924	77.2	+ 1.2	106	48	4.14	+0.46	3.50	0	7	19	8	4
1925	76.5	+ 0.5	107	45	3.45	−0.23	4.26	0	6	19	8	4
1926	77.5	+ 1.5	106	50	5.63	+1.95	5.83	0	10	15	9	7
1927	71.1	− 4.9	97	39	5.06	+1.38	7.76	0	9	14	10	7
1928	76.4	+ 0.4	99	45	5.35	+1.67	5.52	0	9	15	10	6
1929	76.0	0.0	105	43	2.50	−1.25	3.27	0	6	18	9	4
1930	78.5	+ 2.5	114	47	2.02	−1.73	2.54	0	6	16	10	5
.....	....	.....	..	..	....	.....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	..	..	..	..	..

Climatological Data for August, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	80.0	+ 6.2	109	3	56	11	42	2.73	−1.16	1.32	0	8	16	1	14	sw.	O. K. Benecke
Clifton Hill	Randolph	731	31	78.8	+ 2.6	110	3	52	11	43	1.91	−2.12	0.96	0	11	18	7	6	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	78.4	+ 2.8	107	9	58	24	35	2.18	−1.42	0.95	0	7	7	16	8	sw.	U. S. Weather Bureau
Downing	Schuyler	876	9	77.3	+ 2.4	107	3	52	11†	35	1.20	−2.32	0.58	0	10	22	7	2	e.	James Taylor
Fayette	Howard	661	50	77.3	+ 1.2	110	9	53	24	44	2.18	−1.04	1.05	0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	77.6	+ 1.1	108	9	52	23	39	0.67	−2.84	0.32	0	6	14	13	4	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	0.89	−2.11	0.30	0	10	16	5	10	sw.	J. W. Pulliam
Hannibal	Marion	534	38	78.0	+ 3.0	104	9	54	22	35	1.45	−1.89	0.96	0	11	13	6	12	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	78.0	+ 1.3	107	8†	51	24†	41	2.11	−0.95	1.52	0	10	10	15	6	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	77.0	+ 3.0	107	3	52	22	36	3.04	−0.28	1.07	0	7	21	4	6	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	76.6	+ 1.6	110	8	48	23	46	1.77	−1.96	0.70	0	6	11	18	2	s.	Stark Bros. Nurseries
Macon	Macon	875	31	77.4	+ 1.1	109	3	52	11†	40	2.39	−0.89	0.85	0	9	21	3	7	w.	W. C. Brown
Mexico	Audrain	800	41	78.1	+ 2.0	110	9	51	11†	41	0.84	−2.41	0.20	0	8	22	6	3	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	1.86	.....	0.41	0	9	13	12	6	ne.	J. S. Conway
St. Charles	St. Charles	456	42	80.2	+ 3.5	109	4†	55	11	39	0.30	−3.16	0.18	0	3	7	17	7	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	80.4	+ 2.9	105	4	59	22	25	0.28	−2.71	0.09	0	6	16	8	7	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	80.0	+ 2.8	105	4	60	22	25	0.22	−5.39	0.07	0	8	17	8	6	se.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	2.38	−0.47	0.75	0	12	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	32	76.9	+ 0.2	109	9	47	11	47	2.43	−1.04	0.65	0	8	12	15	4	s.	Frank Hall
Unionville	Putnam	1,062	37	78.2	+ 3.2	111	3	50	11†	40	1.97	−1.99	0.80	0	5	14	9	8	sw.	Geo. W. Davis
Warrenton	Warren	816	48	80.9	+ 4.5	109	8	55	11	36	0.26	−2.92	0.18	0	2	5	22	4	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	78.0	+ 3.0	106	3	59	21	32	2.11	−1.09	1.09	0	9	8	11	12	ne.	U. S. Weather Bureau
Section means and	extremes	.....	..	78.4	+ 2.5	111	3	47	11	47	1.61	−1.91	1.52	0	8	14	11	6	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	78.0	.....	114	9	49	23	46	3.53	.....	2.00	0	7	21	6	4	s.	Jeff. King
Caruthersville	Pemiscot	265	34	80.5	+ 0.8	108	8†	60	21†	33	2.78	−0.79	2.25	0	3	25	3	3	s.	Sam Smith
Doniphan	Ripley	344	26	80.0	+ 2.6	111	8†	51	27	50	0.60	−3.71	0.23	0	3	21	7	3	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	76.3	+ 0.1	109	9	52	24†	40	1.46	−2.15	0.85	0	7	6	10	15	s.	John G. Putz
Marble Hill	Bollinger	470	35	79.0	+ 2.0	111	9	52	25	52	1.07	−2.43	0.25	0	6	13	15	3	n.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	0.82	−2.99	0.34	0	4	22	8	1	s.	John A. Spence
Poplar Bluff	Butler	339	26	78.0	0.0	112	9	55	24	43	3.59	−0.68	2.54	0	4	17	10	4	e.	J. H. Wolpers
Sikeston	Scott.	318	29	80.0	+ 2.4	111	8	56	23	40	0.62	−3.19	0.25	0	4	..	..	..	.....	Glen R. Fisher
Cairo, Ill.	Alexander, Ill.	358	55	79.4	+ 1.6	106	9	61	22	28	0.76	−2.26	0.46	0	8	14	9	8	s.	U. S. Weather Bureau
Section means and	extremes	....	..	78.9	+ 1.4	114	9	49	23	52	1.69	−2.28	2.54	0	5	17	9	5	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	74.4	− 0.1	107	9	49	23†	46	1.08	−2.64	0.49	0	4	23	2	6	e.	Arcadia College
Aurora	Lawrence	1,370	38	78.3	+ 1.5	101	3	55	23	31	2.53	−1.74	1.18	0	5	23	8	0	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	77.2	+ 1.3	106	8	54	23	38	2.69	−1.70	1.08	0	4	26	2	3	ne.	V. H. Kirkendall
Dean ‡‡	McDonald	1,000	31	78.3	+ 0.8	108	3	49	24	46	2.62	−1.65	1.25	0	4	21	10	0	s.	H. E. Dean
Eldon	Miller	934	34	77.8	+ 1.4	110	8	54	22	39	2.21	−1.77	0.94	0	7	4	15	12	sw.	E. H. Shepherd
Farmington	St. Francois	918	19	78.2	+ 3.4	111	9	51	24	40	0.62	−2.76	0.44	0	3	11	17	3	w.	Robert Forsyth
Goodland	Iron	1,000	36	75.2[f]	+ 0.7	110	9	48	23	45	1.85	−2.18	0.84	0	4	20	9	2	n.	F. M. Adams
Greenville	Wayne	381	7	77.2	.....	111	9	50	24	49	2.25	.....	1.25	0	3	17	11	3	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	2.27	.....	1.50	0	2	25	4	2	.....	A. W. Madison
Koshkonong	Oregon	958	29	80.8	+ 3.1	108	9	59	13†	32	4.01	−0.44	1.78	0	6	18	5	8	sw.	R. M. Hitt
Lebanon	Laclede	1,265	43	77.6	+ 1.3	107	9	49	22†	45	0.94	−2.59	0.40	0	4	24	3	4	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	80.1	+ 2.9	105	9	57	23	34	3.92	−0.25	2.30	0	6	23	6	2	sw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	29	78.0	+ 2.9	108	9	54	23	40	1.97	−2.43	0.85	0	7	17	12	2	ne.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	79.2	+ 2.3	103	3†	52	23	40	2.18	−1.91	1.36	0	6	24	7	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	78.9	+ 3.1	107	9	55	25	34	3.63	−0.45	1.55	0	5	8	4	18	s.	F. H. Lane
Salem (near)	Dent	1,173	26	76.3	+ 0.2	108	9	51	22	40	2.17	−2.24	1.15	0	5	21	7	3	sw.	A. C. Leech
Seligman	Barry	1,542	28	79.1[a]	+ 3.5	103	9	53	23	36	1.25	−2.74	0.72	0	5	21	9	1	e.	Floyd E. Pawver
Seymour (near)	Webster	1,642	24	77.2	+ 2.2	105	9	53	23†	40	1.09	−2.75	0.65	0	2	25	6	0	sw.	Ira H. Hailey
Springfield	Greene	1,324	42	78.9	+ 3.2	101	9	60	12	26	3.02	−1.07	1.39	0	6	27	4	0	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	77.9	+ 2.0	111	9	48	23	49	2.23	−1.84	2.30	0	5	20	7	4	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	79.9	+ 2.1	106	8†	57	12†	36	0.82	−2.92	0.42	0	5	4	21	6	nw.	W. G. Bigelow
Clinton	Henry	765	37	81.8	+ 5.0	114	9	57	22	43	1.74	−1.62	1.05	0	5	16	13	2	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	78.8	+ 3.0	109	3	56	13	37	2.69	−1.46	1.34	0	6	4	7	20	s.	John H. Patterson
Lamar	Barton	980	43	80.0	+ 2.5	106	8†	57	23	37	3.85	−0.33	2.18	0	5	24	5	2	sw.	Jesse A. Mann
Lamonte	Pettis	867	30	79.4	+ 2.7	110	3†	55	24	38	1.26	−2.46	0.58	0	6	28	2	1	s.	J. E. Wheeler
Marshall	Saline	779	42	79.9	+ 4.3	108	3	55	11	36	1.50	−2.16	0.52	0	5	18	3	10	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	80.4	+ 3.5	106	9	55	23	38	0.30	−3.21	0.20	0	2	17	8	6	sw.	George A. Kaupp
Warrensburg	Johnson	878	43	80.3[d]	+ 3.3	110	8†	55	22	43	1.28	−2.31	0.66	0	5	13[d]	11[d]	3[d]	sw.	E. A. Markey
Warsaw	Benton	687	29	80.8	+ 3.4	109	9	54	22	45	1.14	−3.15	0.65	0	3	20	8	3	s.	Everett Martin
Section means and	extremes	.....	..	80.1	+ 3.3	114	9	54	22	45	1.62	−2.18	2.18	0	5	16	9	6	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	77.5	+ 2.6	111	3	50	23	45	3.92	+0.04	0.87	0	7	19	10	2	e.	A. S. Cumming
Chillicothe	Livingston	779	20	76.2	+ 0.1	108	3	49	10	39	2.20	−2.46	0.65	0	9	14	17	0	e.	Wm. J. Olenhouse
Conception	Nodaway	980	41	78.0	+ 3.4	107	3	54	11	33	4.54	+1.06	2.16	0	9	13	14	4	e.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	76.0[f]	.....	109	4	54	23	51	1.71	−2.13	0.67	0	9	23	4	4	s.	Fred L. Stiff
Grant City	Worth	1,134	26	77.5	+ 2.6	108	3	56	11†	35	3.32	−0.31	0.75	0	10	9	19	3	e.	W. P. Spillman
Kansas City	Jackson	963	41	80.2	+ 3.6	107	3	56	12	28	3.48	−0.61	1.61	0	8	16	12	3	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	76.4	+ 0.7	111	3	52	11†	39	3.55	−0.36	1.98	0	7	8	13	10	e.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	3.26	.....	1.39	0	7	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	80.0	+ 4.0	107	3†	58	22	33	1.71	−1.52	0.95	0	7	20	10	1	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	77.8	+ 4.2	111	3	54	11	38	4.81	+0.95	1.14	0	10	16	1	14	s.	J. R. Brink
Oregon	Holt	1,048	74	79.7	+ 4.7	108	3	56	11	34	4.13	+0.16	1.01	0	9	17	13	1	se.	Mina Wright
St. Joseph	Buchanan	967	22	78.8	+ 2.1	107	3	59	25	29	3.29	−0.12	1.48	0	11	18	8	5	se.	U. S. Weather Bureau
Tarkio	Atchison	916	27	75.7	+ 0.1	105	3	53	11	33	3.97	+0.10	1.05	0	13	10	10	11	se.	Albert Volker
Trenton	Grundy	822	34	78.4[a]	+ 3.2	110	3	54	11	42	3.62	0.00	2.03	0	10	17[a]	10[a]	3[a]	s.	W. H. Estes
Section means and	extremes	.....	..	77.9	+ 2.4	111	3	49	10	51	3.39	−0.40	2.16	0	9	15	11	5	e.	
State means and	extremes	.....	..	78.5	+ 2.5	114	9	47	11	52	2.02	−1.73	2.54	0	6	16	10	5	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for August, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Becker	Missouri												.07	.52	.01		.13	.06	1.04														1.84
Boonville‖	do					.01							.04	1.32	.05		.33	.54	.30												.07	.08	2.73
Brunswick‖	Grand										T.		.05	.29			.96	.26	.21		.01									.03	.01		1.91
Clifton Hill	Chariton				.01	T.			.03	.05	T.		.28	.89	T.		.08	.03	.85		T.								.02	T.			2.18
Columbia***	Missouri				.03	T.					T.		.28	.89	T.		.08	.03	.85		T.									.05	.04	T.	1.20
Downing	Mississippi			T.	.03			.02			.58		T.	.03			.13	.15		.14		.03											2.18
Fayette‖	Missouri					.02							.11	1.05	.06		.36	.18	.46														0.67
Fulton‖	do			.01	T.				.12				.32	.03		.02	T.	.17			T.								T.				0.89
Gorin	Mississippi				.02			.02			.30		.02	.06				.03		.05		.04								.27	.08		1.45
Hannibal***	do				.03	T.					.27	T.	.02	.03	.01		.10	.01		.01	T.								.23	.73	.01		0.82
Hermann‖	Missouri										T.		.09	.11	.38				.10	.11		.02								.01			2.11
Jefferson City‖	do				.06	.07							.08	1 52	.20		.05	.03	.10	.02										.03			3.04
Kirksville	Mississippi										.65		.23				.53	.34												1.07	.07	.15	1.77
Louisiana	do										.33		.10	.50	.70		.02													.12			3.24
Lucerne‖	Grand		.17						.60				.17				.20	1.48			.09								.23	.14	.16	2.39
Macon ‖	Chariton										.42		.10	.10	.12		.28	.85				.05								.40	.07		0.84
Mexico ‖	Mississippi											.05	.16	.20	.12		.07	.11	.05											.08			2.25
Milan‖	Grand		.09								.77		T.				.30		.41											.48	.07	.18	1.86
Monroe City	Mississippi				.28					T.	.35		.07	.12			.22	.28		.05										.41	.08		0.20
Pacific‖	Meramec					T.							T.				.20													T.			0.30
St. Charles	Missouri					T.				T.	.05		T.	T.	.07		.18			T.												T.	0.28
St. Louis (1)***	Mississippi					.09			T.	T.	.05	T.	T.	.05	.03		T	T.		T.	T.									.02		.04	0.22
St. Louis (2)*	do					.05			T.	.02	.04		T.	.07	.01		.01	T.												.01			2.38
Shelbina ‖	do				.02						.36		.07	.15	.18		.40	.22	.75	.02		.03								.14	.04		2.43
Steffenville	do				.03						.50						.32	.25		.05									.65	.60	.03		0.10
Union‖	Meramec					.03							.03	.04																			1.97
Unionville	Chariton										.80		.40	T.				.30			T.									.35		.12	0.04
Valley Park	Meramec					T.	T.						T	T.	.04				T.			T.								T.	T.		0.26
Warrenton	Mississippi					T.					T.		.08	.18					T.											T.			2.11
Keokuk, Ia.***	do				.04	T.	T.	T.	T.		.15	T.		1.08	.01		.18	.15		T.	T.								.39	.07	.04		
Southeast Lowlands																																	
Campbell‖	St. Francis										.05			.15	.40	.03	.60	2.00														.30	3.53
Cape Girardeau‖	Mississippi										.39				.06			.13	.65	.11													1.34
Caruthersville ‖	do												.08	.45			2.25																2.78
Dexter‖	St. Francis					.21								.14	.56		1.06	T.		.08												.23		2.28
Doniphan	Black									.23										.22											T.	.15		9.60
Jackson	Mississippi									.20	.15		.02	.11			.08	.85														.05		1.46
Marble Hill	Mississippi												.12	.10			.15	.25	.20													.25		1.07
Morehouse	do												.08	.34	.11		.29																	0.82
New Madrid‖	do													.06	.13	.22		.52														.01		0.94
Poplar Bluff‖	Black													.40	.37		.28	2.54																3.59
Sikeston‖	Mississippi									T			.09	.16			.25															.12		0.62
Cairo, Ill.***	do									.02			.01	T	.10		.10	.43	.03												.06	.01		0.76
Ozark Plateau																																	
Arcadia ‖	St. Francis												T.	.49	.41		T.	T.	T.	.08	.10											T.		1.98
Aurora	Neosho				.13								T.		T.	.38	1.18	.82	.02															2.53
Birchtree (near)	Black													1.08		.22	.67															.72		2.69
Caplinger Mills	Osage					T.										1.10	.25	.03																1.38
Dean	Neosho				1.25						T.					.15		1.00	.22															2.62
Eldon‖	Missouri					.03							.08	.94	.93			.06	.07	.10														2.21
Farmington	St. Francis												.14	.44		T.			.04															0.62
Galena‖	White			.02									.19		.89	.83		.71																2.64
Goodland	Black												.35	.84					.48														.18		1.85
Greenville	St. Francis												.40	.60			1.25																		2.25
Hailey	White				1.50													.77																2.27
Koshkonong	Black				T.									1.78		.40	.50	.48		.39													.46	4.01
Lebanon ‖	Osage													.40	.04		.38			.12														0.94
Leeper‖	Black													.47	.81		.72	T.															T.	2.00
Lockwood	Osage											.08			.35	.30	.79	.10	2.30															3.92
Mountain Grove‖	White					T.								.85	.02	T.	.78	.04	.17	.08													.03	1.97
Neosho	Neosho				.05						T.	.02			T.	T.	1.36	.38	.25			.12	T.		T.									2.18
Owensville ‖	Gasconade												T.	.70	.40				.70															1.80
Ozark Beach‖	White																																	
Rolla ‖	Meramec													1.30	1.55		.09		.53	.16													T.	3.63
Salem (near)	do												.82	.90		T.	.28		.15	.02														2.17
Seligman	Neosho				.38											.07	T	.72	.02			.06											T.	1.25
Seymour (near)	White				T.								T.			T.	.65		.44															1.09
Springfield ***	do				T.							.17	.82	T.	T.	.12	1.38	.28	.75				T.		T.									3.02
Steelville‖	Meramec													.73	.49		.17		.65	.44		T.												2.48
Stover ‖	Missouri													1.25			.10		.04	.27										T.				1.66
Tuscumbia ‖	Osage				T.								.04	1.24	.10		T.		.49	.07														1.94
Williamsville‖	Black													.27	.55		2.18	.16														.04		3.20
Willow Sprgs. ‖ (near)	White					.07								.65	.15	.25	.75	.08		.38													.03		2.36
Southwest Plain																																	
Appleton City	Osage				T.	T.						T	.22		T.	.02	.42	.03	.13						T.				T.				0.82
Clinton	Osage					.05							1.05			.10	.52		.02															1.74
Concordia‖	Missouri												.30	.84		.12	.26	.12																1.64
Harrisonville‖	Osage												.35	.45			.17		1.84	.31											.07			2.69
Joplin‖	Neosho																																	
Lamar ‖	do					T.							.24		T.	2.18	.20	.28		.95														3.85
Lamonte	Missouri				.04								.58	.16	.04		.36		.08																1.26
Marshall	do				T.								.25	.36			.22	.15	.52	T.										T.		T.		1.50
Nevada	Osage											T.				T.		.10	.20															0.30
Osceola‖	do													.26	.14		.06	.06																0.52
Warrensburg	Missouri												.66	.07	.03				.24											.28					1.28
Warsaw	Osage				T.									.65			.44		.05																1.14
Waverly ‖	Missouri												.10	.40			.25	.31																	1.06
Northwest Plateau																																	
Bethany	Grand										.87		T.	.15			.27	.75	.26											.85	.77		T.	3.92
Chillicothe ‖	do									.22	.06		T.	.28			.65	.62	.19	T.											.06	.02	.10	2.20
Conception	Missouri										.42		.06	.10			.71	.90	1.26	T.										.19	.32	.58		4.54
Edgerton	do										T.	T.	.26	.67		.01	.28	.12	.28	T.	.01										.01	T	.07	1.71
Gallatin ‖	Grand									.70		T.	T.	.25	.09		.71	.45	.21												.80	.07		3.28
Grant City	do										.75	T.	T.	.08		T.	.45	.56	.24	.06	T.									.18	.26	.36	.38	3.32
Kansas City***	Missouri				.01	T.					T.	T.	1.60	.01	T.	T.	.10		1.55	T.		.01		T.							.07	.13		3.48
Kidder ‖	Grand					T.							.06	.37			.88	.13	1.98												.09	.04	T.	3.55
King City	Missouri			T							.05		.09				.71	.37	1.39												.39		.26	3.26
Lexington	do					.09							.25	.95	.02		.14	.15	.11																1.71
Maryville ‖	do									T.	.60	.08		.06			.50	1.14	.94	.60										.17	.17	T.	.55	4.81
Oregon	do					T.					.16		.41	.80		T.	1.01	T.	.65	T.	.23	.08								T.	.75		.04	4.13
St. Joseph***	do			T.	T.						.05	T.	.50	1.03	T.	.01	1.21	.09	.23	.07		.01		T.							.03	.06		3.29
Tarkio	do			T.			.15		.25		1.05		.15	.01			.56	.06	.19	.35		.10								.25	.34	.51		3.97
Trenton	Grand		.13			T.			T.		.19	T.	.03	.08			.43	2.03	.09		T.										.53	.05	.06	3.62

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for August, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	101	103	109	104	104	105	104	108	106	86	90	75	95	89	90	95	94	84	86	88	86	89	91	94	95	96	96	95	95	96	96	95.0
	Minimum	59	63	68	78	72	71	72	73	72	71	56	58	60	60	65	68	68	67	65	63	63	57	57	57	61	60	60	62	68	70	68	64.9
Columbia	Maximum	96	99	104	90	97	101	102	105	107	84	85	73	88	80	88	86	85	80	82	84	81	81	83	86	90	92	94	93	94	95	89	90.1
	Minimum	61	72	79	76	73	75	73	79	75	66	59	60	60	68	64	69	70	65	66	62	64	58	58	58	58	59	61	68	70	71	72	66.7
Fayette	Maximum	99	100	108	92	99	103	105	109	110	79	89	67	90	81	79	79	89	80	85	86	83	85	89	91	95	95	97	95	95	98	92	91.7
	Minimum	55	58	65	74	70	70	70	72	70	73	55	60	58	61	62	66	68	65	65	60	62	55	55	53	56	56	56	57	65	68	69	62.9
Hannibal	Maximum	96	98	103	99	96	101	102	101	104	83	82	72	76	84	90	88	83	79	79	84	81	82	85	88	90	92	94	94	82	94	88	89.4
	Minimum	61	72	80	80	73	73	72	78	75	66	55	63	64	68	61	69	70	69	63	64	62	54	55	57	58	59	61	68	68	68	74	66.5
Jefferson City§§	Maximum	96	99	104	89	99	102	103	107	107	88	89	64	89	85	85	86	88	84	83	85	84	85	87	89	92	94	96	95	96	97	88	91.5
	Minimum	62	63	72	75	72	71	71	78	73	73	58	62	58	59	65	68	69	67	62	58	62	57	58	51	51	53	62	66	67	70	69	64.6
Kirksville	Maximum	96	100	107	99	98	101	102	102	102	96	80	74	83	86	91	88	85	78	77	79	80	81	85	87	90	92	92	88	81	90	89	89.6
	Minimum	60	70	80	76	74	72	72	76	74	65	53	57	57	58	62	67	66	66	75	59	55	52	54	55	59	59	63	69	64	64	65	64.4
Louisiana	Maximum	100	100	106	99	93	103	103	110	105	82	85	75	73	85	95	85	85	77	80	85	82	83	87	90	93	90	98	94	98	100	102	91.7
	Minimum	54	69	70	84	78	64	68	70	63	63	50	59	60	63	57	60	68	60	63	55	58	50	48	50	50	53	58	60	69	65	67	61.5
Macon§§	Maximum	96	102	109	103	99	102	104	106	106	84	85	72	89	87	93	89	88	79	80	83	82	84	85	88	90	93	94	92	84	94	91	91.4
	Minimum	61	66	69	81	72	72	73	74	74	64	52	53	57	57	61	62	66	68	63	59	55	55	52	57	60	59	60	64	66	66	66	63.4
Mexico§§	Maximum	100	103	105	94	97	106	108	109	110	80	85	70	92	80	98	92	87	76	86	83	83	84	87	92	94	97	98	99	97	99	92	93.0
	Minimum	59	68	68	79	72	70	69	77	74	70	51	57	56	59	58	65	67	66	61	56	59	51	53	53	56	57	60	63	67	67	70	63.2
St. Louis(1)	Maximum	92	96	103	105	98	102	103	105	104	80	82	76	79	81	88	88	88	76	80	83	82	81	85	86	89	92	95	95	92	93	82	89.7
	Minimum	70	73	78	84	77	82	83	83	80	67	63	66	63	67	69	71	73	68	64	63	64	59	64	65	71	72	75	73	72	75	73	71.2
Unionville	Maximum	100	103	111	105	100	105	104	103	102	92	84	78	90	90	90	92	86	85	80	81	84	85	86	88	94	96	94	90	84	94	92	92.5
	Minimum	60	70	77	78	75	70	70	74	70	65	50	55	57	67	63	66	65	66	64	65	53	50	52	53	60	57	64	70	64	63	64	63.8
Warrenton	Maximum	99	103	108	104	100	105	105	109	106	104	85	81	85	82	96	94	88	82	84	88	83	83	88	91	92	95	98	98	96	99	94	94.4
	Minimum	63	71	77	82	76	77	75	79	77	69	55	60	58	67	63	69	70	67	63	59	62	56	56	60	64	64	67	72	70	72	69	67.4
Southeast Lowlands																																	
Campbell	Maximum	97	101	106	107	104	107	108	111	114	99	89	83	75	98	88	93	95	88	86	86	86	82	87	90	93	94	99	100	99	89	88	94.9
	Minimum	56	55	60	70	66	68	68	71	70	69	64	57	60	62	68	64	64	64	65	59	57	53	49	54	53	53	55	56	59	62	65	61.2
Caruthersville	Maximum	96	99	100	102	100	104	105	108	108	99	91	85	75	94	90	85	91	88	86	86	86	82	85	89	82	92	94	97	97	85	97	92.8
	Minimum	65	66	74	73	73	75	76	77	78	70	64	65	65	70	73	70	67	69	63	64	60	60	61	63	64	65	66	69	70	70	70	68.2
Doniphan	Maximum	99	103	105	105	104	105	108	111	111	98	93	83	85	93	98	95	95	92	91	85	90	83	87	95	94	96	101	101	101	94	86	96.4
	Minimum	60	59	64	76	69	68	67	70	70	72	69	65	68	67	70	69	69	67	65	63	58	53	54	52	53	55	51	54	61	63	71	63.6
Jackson	Maximum	95	96	101	99	100	104	103	106	109	95	85	83	72	92	90	89	90	81	84	85	84	80	84	83	91	93	96	92	95	91	85	91.4
	Minimum	55	56	61	62	70	68	68	68	71	69	55	56	59	63	65	77	68	64	61	55	56	54	54	52	52	53	58	58	59	60	69	61.2
Poplar Bluff	Maximum	100	97	103	104	101	103	106	109	112	95	90	78	76	95	84	86	90	87	87	87	89	84	89	89	92	94	98	96	97	88	79	93.1
	Minimum	58	58	62	69	68	68	67	69	69	73	66	58	62	63	71	66	70	61	67	59	59	57	57	55	56	58	58	59	60	62	65	62.9
Sikeston	Maximum	91	99	101	105	104	106	107	111	110	94	87	75	76	95	94	86	93	88	87	87	86	81	87	91	94	95	97	100	100	90	89	93.7
	Minimum	74	61	61	74	71	74	74	76	74	77	63	61	62	66	72	66	66	65	60	65	57	58	56	60	60	63	65	60	67	75	70	66.2
Cairo, Ill	Maximum	92	95	98	99	98	101	102	105	106	88	83	79	75	90	88	83	89	84	83	83	82	79	83	86	89	91	93	96	95	86	84	89.8
	Minimum	68	69	74	77	74	76	77	77	78	72	63	63	65	69	71	66	71	70	66	61	66	61	63	63	66	64	68	68	69	71	72	69.0
Ozark Plateau																																	
Arcadia§§	Maximum	94	94	102	94	99	101	101	105	107	88	86	63	75	89	87	86	86	80	83	83	83	80	84	85	88	91	91	94	92	89	80	89.0
	Minimum	54	59	56	74	73	73	70	69	66	71	57	55	56	57	66	61	66	62	58	51	56	50	49	49	51	51	53	54	58	61	65	59.7
Aurora	Maximum	88	96	101	98	93	93	96	99	100	96	91	84	90	96	92	93	88	88	84	83	82	80	81	85	86	86	89	90	92	90	92	90.4
	Minimum	64	65	76	77	66	71	72	74	73	77	65	66	66	74	70	66	67	67	63	65	62	58	55	57	56	57	63	62	63	68	66	66.2
Birchtree	Maximum	95	98	101	96	98	100	103	106	102	89	85	92	87	99	90	87	85	85	82	83	88	80	83	86	88	91	96	95	95	90	88	91.7
	Minimum	65	63	64	65	64	68	70	68	69	68	64	68	58	61	67	67	68	64	64	57	64	56	54	56	58	56	58	57	60	60	59	62.6
Eldon§§	Maximum	97	100	103	89	100	101	103	110	107	92	88	64	88	83	87	90	90	82	83	85	83	83	85	88	91	93	95	96	97	97	89	91.6
	Minimum	63	63	67	77	70	72	69	71	72	73	58	58	57	59	68	69	70	68	63	60	61	54	56	55	57	56	58	59	68	67	67	64.0
Farmington	Maximum	96	101	106	98	106	108	106	109	111	93	86	73	79	88	90	92	90	87	84	87	85	81	84	87	90	95	96	98	94	90	82	92.6
	Minimum	58	63	69	72	73	74	75	75	71	71	55	57	58	62	63	61	68	65	61	64	63	54	54	51	63	67	57	61	60	62	70	63.8
Koshkonong	Maximum	98	102	104	98	99	103	103	106	108	99	90	83	75	94	84	88	85	87	84	85	84	79	83	85	90	93	94	96	95	90	80	91.9
	Minimum	68	70	74	77	77	74	75	78	80	81	77	70	59	67	70	69	70	73	64	73	62	59	61	60	67	68	68	68	69	66	65	69.6
Lebanon§§	Maximum	98	102	105	103	100	100	102	106	107	96	91	73	88	97	85	88	90	89	85	87	85	83	87	87	91	94	96	96	97	97	89	93.4
	Minimum	57	57	69	74	68	68	68	69	70	70	64	64	57	59	66	66	65	66	63	58	58	49	49	52	52	54	56	58	51	69	69	61.8
Mountain Grove§§	Maximum	99	101	103	93	98	100	103	106	108	99	92	76	83	100	81	88	86	89	85	85	86	83	87	86	88	90	93	96	95	90	80	91.9
	Minimum	62	67	70	75	67	72	70	73	71	71	65	65	56	60	69	66	66	66	64	63	61	56	54	55	55	57	60	59	62	65	68	64.2
Neosho	Maximum	93	100	103	102	95	96	98	102	102	99	96	93	103	101	100	97	96	91	87	88	89	89	87	85	87	90	92	94	94	94	95	94.8
	Minimum	60	60	69	75	64	66	65	65	66	72	65	64	68	74	74	65	68	70	62	66	62	57	52	60	53	53	55	57	56	62	66	63.6
Rolla	Maximum	95	101	105	101	101	102	102	105	107	102	88	84	83	87	83	86	83	83	82	83	81	79	82	83	86	90	93	93	95	93	88	91.2
	Minimum	65	68	77	80	75	75	72	74	76	74	61	63	57	66	68	68	65	71	66	59	64	59	59	61	55	61	59	63	65	69	69	66.6
Springfield	Maximum	93	97	100	98	93	94	96	99	101	95	80	76	86	95	88	91	87	84	82	84	82	79	83	82	86	86	89	91	91	90	84	89.1
	Minimum	71	71	75	73	69	74	74	76	79	73	65	60	66	76	70	66	69	63	66	66	64	61	62	67	64	66	67	68	69	70	70	68.7
Southwest Plain																																	
Appleton City	Maximum	96	100	105	99	98	99	102	106	106	103	89	84	98	95	91	94	93	88	85	88	85	85	87	86	89	92	94	93	96	96	94	94.1
	Minimum	64	66	73	74	70	69	69	70	72	75	66	57	62	68	68	68	64	64	63	65	57	58	64	60	60	61	60	60	62	68	66	65.7
Clinton	Maximum	99	105	110	98	103	105	107	113	114	96	91	86	95	87	91	99	96	90	86	90	86	87	90	91	94	98	99	97	100	100	97	96.8
	Minimum	66	65	78	76	71	71	70	71	71	76	77	61	63	68	68	67	70	68	64	62	65	57	60	60	61	60	60	62	68	65	66	66.7
Harrisonville§§	Maximum	98	103	109	100	99	102	105	108	108	89	85	67	89	82	88	97	93	77	81	85	80	83	84	87	88	92	95	91	92	97	94	91.9
	Minimum	66	66	73	75	72	69	71	73	72	74	65	57	56	62	68	68	69	64	65	64	64	58	60	60	62	63	64	64	64	67	66	65.8
Lamar§§	Maximum	97	100	105	104	98	97	101	106	106	100	80	88	102	98	90	95	90	89	88	90	82	85	85	85	90	94	93	94	96	97	93	94.1
	Minimum	64	64	68	75	68	69	69	70	69	71	68	65	69	71	68	68	68	69	64	66	65	59	57	58	59	59	61	62	64	67	66	65.8
Lamonte	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marshall	Maximum	97	100	108	96	98	102	102	106	105	100	86	82	90	87	88	91	89	89	83	84	85	82	85	90	92	93	95	94	94	97	94	93.0
	Minimum	65	70	72	80	73	74	72	80	82	72	55	59	59	68	66	68	66	66	64	62	61	56	60	61	60	61	64	68	67	70	70	66.8
Nevada	Maximum	93	101	104	102	97	98	101	105	106	97	89	87	104	94	91	96	92	85	87	89	85	84	87	85	89	92	95	95	96	92	92	93.9
	Minimum	63	70	74	78	70	72	73	74	68	74	65	65	66	69	68	69	68	66	62	65	64	57	55	66	57	57	61	63	70	70	68	66.8
Warrensburg	Maximum	98	105	110	100	103	103	105	108	110	98	87	77	91	83	..	..	..	85	85	90	86	86	87	90	97	..	97	94	93	98	98	[d]95.0
	Minimum	65	70	77	80	68	73	64	75	71	64	61	57	59	68	..	..	..	66	64	61	62	55	57	57	60	..	63	62	68	70	75	[d]65.6
Warsaw	Maximum	101	104	107	100	103	102	105	108	109	101	92	84	95	90	92	95	95	89	86	90	89	88	90	92	94	96	96	98	99	99	97	96.3
	Minimum	56	61	72	77	72	68	69	72	69	76	66	66	62	67	70	70	71	65	66	62	68	54	55	55	56	55	55	60	68	69	70	65.2
Northwest Plateau																																	
Chillicothe§§	Maximum	97	98	108	99	98	99	98	105	86	98	85	72	91	89	93	94	92	77	83	85	81	85	78	79	83	87	94	91	80	89	97	90.0
	Minimum	58	65	76	77	77	71	71	74	66	49	65	60	58	59	57	64	66	64	63	65	57	52	51	50	53	55	59	63	65	65	61	62.5
Grant City	Maximum	95	101	108	105	99	102	102	105	104	87	82	73	88	89	90	90	89	76	80	81	79	83	82	87	90	90	86	76	91	89	90	90.0
	Minimum	63	71	79	76	78	79	71	73	69	65	56	56	59	66	63	66	65	66	62	58	58	56	57	62	61	61	62	67	65	64	62	65.0
Kansas City	Maximum	97	102	107	98	98	99	100	103	104	85	82	73	89	80	89	95	90	74	78	85	77	79	83	86	87	90	91	88	89	91	92	89.7
	Minimum	72	78	87	82	78	78	80	83	81	70	65	56	61	70	71	68	71	66	66	65	65	62	63	68	67	68	72	70	70	71	71	70.8
Kidder§§	Maximum	100	102	111	102	98	102	101	105	104	82	84	70	88	81	88	91	89	76	80	82	72	80	84	85	97	90	90	82	83	90	91	89.7
	Minimum	72	68	76	80	73	73	70	74	69	66	52	52	56	58	62	63	65	62	62	55	57	53	55	56	58	59	60	60	64	64	60	63.0
Lexington§§	Maximum	93	100	107	100	100	102	105	107	107	102	81	81	90	82	92	92	92	88	77	81	81	79	81	90	92	92	94	91	87	87	92	91.8
	Minimum	67	73	82	82	73	77	75	79	74	72	69	60	59	68	69	68	69	67	65	62	63	58	59	59	60	62	64	69	69	70	69	68.1
Maryville	Maximum	98	104	111	108	98	103	102	105	105	92	80	76	89	88	90	92	91	84	80	84	78	81	85	88	89	92	92	84	80	92	90	91.3
	Minimum	60	72	82	74	74	75	70	70	67	64	54	60	58	65	61	65	63	65	64	60	61	60	57	60	57	59	59	66	65	64	62	64.3
Oregon	Maximum	99	105	108	106	102	104	103	106	106	89	85	73	90	91	91	94	90	81	81	89	80	86	83	87	90	91	91	87	89	94	94	92.4
	Minimum	65	75	83	80	76	78	78	78	72	66	56	60	60	67	69	66	67	65	65	59	63	59	58	59	60	64	65	68	67	66	64	67.0
St. Joseph	Maximum	96	103	107	102	99	102	101	101	101	81	83	71	85	85	88	93	89	77	79	85	75	82	82	85	87	89	90	85	88	92	92	89.5
	Minimum	68	76	85	82	77	79	74	78	72	67	61	59	60	69	70	66	69	67	66	62	64	61	60	62	59	62	65	68	69	69	66	68.1
Trenton	Maximum	97	102	110	108	101	104	104	104	105	95	84	74	91	90	93	..	92	85	81	81	80	83	84	84	91	92	94	88	84	93	91	[a]92.2
	Minimum	55	67	79	76	75	75	72	75	69	65	54	63	59	66	60	..	66	67	66	62	60	56	58	55	58	59	60	67	65	66	64	[a]64.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 9-19-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., SEPTEMBER, 1930 NO. 9

GENERAL SUMMARY

The hot and dry weather of July and August, continued over the opening days of September in all Missouri, but the heat and droughty conditions were relieved over most of the State by the second week. There were some highly beneficial rains during the period from the 6th to 15th, restoring substantial top-soil moisture and replenishing streams, as well as benefiting some late crops. Scattered showers followed later in the month, the additional rains helping much to put the ground in condition for fall seeding.

For the month as a whole, September was warmer, and wetter than normal. September also was the first month since January to receive normal rainfall, despite the fact the current months' rainfall was from 1 to 2 inches less than normal over most of the northern counties, the northern section receiving just under 3 inches; the three southern sections, southeastern lowlands, Ozark Plateau, and southwestern plain received an average rainfall of more than 5 inches. The rainfall was noticeably heavy in the southwest part of the State.

September rains helped a relatively small amount of late corn, and the bulk of the crop was safe from frost damage at the end of the month. Wheat seeding was more than half completed. The early sown was up to good stands and making some pastures. Soybeans, cowpeas, cane, and kaffir were benefited by the late rains and, mostly harvested. Pastures continued to improve slowly but were in need of more rain.

TEMPERATURE

The monthly mean temperature for the State, 67 stations reporting, was 71.3°, or 2.3° above the normal. The highest local monthly mean was 76.0° at Caruthersville, Pemiscot County; the lowest was 66.9° at Kidder, Caldwell County. The highest temperature recorded was 105° at Clinton, Henry County, on the 1st, the lowest was 37° at Goodland, Iron County, on the 27th; the greatest daily range was 47° at Warsaw on the 4th. Values were 90° or higher on 5 days; and 100° or higher on one day, the 1st, and at 24 stations.

PRECIPITATION

The average precipitation for the State, as shown by the records of 98 stations, was 4.18 inches, or 0.34 inch more than 60 years' average, and 0.98 inch more than September, 1929. The greatest local monthly amount reported was 12.87 inches at Neosho, Newton County; the least local monthly amount was 0.74 inch at Caruthersville, Pemiscot County. The greatest amount in any 24 consecutive hours was 4.00 inches at Hailey, Barry County on the 9th. The average number of days with 0.01 inch or more was 8.

MISCELLANEOUS PHENOMENA

Fog, dense.—At Conception on the 7th, and St. Louis on the 8th.

Hail.—Moderate hail, without material damage, at Jefferson City on the 6th; Arcadia, Edgerton, and Mountain Grove on the 12th; Brunswick, on the 14th. At Clinton, Gorin, St. Joseph, Unionville, and King City on the 25th, a few large stones fell at Gorin.

Halos, lunar.—3d, and 9th.

Halos, solar.—3d, 4th, 5th, 8th, 10th, 12th, 15th, 17th, 18th, and 24th.

Thunderstorms.—Local on the 2d, 4th, 5th, 8th, 10th, 11th, 12th, 15th, 18th, 23d, and 25th; more general on the 6th, 7th, 13th, and 14th.

SPECIAL STORM NOTES.

12th.—Heavy rains with high winds covered much of the Ozark Plateau, with some scattered property damage by squalls. Damage generally limited to haystacks, and roofs of small buildings; about $2,000 at and in the neighborhood of Raymondsville, Texas County, was the only real loss.

14th.—Severe thunderstorm squall about 11 p. m. at or near Browning, Linn County; a few roofs were blown off, chimneys and trees blown over, along with shocked corn and haystacks. Damage estimated $2,000. On the same date but earlier, it is said about 3 p. m., large hailstones fell at Victoria, Jefferson County; roofs, window glass, and automobile tops damaged; estimated loss $600.

25th.—Quite a severe storm, apparently a tornado, struck about four miles northeast of Fort Scott, Kansas, and moved northeast toward Richards, Vernon County, Mo. Before reaching Richards the storm divided. One part passed just south of Richards and struck a red ball Missouri Pacific freight train and one residence. The other part passed west and north of Richards, thence northeast near Metz and between Rich Hill, Bates County, and Appleton City, St. Clair County, breaking up somewhere in the interior. The path was about 30 miles long and from 300 feet to 1,500 feet wide. Two persons were killed outright and one injured. The damage was estimated about $50,000. At Richards nine freight cars were taken from the middle of the moving train by the force of wind, causing a $3,760 loss.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	29.96	80	63	245	66	4,260	5.9	31	sw.	25
Hannibal	29.97	79	..	....	..	5,024	7.0	36	sw.	26
Kansas City	29.94	75	57	296	79	5,396	7.3	36	nw.	13
St. Joseph	29.93	81	60	248	66	4,444	6.2	33	w.	25
St. Louis	29.97	77	57	210	56	7,044	9.8	54	nw.	14
Springfield	29.99	78	61	289	78	6,144	8.5	31	s.	25
Cairo, Ill.	29.98	86	63	....	..	4,096	5.7	30	sw.	24
Keokuk, Iowa	29.97	74	51	256	69	4,341	6.0	38	w.	14

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	65.2	− 3.7	97	28	1.11	−2.56	....	0	4	..	..	..
1889	64.7	− 4.2	94	31	4.66	+0.99	....	0	11	..	..	..
1890	63.7	− 5.2	98	34	3.98	+0.31	....	0	9	..	..	..
1891	70.6	+ 1.7	104	30	0.63	−3.04	....	0	6	..	..	..
1892	67.8	− 1.1	97	32	2.39	−1.26	3.00	0	4	19	6	5
1893	69.9	+ 1.0	107	26	3.92	+0.25	5.20	0	6	17	7	6
1894	68.5	− 0.4	101	34	4.93	+1.26	3.07	0	5	13	11	6
1895	71.8	+ 2.9	104	25	2.45	−1.22	6.21	0	4	19	8	3
1896	65.0	− 3.9	101	28	4.17	+0.50	4.40	0	10	11	10	9
1897	74.3	+ 5.4	105	27	0.74	−2.93	2.13	0	2	23	5	2
1898	70.9	+ 2.0	103	30	6.74	+3.07	6.10	0	9	15	9	6
1899	67.4	− 1.5	108	16	2.04	−1.63	3.01	0	4	20	6	4
1900	71.1	+ 2.2	100	29	4.81	+1.14	3.79	0	10	13	10	7
1901	68.9	0.0	103	27	2.31	−1.36	2.80	0	6	18	8	4
1902	63.2	− 5.7	95	30	4.78	+1.11	6.55	0	10	15	6	9
1903	66.4	− 2.5	98	32	4.41	+0.74	6.77	0	8	17	6	7
1904	69.6	+ 0.7	96	34	3.85	+0.18	2.46	0	3	16	8	6
1905	69.6	+ 0.7	98	41	7.67	+4.00	7.90	0	10	15	6	9
1906	71.9	+ 3.0	98	36	4.15	+0.48	4.28	0	11	15	8	7
1907	68.9	0.0	101	31	1.93	−1.74	2.25	0	6	18	7	5
1908	71.6	+ 2.7	99	28	1.80	−1.87	2.68	0	4	18	8	4
1909	68.7	− 0.2	105	28	4.62	+0.95	4.48	0	8	18	6	6
1910	69.5	+ 0.6	97	34	5.53	+1.91	4.63	0	10	14	6	10
1911	73.7	+ 4.6	105	39	7.13	+3.46	7.75	0	11	13	7	10
1912	68.6	− 0.3	105	27	3.06	−0.61	3.61	0	9	17	5	8
1913	69.4	+ 0.5	109	27	4.63	+0.79	4.08	0	9	13	7	10
1914	69.6	+ 0.5	99	35	6.27	+2.52	9.22	0	9	15	8	7
1915	70.6	+ 1.5	98	34	5.25	+1.51	5.91	0	7	16	7	7
1916	67.8	− 1.5	101	27	2.94	+0.86	2.80	0	6	19	7	4
1917	67.9	− 1.2	101	33	2.78	−1.09	4.13	0	5	19	6	5
1918	62.3	− 6.7	96	29	4.73	+0.77	6.61	0	7	17	6	7
1919	71.4	+ 2.7	104	38	3.29	−0.54	4.93	0	5	20	6	4
1920	70.0	+ 1.4	100	31	4.81	+0.92	4.10	0	9	17	7	6
1921	73.4	+ 4.7	104	34	7.03	+3.15	5.45	0	13	13	9	8
1922	71.7	+ 2.6	107	34	3.31	−0.57	5.36	0	5	21	5	4
1923	68.7	− 0.3	98	33	4.59	+0.86	5.26	0	11	12	9	9
1924	64.0	− 5.0	96	29	3.77	+0.04	3.72	0	8	14	8	8
1925	74.6	+ 5.6	110	45	6.46	+2.73	8.92	0	10	14	6	10
1926	69.3	+ 0.3	97	27	8.79	+5.06	5.83	0	13	12	7	11
1927	71.6	+ 2.6	102	29	3.71	−0.02	6.37	0	8	17	7	6
1928	65.0	− 4.0	95	28	2.61	−1.12	5.60	0	5	20	7	3
1929	67.4	− 1.6	98	33	3.20	−0.64	4.22	0	8	13	10	7
1930	71.3	+ 2.3	105	37	4.18	+0.34	4.00	0	8	16	7	7
.....	....	.....	..	..	....	.....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	..	..	..	..	..

Climatological Data for September, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Charlton	652	51	73.0	+ 6.3	102	1	44	27	43	2.56	−1.83	0.56	0	7	21	1	8	ne.	O. K. Benecke
Clifton Hill	Randolph	781	31	71.5	+ 2.6	103	1	41	27†	41	1.27	−3.59	1.05	0	5	14	12	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	70.6	+ 2.4	100	1	46	27	35	3.39	−0.96	1.60	0	9	13	8	9	s.	U. S. Weather Bureau
Downing	Schuyler	876	9	70.2	+ 2.6	95	13	40	28	39	1.44	−3.27	1.33	0	4	20	8	2	e.	James Taylor
Fayette	Howard	661	50	70.0	+ 1.7	103	1	41	27	45	3.93	−0.90	1.93	0	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	70.5	+ 1.6	100	1	43	26	40	3.43	−0.96	2.00	0	7	14	7	9	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	3.02	−1.27	1.61	0	4	17	7	6	sw.	J. W. Pulliam
Hannibal	Marion	534	38	71.4	+ 3.7	98	1	43	28	33	3.12	−0.85	2.40	0	4	13	8	9	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	70.8	+ 1.7	100	1	45	27	34	4.76	+1.48	2.60	0	12	17	2	11	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	70.3	+ 4.3	97	13	41	28	37	2.51	−1.80	2.29	0	3	19	2	9	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	71.0	+ 3.1	100	1	40	28	40	3.62	−0.33	2.65	0	4	16	9	5	s.	Stark Bros. Nurseries
Macon	Macon	875	31	69.7	+ 1.4	100	1	43	28	38	3.14	−1.07	2.10	0	4	18	4	8	se.	W. C. Brown
Mexico	Audrain	800	41	70.2	+ 1.6	101	1	41	28	41	2.35	−2.33	1.20	0	6	23	0	7	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	3.57	.....	2.51	0	4	14	7	9	ne.	J. S. Conway
St. Charles	St. Charles	456	42	73.7	+ 5.8	100	1	46	27	37	2.82	−0.46	1.10	0	5	14	4	12	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	72.6	+ 2.1	96	1	50	27	29	3.51	+0.05	1.50	0	8	16	4	10	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	72.2	+ 2.0	95	1	49	27	29	3.72	−0.92	1.86	0	8	17	2	11	se.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	3.26	−0.72	2.27	0	6	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	32	71.1	+ 2.0	100	1	39	26	42	4.20	+0.01	2.95	0	5	18	7	5	s.	Frank Hall
Unionville	Putnam	1,062	37	70.7	+ 3.5	97	13	40	28	38	2.60	−2.01	1.90	0	3	15	9	6	sw.	Geo. W. Davis
Warrenton	Warren	816	48	72.8	+ 4.0	100	1	45	27	36	4.56	+0.52	2.05	0	6	14	5	11	sw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	71.0	+ 3.5	97	1	45	28	33	2.97	−0.87	1.74	0	4	15	7	8	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	71.2	+ 2.8	103	1	39	26	45	3.17	−1.05	2.95	0	6	16	6	8	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	72.4	....	99	2	39	27	42	4.73	.....	1.60	0	8	15	9	6	s.	Jeff. King
Caruthersville	Pemiscot	265	34	76.0	+ 2.6	98	3	49	27†	32	0.74	−2.36	0.33	0	5	25	2	3	nw.	Sam Smith
Doniphan	Ripley	344	26	74.0	+ 3.2	98	2	41	27	40	3.54	−0.10	1.54	0	8	15	7	8	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	70.4	+ 0.5	93	2	40	27	37	7.08	+3.53	1.78	0	12	12	1	17	s.	John G. Putz
Marble Hill	Bollinger	470	35	72.4	+ 2.0	95	2†	47	27†	38	6.34	+2.71	1.80	0	8	13	7	10	w.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	6.43	+3.57	1.78	0	11	14	11	5	sw.	John A. Spence
Poplar Bluff	Butler	339	26	73.2	+ 1.9	95	2	42	27	36	6.34	+2.76	1.80	0	9	18	6	6	w.	J. H. Wolpers
Sikeston	Scott.	318	29	70.2	− 0.4	100	2	45	27	33	4.13	+1.27	1.61	0	9	14	7	9	ne.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	74.0	+ 2.5	94	2	50	27	28	2.65	−0.24	1.32	0	8	8	7	15	s.	U. S. Weather Bureau
Section means and	extremes	....	..	72.8	+ 1.8	100	2	39	27	42	4.66	+1.39	1.80	0	9	15	6	9	s.	
Ozark Plateau																				
Arcadia	Iron	926	48	68.4	+ 0.8	90	1†	39	27	39	5.66	+2.02	1.67	0	9	14	1	15	w.	Arcadia College
Aurora	Lawrence	1,370	38	71.4	+ 0.7	95	1	46	26	32	6.03	+2.30	1.74	0	10	15	6	9	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	70.7	+ 1.2	95	13	39	27	35	4.83	+1.24	2.00	0	10	16	6	8	sw.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	72.2[a]	+ 1.5	94	13	39	27	43	7.70	+4.08	2.20	0	6	21	6	3	e.	H. E. Dean
Eldon	Miller	934	34	71.1	+ 1.8	101	1	43	27	39	6.24	+2.44	1.53	0	10	8	11	11	sw.	E. H. Shepherd
Farmington	St. Francois	918	19	71.0	+ 1.7	96	3	40	27	40	2.99	−0.23	0.95	0	11	15	10	5	sw.	Robert Forsyth
Goodland	Iron	1,000	36	69.6	+ 2.3	94	13	37	27	42	4.68	+0.95	1.11	0	10	16	4	10	n.	F. M. Adams
Greenville	Wayne	381	7	71.8	.....	94	2†	40	27	40	3.55	.....	0.95	0	6	16	8	6	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	7.58	.....	4.00	0	5	9	12	9	n.	A. W. Madison
Koshkonong	Oregon	958	29	72.5	+ 1.6	92	2†	46	27†	28	4.35	+0.86	1.72	0	9	14	2	14	sw.	R. M. Hitt
Lebanon	Laclede	1,265	43	69.9	+ 0.4	100	1	42	27	46	6.74	+2.65	1.82	0	9	14	7	9	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	73.0	+ 1.7	99	1	46	26†	36	4.09	+0.09	1.30	0	7	16	7	7	sw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	29	70.2	+ 1.8	95	1	46	26†	36	6.10	+2.06	1.52	0	12	13	5	12	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	73.0	+ 2.7	98	1	41	28	40	12.87	+8.65	3.08	0	11	20	5	5	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	71.2	+ 3.2	97	1	45	27	33	6.08	+2.24	2.00	0	12	15	1	14	s.	F. H. Lane
Salem (near)	Dent	1,173	26	69.8	+ 0.3	94	1	41	27	40	3.44	−0.82	1.37	0	9	15	7	8	se.	A. C. Leech
Seligman	Barry	1,542	28	73.0[b]	+ 4.2	97	1†	44	28	38	6.22	+2.10	1.41	0	7	13[d]	8[d]	5[d]	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	70.2	+ 1.6	97	1	43	27†	34	5.32	+0.74	1.26	0	9	16	8	6	s.	Ira H. Hailey
Springfield	Greene	1,324	42	71.4	+ 2.5	95	1	46	26	27	3.25	−0.27	1.14	0	7	21	7	2	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	71.1	+ 1.8	101	1	37	27	46	5.67	+1.83	4.00	0	9	15	7	8	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	72.4	+ 2.1	101	1	45	27	37	6.24	+2.57	2.22	0	11	11	17	2	sw.	W. G. Bigelow
Clinton	Henry	765	37	73.9	+ 3.7	105	1	46	27†	43	4.30	+0.48	1.10	0	10	14	12	4	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	72.2	+ 3.9	102	1	45	27	41	2.81	−1.55	0.64	0	9	8	4	18	e.	John H. Patterson
Lamar	Barton	980	43	73.0	+ 2.4	101	1	44	28	39	5.80	+1.56	3.50	0	7	18	6	6	se.	Jesse A. Mann
Lamonte	Pettis	867	30	71.6	+ 1.5	103	1	46	27†	38	4.10	−0.40	1.25	0	9	22	6	2	s.	J. E. Wheeler
Marshall	Saline	779	42	72.5	+ 4.2	102	1	41	27	36	3.86	−1.02	1.66	0	8	16	8	6	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	73.2	+ 4.1	99	1	46	28	42	3.16	−1.00	1.07	0	7	14	8	8	s.	George A. Kaupp
Warrensburg	Johnson	878	43	72.3	+ 2.2	102	1	37	26	45	3.02	−0.57	1.08	0	7	15[e]	8[e]	2[e]	s.	E. A. Markey
Warsaw	Benton	687	29	73.7	+ 3.7	103	1	45	27†	47	6.91	+2.59	2.35	0	7	17	8	5	e.	Everett Martin
Section means and	extremes	.....	..	72.8	+ 3.1	105	1	37	26	47	4.47	+0.30	3.50	0	8	15	9	6	s.	
Northwest Plateau																				
Bethany	Harrison	916	37	69.6	+ 2.6	95	13	39	28	43	2.32	−1.54	1.68	0	4	23	3	4	s.	A. S. Cumming
Chillicothe	Livingston	779	20	69.2	− 0.4	91	22	39	28	44	3.21	−2.53	1.14	0	7	15	12	3	e.	Wm. J. Olenhouse
Conception	Nodaway	980	41	69.8	+ 2.6	92	13	43	26	36	1.94	−1.91	0.93	0	4	14	10	6	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	70.4	+ 2.5	95	1	40	28†	43	2.61	−0.67	1.07	0	10	22	1	7	s.	Fred L. Stiff
Grant City	Worth	1,134	26	69.7	+ 2.7	93	13	43	28	35	1.26	−2.73	0.70	0	5	16	12	2	se.	W. P. Spillman
Kansas City	Jackson	963	41	72.4	+ 3.5	97	1	47	26	39	2.61	−1.95	0.93	0	11	13	10	7	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	66.9	− 0.8	93	1	40	28	39	2.92	−1.32	0.98	0	7	13	6	11	s.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	2.69	.....	1.44	0	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	73.2	+ 4.7	100	1	47	28	36	5.53	+1.09	2.60	0	8	16	8	6	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	68.9	+ 3.5	93	13†	42	29	41	1.35	−2.86	0.42	0	8	17	11	2	n.	J. R. Brink
Oregon	Holt	1,048	74	72.3	+ 5.3	96	13	43	26	35	3.77	+0.03	2.16	0	4	21	4	5	ne.	Mina Wright
St. Joseph	Buchanan	987	22	70.2	+ 1.5	93	13	44	26	39	2.75	−2.34	1.16	0	10	16	8	6	se.	U. S. Weather Bureau
Tarkio	Atchison	916	27	68.2	+ 1.6	91	22	42	28	36	2.76	−0.74	2.21	0	3	12	8	10	se.	Albert Volker
Trenton	Grundy	822	34	70.4[a]	+ 3.0	96	13	40	28	38	2.13	−2.13	1.48	0	5	19	8	8	s.	W. H. Estes
Section means and	extremes	.....	..	69.8	+ 2.2	100	1	39	28	44	2.70	−1.51	2.60	0	7	17	8	5	s.	
State means and	**extremes**	.....	..	71.3	+ 2.3	105	1	37	27	47	4.18	+0.34	4.00	0	8	16	7	7	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for September, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Becker	Missouri					T.	.01	2.08			T.	.47	T.	.28		1.21											.10						4.15
Boonville‖	do							.25			.43			.20	.56	.54									.50								2.56
Brunswick‖	Grand					.08									1.05	.05																	1.27
Clifton Hill	Charlton						.13			.01			.03		.87									.10		.08							3.39
Columbia***	Missouri					.31	.73	.87	T.	T.	.28	.02	.13		1.33											.02	.05						1.44
Downing	Mississippi					.04		T.				T.														.13							3.93
Fayette‖	Missouri						1.93				.14			.15	T.	1.58																	3.43
Fulton‖	do				.44	T.	2.00	.01		T.			.05		.75									.01		.17							3.02
Gorin	Mississippi											.04			1.32	.05									1.61								3.12
Hannibal***	do					T.	.06	.63		T.					2.40									.03		T.							3.17
Hermann‖	Missouri					.18	.20	1.20	.12				T.		.01	1.05									.15		.26						4.76
Jefferson City‖	do					.27	.07	2.60	.05	.02	.08	.03		.05	02	1.03									.02		.52						2.51
Kirksville	Mississippi														2.29	.10										.12							3.62
Louisiana	do						.17							.62	2.65												.18						1.09
Lucerne‖	Grand														.75	.34																	3.14
Macon ‖	Chariton							.42							2.10	.30										.32							2.35
Mexico ‖	Mississippi							1.20	.02				.10		.02	.92											.09						3.50
Milan‖	Grand							.09							1.45	1.24									T.		.72						3.57
Monroe City	Mississippi					.59	.28	.19			T.				2.51																		5.54
Pacific‖	Meramec					.25		1.75	.08				.15			1.90	.06								1.30	.05							2.82
St. Charles	Missouri					T.		1.10						.13	.90	.63						T		.06	T.								3.51
St. Louis (1)***	Mississippi					.05	.27	.68		T.				.32	1.49	.02								.63	.05	T.							3.72
St. Louis (2)*	do					.08	.35	.73						.23	1.36	.08								.85	.04								3.26
Shelbina ‖	do							.29				.02			2.27	.53									.10		.05						4.20
Steffenville	do						.05	.05				T.			2.95	T.								T.	1.05	.10							5.13
Union‖	Meramec	.77				.38		1.53	.40							1.95									.10								2.60
Unionville	Chariton										T.				1.90									T.		.30	.40						3.64
Valley Park	Meramec					.12	T.	1.02	T.					.30		2.00	.07								.13	T.							4.56
Warrenton	Mississippi					.13	T.	2.05			.10		T.	T.	1.70									.14	T.		.44						2.97
Keokuk, Ia.***	do					T.	.02	.01			T.				1.20					T.				T.	1.74	T.							
Southeast Lowlands																																	
Campbell‖	St. Francis			.47							1.60	.01		.21		1.05	.13								.38	.88							4.73
Cape Girardeau‖	Mississippi	.56		.06					.66					.07		1.05	.95								.31	1.90							5.56
Carnthersville ‖	do										.15			.33											.05	.16	.05						0.74
Dexter‖	St. Francis							T.	.23	.02	T.	.03	.43	.09		.78	.74							.05	.38	.90							3.65
Doniphan	Black	.22						T.		.28		.05	.30			1.54	.10							.50	.55								3.54
Jackson	Mississippi	1.28	.10					.74			.12		.07	.03	.12	.97	1.78							.28	1.58	.01							7.08
Marble Hill	Mississippi						.10	.60			.20					1.80	1.12							.60	1.20	.72							6.34
Morehouse	do	.49					T.	.29		.06	.13	.45	.65	.01		1.78	.69							.73	1.15								6.43
New Madrid‖	do									.04	.15	.98	.39	.06	.09	.74	.12	.03						.01	.02	.36	.01						3.00
Poplar Bluff‖	Black	.53								T.	.21	T.	.06	.45		1.65	1.80								1.05	.50	.09						6.34
Sikeston‖	Mississippi							.33		.10	.20	.02		.14		1.61	.98								.45	.30							4.13
Cairo, Ill.***	do		T.				T.	.22	T.	T.	.04	.34	T.	.42		1.32	T.							.01	.28	.02	T.						2.65
Ozark Plateau																																	
Arcadia ‖	St. Francis	0.50						T.	1.39	.05	.14			.72		1.67	.01								1.03	.15	T.						5.66
Aurora	Neosho					.06	.71	.03	1.37	1.14	.10	.11	T.		.67	1.74								.10									6.03
Birchtree (near)	Black						.22	.83	.22	.27		.23	.55			2.00								.24	.15		.12						4.83
Caplinger Mills	Osage		T.			.48	.45	.20	.94	.60		.49	.64	.12	.05	.21								.03									4.21
Dean	Neosho						T.	1.35	1.40		.35	.55			1.85	2.20								T.									7.70
Eldon‖	Missouri					.34	.38	1.53	.12		.49	1.25		.58		1.26									.03		.26						6.24
Farmington	St. Francis	.07	T.			.03	.20	.95	.01	T.		T.	.04		.25	.94	.04							.38	.08								2.99
Galena‖	White								2.00	1.41	.40	.67				2.07	.19																6.74
Goodland	Black	.18						1.11	.05	.20	.10	.02	1.10		.76	1.11								.05									4.68
Greenville	St. Francis	.95						T.	2.05	4.00	.20			1.27		.80	.10							.35	.75								3.55
Hailey	White							.60																.06									7.58
Koshkonong	Black						.32	.04	.36	.65	T.		.56			1.72								.15	.30		.25						4.35
Lebanon ‖	Osage					.25	.85	1.82	.50	.06	.70	T.	T.	.95		1.11	.50																6.74
Leeper‖	Black	.16					T.	.28	1.01		.25			.32		.70	.22								.41	.20	.10						3.65
Lockwood	Osage						.37		1.14		.11		.10		.65	1.30								.42									4.09
Mountain Grove‖	White	T.		T.		T.	.48	.13	1.52	.10	.52	.59	.15	1.08		.92	.39							T.	.20	.02							6.10
Neosho	Neosho					.18	1.32	.04	1.40	3.08	1.45	.20	.05		2.20	2.90								.05									12.87
Owensville ‖	Gasconade					.60		2.35	.10					.10		1.41	.19																4.75
Ozark Beach‖	White																																
Rolla ‖	Meramec	T.		.75		.22	.07	2.00	.20	.02	.50		.50	.65		.95	.12								.10								6.08
Salem (near)	do					.06	.17	.95		.37	.02	T.	.42		.10	1.27	.08							T.	T.								3.44
Seligman	Neosho					T.	.99	T.	1.41	1.28	.28	.08			.86	1.32								T.									6.22
Seymour (near)	White					T.	.28	.77	.98	.70	.25	1.26	.04		.21	.83								T.		T.							5.32
Springfield***	do			T.		.19	.26	.45	.69	.70	T.	T.	T.		.50	.46								T.									3.25
Steelville‖	Meramec			.14		.32		.97	1.51	.07	.37			.47		1.46	.15								.11								5.57
Stover ‖	Missouri					.13	.10	1.32			.46	.26		.38		.52										.48							3.65
Tuscumbia ‖	Osage			T.		.48	.18	2.12	.02	T.	.49	.78		.44		1.08										T.							5.59
Williamsville‖	Black	.18						.02	.23	.02	.08	.01	.01	.27		.80	.95								.27	.34	.07							3.25
Willow Sprgs. ‖ (near)	White	.28					.09	.47	1.45	.06	.46		.25	.74		2.01	.27								.20	.03	.07							6.38
Southwest Plain																																	
Appleton City	Osage		.15			.22	2.22	.39	.45	.76	.04		.27		.14	.39								T.		T.	1.21						6.24
Clinton	Osage		.03			.43	.80	.18	.02	1.10			.37		.30	.32										.75								4.30
Concordia‖	Missouri							2.40					.68			1.80																	4.88
Harrisonville‖	Osage					.18	.25	.26			.13	.61		.06		.64									.06		.62						2.81
Joplin‖	Neosho		T.	.12		.68	.12	T.	1.20	2.96	.20	.44	.05		1.33	.40																	7.50
Lamar‖	do					.35	.18	.05	3.50	.75	.25					.72																		5.80
Lamonte	Missouri		T.				.25	1.25		.03		.05	.45		1.05	.04								.03		.95							4.10
Marshall	do						.78	1.66			.02		.20		.88	.20								.05		T.	.07						3.86
Nevada	Osage		T.			.50	T.	.15	1.07	.52	T.				.15	.76								.01									3.16
Osceola‖	do			.05		.38	1.19	.57	1.36	1.06				.97		.92											.25						6.75
Warrensburg	Missouri						1.08			.15		.04	.43	.02	.90									T.		.40							3.02
Warsaw	Osage			.02		.67		1.18		2.35	T.			1.07	T.	.90								T.			.72						6.91
Waverly ‖	Missouri							2.11	T.	T.	.14			.63	.08	1.25																	4.21
Northwest Plateau																																	
Bethany	Grand									.27	.03				1.68											.84							2.32
Chillicothe‖	do							.54		T.	.51			.08	.88	1.14									.05		.01						3.21
Conception	Missouri	T.			T.		T.			.93	T.	T.	T.		.56											.42	.03						1.94
Edgerton	do				.09	.02	.46	T.		.15	.01		.57		1.07	.02			.02							.20								2.61
Gallatin ‖	Grand							.33		.04	.42	.05		.11	.95	1.15											.07						3.12
Grant City	do						T.			.11	.03				.70											.38	.04						1.26
Kansas City***	Missouri	T.	T.		.03	.01	.91	.01		.06	.10	.01	.45	T.	.93				.02					T.		.08							2.61
Kidder ‖	Grand							.50		.04	.29			.11	.80	.98											.20						2.92
King City	Missouri					.04	.03			.61			.07		1.44				.08							.45	.02						2.69
Lexington	do							2.60		.10	.32		.45	.20	.23	1.08											.55						5.53
Maryville ‖	do				.04			.02		.39	.37		.01		.42				.01								.09						1.35
Oregon	do	T.			T.		T.	T.	T.	2.16			.07		1.46											T.	.08						3.77
St. Joseph***	do	T.			.03	T.	.23		.02	1.14	.02		.07	.49	.32				T.							.41	.02						2.75
Tarkio	do									2.21					.43												.12						2.76
Trenton	Grand		T.			T.		.06			.12			T.	1.48									.08		.39							2.13

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for September, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	102	86	90	95	91	94	89	81	75	78	92	91	96	74	75	88	85	92	92	82	91	95	89	89	94	72	80	83	82	85	..	86.9
	Minimum	70	64	51	52	56	64	63	66	65	65	66	67	65	64	61	54	49	50	65	56	53	67	67	67	72	49	44	46	47	47	..	59.1
Columbia	Maximum	100	85	85	89	82	83	81	76	76	78	83	79	90	77	68	79	77	85	88	73	84	90	78	81	86	65	74	75	78	75	..	80.7
	Minimum	68	65	55	54	64	63	66	68	66	68	66	68	66	63	58	54	50	62	64	55	53	68	68	72	65	49	46	46	50	51	..	60.4
Fayette	Maximum	103	82	88	93	87	84	85	77	76	79	91	83	95	70	70	82	82	87	89	78	88	93	81	83	88	70	79	80	84	81	..	83.6
	Minimum	66	64	49	48	53	59	61	65	64	64	65	64	63	64	61	52	47	48	58	57	48	52	66	68	69	49	41	42	43	44	..	56.5
Hannibal	Maximum	98	82	82	86	85	86	81	76	79	84	87	87	96	79	69	79	80	85	87	89	74	86	92	83	83	87	71	72	72	80	71	82.1
	Minimum	69	67	53	56	69	64	68	66	63	66	64	66	68	65	58	53	49	56	67	53	53	71	70	72	71	50	46	43	48	53	..	60.6
Jefferson City§§	Maximum	100	85	89	90	81	83	84	78	76	82	86	81	94	75	69	84	80	85	87	85	87	89	78	82	80	67	79	80	81	79	..	82.5
	Minimum	66	69	57	56	60	61	63	66	66	66	66	65	65	67	62	53	52	53	55	57	53	57	67	66	69	50	45	46	50	48	..	59.2
Kirksville	Maximum	93	90	85	85	85	82	82	77	78	84	89	91	97	91	69	78	78	85	86	79	84	90	84	82	85	80	71	74	80	80	..	83.1
	Minimum	67	62	51	54	55	62	65	62	61	65	61	65	63	61	55	56	47	57	66	50	53	65	67	70	65	45	44	41	43	46	..	57.5
Louisiana	Maximum	100	91	84	82	90	90	86	80	79	85	90	90	95	77	75	80	83	85	90	87	92	88	77	83	80	66	70	72	80	80	..	83.5
	Minimum	69	70	44	46	60	65	67	65	63	60	63	67	69	63	65	50	46	50	60	65	70	63	60	69	60	52	43	40	42	50	..	58.5
Macon§§	Maximum	100	81	83	88	85	83	84	80	78	85	86	88	96	68	70	79	79	86	89	75	85	92	83	82	85	65	74	76	81	76	..	82.1
	Minimum	69	64	54	54	54	62	62	64	62	62	63	64	64	61	58	54	47	48	61	53	52	63	66	67	60	46	44	43	50	49	..	57.3
Mexico§§	Maximum	101	85	89	93	86	89	82	76	80	84	87	83	95	73	68	84	83	87	90	75	87	93	81	84	89	67	78	78	83	71	..	83.4
	Minimum	66	66	49	52	53	60	63	65	61	62	62	66	65	64	61	53	47	49	58	58	50	55	67	67	69	49	46	41	42	46	..	57.1
St. Louis(1)	Maximum	96	87	85	88	75	83	81	75	78	82	86	86	93	80	68	85	80	81	87	75	85	91	80	76	84	78	79	74	81	72	..	81.7
	Minimum	71	72	64	61	65	66	65	68	64	66	66	69	68	62	63	60	60	62	63	61	60	70	69	70	72	53	50	52	58	54	..	63.5
Unionville	Maximum	94	84	88	90	90	84	87	82	85	88	92	95	97	86	74	75	82	88	90	80	86	92	86	84	86	78	70	75	82	75	..	84.8
	Minimum	67	57	50	53	60	58	60	62	62	63	60	65	63	62	63	56	48	58	58	44	45	64	68	70	66	44	43	40	44	45	..	56.6
Warrenton	Maximum	100	98	87	93	85	88	84	80	77	83	89	84	95	89	71	86	80	86	91	83	86	93	82	78	87	80	80	75	83	76	..	85.0
	Minimum	67	71	57	57	63	62	65	67	62	65	64	68	67	66	62	56	53	57	61	58	57	67	66	69	69	51	45	47	53	49	..	60.7
Southeast Lowlands																																	
Campbell	Maximum	94	99	88	87	92	88	86	84	79	84	87	82	91	95	85	83	83	83	88	83	89	91	87	83	86	78	77	84	83	83	..	86.1
	Minimum	66	65	65	55	50	60	62	65	65	65	67	64	63	70	63	55	53	54	48	55	54	61	64	66	68	55	39	45	52	49	..	58.8
Caruthersville	Maximum	85	94	98	90	90	91	91	91	86	85	85	88	92	92	95	78	81	85	86	88	86	90	92	88	83	87	68	78	84	85	..	87.1
	Minimum	70	70	72	61	62	68	67	71	72	71	71	69	68	71	70	61	61	63	56	60	63	65	68	74	71	66	49	49	52	56	..	64.9
Doniphan	Maximum	91	98	96	94	90	90	90	84	78	85	88	95	93	97	89	86	85	84	88	89	91	93	82	78	80	83	79	85	82	85	..	87.6
	Minimum	65	68	67	66	58	53	65	69	70	70	70	65	68	72	57	55	57	55	51	53	55	65	69	72	62	57	41	49	47	45	..	60.5
Jackson	Maximum	88	93	85	87	85	82	80	80	79	81	86	88	87	92	84	78	78	80	83	77	85	89	83	76	81	80	72	77	80	74	..	82.3
	Minimum	57	69	65	52	55	62	64	62	66	64	66	62	63	72	62	54	53	52	50	55	52	62	62	66	68	57	40	46	48	50	..	58.4
Poplar Bluff	Maximum	90	95	88	88	87	86	86	82	76	85	87	91	91	94	84	85	82	83	87	83	88	90	88	77	84	77	75	83	85	85	..	85.4
	Minimum	69	63	70	55	54	64	65	66	70	69	69	66	65	72	60	57	58	55	52	57	55	61	65	69	71	61	42	47	54	52	..	61.1
Sikeston	Maximum	94	100	89	89	91	91	88	84	83	82	84	92	90	95	93	82	82	82	88	86	88	92	89	83	86	83	76	83	84	82	..	87.0
	Minimum	69	72	69	58	58	66	69	68	71	68	70	66	68	70	65	59	60	58	55	61	58	65	68	70	71	64	45	51	53	57	..	63.4
Cairo, Ill	Maximum	91	94	84	86	88	85	76	82	82	82	83	86	87	91	81	80	80	81	86	79	86	88	86	82	84	76	74	78	81	77	..	83.2
	Minimum	71	72	68	61	65	69	69	69	70	69	70	68	67	75	67	59	62	61	58	64	60	69	72	70	71	55	50	54	56	56	..	64.9
Ozark Plateau																																	
Arcadia§§	Maximum	90	89	85	86	80	78	77	76	75	81	82	83	90	89	67	82	80	80	84	72	85	87	78	74	78	65	75	80	80	75	..	80.1
	Minimum	65	69	63	47	52	57	61	61	63	64	65	63	61	65	62	53	51	48	49	52	49	54	63	68	67	53	39	42	47	46	..	56.6
Aurora	Maximum	95	91	85	88	81	81	93	73	78	80	82	86	91	85	68	82	79	82	83	74	85	84	77	81	87	78	72	73	74	77	..	81.5
	Minimum	67	71	61	60	66	65	71	65	64	66	65	68	70	62	59	52	57	60	58	59	59	67	68	69	68	46	48	50	48	49	..	61.3
Birchtree	Maximum	89	91	86	87	81	79	76	76	75	79	83	86	95	89	80	84	80	81	83	76	85	81	76	77	81	75	74	79	78	81	..	81.4
	Minimum	69	68	66	54	56	63	60	65	68	66	68	64	68	72	53	53	56	53	52	54	54	64	67	69	69	49	39	49	54	59	..	60.0
Eldon§§	Maximum	101	85	88	91	86	78	85	79	76	80	87	85	94	74	69	84	81	86	88	88	88	90	77	83	87	66	68	80	80	80	..	82.8
	Minimum	65	67	59	52	52	63	65	65	68	67	66	66	66	69	63	55	52	54	58	59	57	57	65	67	69	50	43	44	49	50	..	59.4
Farmington	Maximum	95	91	96	89	77	82	84	77	80	85	87	82	89	93	69	85	80	86	88	79	86	88	86	82	84	74	75	78	81	77	..	83.3
	Minimum	66	71	63	49	63	59	58	64	66	65	63	64	64	64	62	54	53	50	52	53	50	63	71	68	70	52	40	47	49	48	..	58.7
Koshkonong	Maximum	90	92	85	87	84	86	81	83	74	79	84	86	92	89	82	80	78	82	83	79	85	85	78	76	79	77	70	76	78	78	..	81.9
	Minimum	73	78	69	61	63	64	69	68	69	68	67	64	64	74	57	55	60	59	58	61	59	66	68	69	70	50	46	53	55	56	..	63.1
Lebanon§§	Maximum	100	80	87	93	87	79	84	76	80	85	85	84	92	81	64	82	82	85	86	74	86	88	77	84	85	66	76	81	79	79	..	82.2
	Minimum	69	67	56	47	50	59	64	63	65	66	67	66	64	70	59	49	48	49	58	56	56	58	64	67	67	46	42	45	46	46	..	57.6
Mountain Grove§§	Maximum	95	93	90	89	83	81	72	75	73	81	85	84	92	85	66	82	82	81	82	78	86	85	72	79	80	66	74	78	80	82	..	81.0
	Minimum	67	69	61	53	61	64	64	65	65	67	68	66	63	66	61	50	52	57	58	59	58	50	65	67	68	46	46	46	52	47	..	59.4
Neosho	Maximum	98	96	90	92	91	86	94	80	84	86	90	93	94	85	69	84	85	87	87	82	87	88	85	85	87	81	76	79	79	83	..	86.1
	Minimum	69	66	62	52	66	65	70	66	65	65	65	68	74	62	60	49	55	60	56	58	58	66	66	70	70	46	43	41	45	43	..	60.0
Rolla	Maximum	97	91	83	87	82	76	79	76	74	80	84	84	91	85	76	80	78	81	84	77	84	87	81	78	81	79	77	76	76	75	..	81.4
	Minimum	69	74	62	54	61	63	65	66	67	66	68	66	66	72	63	52	53	56	61	59	55	67	68	69	69	50	45	48	49	51	..	61.1
Springfield	Maximum	95	82	84	86	81	79	89	71	76	81	82	83	90	80	64	81	79	81	83	72	83	84	75	81	83	66	73	75	76	80	..	79.8
	Minimum	68	70	64	63	67	66	67	65	66	68	68	69	71	61	59	56	60	63	62	60	61	68	68	70	66	46	49	51	55	59	..	62.9
Southwest Plain																																	
Appleton City	Maximum	101	90	86	91	86	79	89	82	81	82	84	84	93	83	71	83	83	87	88	77	88	89	81	83	89	81	79	79	78	81	..	84.3
	Minimum	68	62	56	54	64	65	67	66	66	67	64	67	70	65	60	53	55	62	61	57	54	67	67	69	69	46	45	46	47	52	..	60.4
Clinton	Maximum	105	91	91	95	88	81	90	84	77	84	90	87	97	80	71	87	83	90	92	80	91	92	84	85	91	82	84	83	83	86	..	86.8
	Minimum	72	65	57	52	64	66	65	67	68	68	65	65	68	65	61	62	52	60	62	58	53	62	70	70	70	50	46	46	47	50	..	61.0
Harrisonville§§	Maximum	102	83	88	90	87	79	84	83	76	80	88	85	94	77	73	83	81	88	88	75	92	91	84	85	90	70	86	82	83	85	..	84.4
	Minimum	70	62	56	55	58	66	66	66	68	67	65	65	65	71	58	54	54	58	62	55	54	60	67	68	68	49	45	47	49	50	..	59.9
Lamar§§	Maximum	101	84	91	92	84	85	94	75	84	86	87	90	93	83	71	87	87	87	88	75	89	89	83	86	90	70	81	80	83	87	..	85.4
	Minimum	70	68	62	53	55	67	68	66	66	67	67	68	73	74	61	53	54	56	61	59	56	58	68	71	71	47	46	44	45	48	..	60.7
Lamonte	Maximum	103	82	88	92	87	85	84	82	76	81	86	86	92	78	69	78	80	86	88	74	89	90	83	85	88	66	77	80	79	79	..	83.1
	Minimum	70	63	52	54	67	65	65	68	68	67	66	67	65	62	60	53	50	60	65	57	53	69	69	71	64	49	46	46	48	47	..	60.2
Marshall	Maximum	102	98	86	91	85	83	81	79	76	78	89	90	92	88	85	79	81	87	90	79	88	89	91	85	89	85	75	78	81	79	..	85.3
	Minimum	70	63	52	57	64	63	65	67	66	68	66	65	65	64	60	56	53	60	61	56	54	58	63	69	70	49	41	47	52	48	..	59.7
Nevada	Maximum	99	92	88	91	84	83	90	80	81	84	87	89	93	89	71	83	82	86	88	78	88	89	81	84	89	82	81	80	80	84	..	85.2
	Minimum	71	64	60	49	65	68	69	65	65	68	67	70	75	67	59	55	52	53	63	59	59	67	68	70	70	47	48	46	47	47	..	61.1
Warrensburg	Maximum	102	90	89	93	93	85	85	85	78	83	85	94	100	80	..	81	89	87	92	80	92	95	83	92	..	81	..	86	89	86	..	[a]88.0
	Minimum	70	54	62	57	65	73	65	59	60	60	60	57	66	51	..	45	42	55	56	45	71	60	62	62	..	37	..	44	44	47	..	[a]56.6
Warsaw	Maximum	103	97	93	95	81	85	93	83	80	82	90	86	94	87	69	86	84	88	88	82	89	90	81	86	90	86	80	81	81	82	..	86.4
	Minimum	71	69	54	48	63	66	67	68	69	69	66	67	71	73	61	52	50	60	62	58	53	68	70	72	71	50	45	45	46	45	..	61.0
Northwest Plateau																																	
Chillicothe§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	61	61	44	49	58	55	61	63	63	63	61	63	63	59	52	52	43	56	64	46	49	51	64	68	66	44	41	39	40	43	..	54.7
Grant City	Maximum	77	84	86	79	88	88	87	80	74	83	87	90	93	83	79	76	78	87	87	75	83	89	83	86	86	69	70	76	80	75	..	81.9
	Minimum	54	66	51	57	60	59	62	63	63	64	63	65	67	62	55	58	46	58	64	45	51	61	67	71	66	44	47	43	47	46	..	57.5
Kansas City	Maximum	97	78	84	87	85	75	80	79	74	77	84	87	91	77	74	78	83	87	88	71	89	91	83	86	90	66	76	78	83	81	..	81.1
	Minimum	70	63	61	64	68	69	66	69	68	68	68	66	69	62	60	62	59	65	67	54	60	73	71	73	51	47	54	53	57	55	..	63.1
Kidder§§	Maximum	93	73	83	81	86	77	79	76	71	80	88	87	90	63	75	76	79	85	85	71	84	89	82	83	81	64	72	72	78	76	..	79.3
	Minimum	66	60	50	51	55	60	60	61	61	62	60	60	63	59	52	53	48	47	57	45	45	53	62	66	63	43	42	40	45	45	..	54.4
Lexington	Maximum	100	85	84	82	88	84	85	82	76	79	88	90	95	86	75	85	84	88	90	81	90	92	84	84	90	83	78	82	82	83	..	85.3
	Minimum	71	64	55	57	68	65	65	67	67	65	66	69	66	64	57	55	53	60	67	55	54	69	69	71	71	49	50	47	51	50	..	61.1
Maryville	Maximum	89	76	83	72	85	75	78	78	73	81	85	92	93	78	74	73	84	88	89	78	82	93	85	85	85	70	70	80	83	78	..	81.1
	Minimum	68	54	49	54	58	60	62	63	63	63	63	65	64	60	53	54	44	60	66	43	48	60	68	71	64	43	43	44	42	48	..	56.1
Oregon	Maximum	86	83	87	77	89	82	86	77	73	82	89	92	96	83	82	79	84	88	89	78	89	93	85	87	89	77	78	82	86	85	..	84.1
	Minimum	72	57	54	64	61	62	64	63	67	66	64	67	67	64	60	58	51	63	68	45	54	66	69	72	67	43	46	51	51	51	..	60.1
St. Joseph	Maximum	91	78	83	77	86	71	81	75	72	80	84	90	93	69	76	75	81	87	87	74	86	92	84	87	90	65	73	79	80	79	..	80.1
	Minimum	66	60	52	59	64	62	66	65	67	66	65	68	64	62	57	56	51	62	62	50	55	68	71	74	51	44	50	47	51	51	..	59.1
Trenton	Maximum	94	82	87	82	88	81	83	80	75	85	90	91	96	80	72	74	82	88	..	78	86	90	84	83	88	70	75	79	82	75	..	[b]82.1
	Minimum	68	62	56	51	58	60	63	64	65	65	62	65	68	62	55	52	44	50	..	57	60	64	66	68	68	44	48	40	44	50	..	[b]57.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to th preceding day, on which it almost always occurs.

WBO, St. Louis, 10-24-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., OCTOBER, 1930 No. 10

GENERAL SUMMARY

October was a month of much sunshine and rather quiet fall weather, anticyclones being the dominant weather type. Because of this fact too, there was a tendency on the part of temperatures to run subnormal.

The first two weeks, however, were, as a rule, warmer than normal, with about eight days of moderate summer-like conditions, the 9th, and the 10th, especially, being outstanding in this respect. The latter half of the month was consistently colder than normal. The first killing frost for all the State, outside the extreme southeast, occurred on the 17th, and following dates to the 20th. The first snow flurries came on the 19th, and noted in all parts. The growing season in the extreme southeast, however, was not closed until the 24th or 31st. The last day of the month, indeed, proved one of the coldest October days for several years, the minimum 11° at Chillicothe being close to the record.

The precipitation, unlike the temperatures, was unevenly distributed. There was less than normal over the northern and eastern sections, and something more than normal over the western part of the Ozark Plateau and most of the southwestern plain, where six stations received more than 5 inches. Most of the monthly fall occurred on the 6th-7th; another general, though mostly light, rain fell on the 15th-16th. There was some slight sleet at a few western stations on the 21st, and 29th.

The growing season continued well into the middle of the month, and several days longer than the average season. With clear skies and only occasional precipitation, the month was favorable, of course, for all outdoor pursuits most of the time. Winter grains were seeded in well prepared beds, and moisture was sufficient for germinating the grain and starting growth. More rain, however, was needed for general pastures and for replenishing stock water. There practically was no subsoil moisture, the water table being about as low as ever known for the time of year. This may have adverse effects on alfalfa, as that plant is deep rooted, seeking its moisture far below the surface.

TEMPERATURE

The monthly mean temperature, based upon the reports of 67 stations, was 55.3°, or 2.1° below the normal. The highest local monthly mean was 60° at Caruthersville, Pemiscot County; the lowest was 52.5° at Tarkio, Atchison County. The highest temperature recorded was 92° at two stations, at Warrensburg, Johnson County on the 9th, and at Brunswick, Chariton County on the 10th. The greatest daily range was 52° on the 29th, at Greenville, Wayne County. Values were 90° or higher at two stations on one day; they were 32° or lower on 5 to 9 days, the smaller number occurring in the southeastern lowlands.

PRECIPITATION

The average precipitation for the State, 96 stations reporting, was 3.06 inches, or 0.17 more than the 60 years' average. The greatest local monthly amount reported was 7.09 inches, at Birchtree, Shannon County; the least local monthly amount was 0.48 inch, at Macon, Macon County. The greatest amount in any 24 consecutive hours was 4.25 inches, at Birchtree on the 7th. The average number of days with 0.01 inch or more was six.

Snow flurries occurred on two or three days; totals of 0.5 inch or more were measured at two stations, and soon melted.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Locally on 14th, 15th, 22nd, and 27th.

Frost, killing.—17th, 18th, 20th, and extreme south and southeast on the 24th, and 31st.

Halos, lunar.—3d, 4th, and 30th.

Halos, solar.—3d, 8th, 15th, and 29th.

Sleet, light.—16th, 19th, 21st, and 29th.

Thunderstorms, local.—15th, 16th, and 22d.

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.09	84	66	215	62	4,362	5.9	23	nw.	30
Hannibal	30.10	80	..	...	..	4,820	6.5	25	w.	26
Kansas City	30.10	79	55	213	76	5,691	7.6	28	nw.	16
St. Joseph	30.08	80	59	202	58	5,087	6.8	29	nw.	29
St. Louis	30.10	77	58	224	65	7,144	9.6	31	s.	7
Springfield	30.12	82	61	238	68	6,190	8.3	28	se.	6
Cairo, Ill.	30.11	82	61	...	..	4,334	5.8	22	nw.	30
Keokuk, Iowa	30.11	79	64	218	61	4,349	5.8	28	w.	17

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	53.6	− 3.5	89	24	2.65	+0.21	....	....	7	..	..	..
1889	53.8	− 3.3	91	27	2.50	+0.06	....	....	6	..	..	..
1890	54.8	− 2.3	91	22	2.24	−0.20	....	....	6	..	..	..
1891	55.7	− 1.4	98	19	1.11	−1.33	....	....	3	..	..	..
1892	57.5	+ 0.6	95	16	2.28	−0.16	2.40	0	5	16	7	8
1893	56.7	− 0.4	95	16	0.99	−1.45	2.81	....	10	20	8	3
1894	57.6	+ 0.5	94	18	1.74	+0.70	3.52	T.	6	17	8	6
1895	54.2	− 5.9	89	15	0.35	−2.09	1.20	T.	2	21	5	4
1896	54.1	− 3.0	90	19	2.48	+0.04	2.68	0	5	19	6	6
1897	62.5	+ 5.4	99	23	0.71	−1.73	1.70	0	3	22	6	3
1898	53.5	− 3.6	94	19	4.23	+1.79	4.51	1.4	8	11	7	13
1899	62.4	+ 5.3	100	24	2.93	+0.49	2.53	0	5	20	6	5
1900	62.4	+ 5.3	92	25	4.18	+1.74	4.04	0	7	17	7	7
1901	60.1	+ 3.0	96	24	1.64	−0.80	2.98	0	6	18	8	5
1902	59.5	+ 2.4	88	28	2.52	+0.08	2.69	0	5	21	5	5
1903	57.2	+ 0.1	90	19	2.85	+0.41	3.80	0	6	19	6	6
1904	57.6	+ 0.5	90	19	0.90	−1.54	2.46	0	3	20	7	4
1905	55.1	− 2.0	90	20	4.64	+2.20	7.47	0.3	5	17	6	8
1906	56.3	− 0.8	94	17	0.87	−1.57	1.50	0	10	15	7	9
1907	56.7	− 0.4	94	18	2.90	+0.46	3.46	0	7	19	5	7
1908	56.3	− 0.8	92	21	2.74	+0.30	4.90	0.8	5	18	6	7
1909	57.2	+ 0.1	96	20	2.77	+0.33	2.57	T.	6	19	5	7
1910	59.4	+ 2.3	94	15	2.71	+0.27	5.50	0	5	22	4	5
1911	56.9	− 0.2	96	25	3.30	+0.86	5.12	0.2	8	11	7	13
1912	59.1	+ 2.0	97	21	3.83	+1.39	5.12	0.7	6	20	5	5
1913	54.7	− 2.5	93	11	4.46	+1.94	2.80	3.3	9	15	6	10
1914	59.2	+ 2.0	88	19	4.54	+2.04	5.40	0	7	14	6	11
1915	59.3	+ 2.9	95	22	1.19	−1.45	1.97	0	3	23	5	3
1916	58.0	+ 0.7	95	20	2.17	−0.54	3.90	0	6	18	5	8
1917	49.8	− 7.4	93	12	1.16	−1.49	2.00	0.2	6	16	8	7
1918	60.6	+ 3.5	95	28	3.37	+0.71	5.61	0	7	14	6	11
1919	58.4	+ 1.4	98	17	6.74	+3.92	4.91	0	11	10	7	14
1920	61.3	+ 4.3	93	18	2.89	+0.25	2.45	T	7	17	6	8
1921	57.9	+ 0.8	92	24	2.19	−0.40	2.32	0	5	21	5	5
1922	59.9	+ 2.4	97	18	2.00	−0.77	3.00	0	5	20	5	6
1923	53.0	− 4.4	89	17	3.39	+0.64	2.76	0.1	9	15	5	11
1924	61.8	+ 4.4	92	21	1.22	−1.53	2.73	0	4	22	5	4
1925	48.6	− 8.8	92	− 3	4.85	+2.10	3.12	2.4	10	8	8	15
1926	57.3	− 0.1	93	21	4.67	+1.92	3.85	0	9	14	6	11
1927	60.9	+ 3.5	93	26	4.72	+1.97	8.85	0	5	22	5	4
1928	60.9	+ 3.5	94	22	3.83	+1.08	5.23	0	8	15	8	8
1929	57.2	− 0.2	91	23	5.54	+2.65	3.30	T.	10	15	6	10
1930	55.3	− 2.1	92	11	3.06	+0.17	4.25	T.	6	16	6	9
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for October, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Charlton	652	51	57.4	+ 2.2	92	10	22	31	38	2.96	+0.23	2.10	0	6	17	2	12	nw.	O. K. Benecke
Clifton Hill	Randolph	731	31	55.2	− 2.0	89	3†	15	31	37	1.67	−0.45	0.98	0.1	6	16	5	10	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	55.2	− 1.4	85	9	22	31	29	2.57	−0.04	2.14	T.	6	14	9	8	se.	U. S. Weather Bureau
Downing	Schuyler	876	9	53.7	− 2.2	87	10	20	21†	31	2.49	+0.29	1.56	T.	4	17	4	10	e.	James Taylor
Fayette	Howard	661	50	55.0	− 1.7	89	10	19	31	43	3.10	+0.62	1.98	0	4	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	55.0	− 2.7	88	9†	20	31	37	2.58	−0.17	2.10	T.	6	14	6	11	. ....	Chamber of Commerce
Gorin	Scotland	700	41	.....	.....	..	..	..	..	..	2.58	+0.20	1.63	T.	4	19	1	11	se.	J. W. Pulliam
Hannibal	Marion	534	38	55.4	− 0.6	85	9	24	20	31	2.22	−0.17	2.08	T.	4	17	6	8	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	55.0	− 1.7	86	9	21	31	38	3.25	+0.66	1.82	T.	6	17	5	9	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	54.0	− 0.7	86	10	20	31	30	2.33	−0.40	1.70	T.	4	17	3	11	s.	Prof. J. S. Stokes
Louisiana	Pike	469	36	55.3	− 1.0	85	4†	20	20	38	2.25	−0.38	1.95	0	2	17	9	5	e.	Stark Bros. Nurseries
Macon	Macon	875	31	54.2	− 2.6	87	10	20	31	32	0.48	−2.25	0.38	0	3	17	7	7	sw.	W. C. Brown
Mexico	Audrain	800	41	54.7	− 1.7	87	9	20	31	37	2.89	+0.51	2.15	0.5	5	22	0	9	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	2.75	.....	2.36	0	6	11	8	12	ne.	J. S. Conway
St. Charles	St. Charles	456	42	57.6	− 0.5	89	10	25	20	34	0.62	−2.05	0.44	T.	2	18	6	7	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	57.1	− 1.7	84	10	31	31	30	1.84	−0.88	1.23	T.	6	18	4	9	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	55.9	− 3.0	83	10	29	31	30	1.59	−2.20	0.90	T.	5	17	6	8	nw.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	2.33	−0.39	1.98	0	4	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	32	55.2	− 2.5	88	12	20	20†	33	2.95	+0.83	1.90	T.	4	16	4	11	n.	Frank Hall
Unionville	Putnam	1,062	37	54.2	− 1.2	88	10	18	21	35	2.71	+0.25	1.70	T.	7	18	5	8	s.	Geo. W. Davis
Warrenton	Warren	816	48	56.4	+ 0.8	87	9	23	31	32	2.07	−0.79	1.72	T.	4	13	10	8	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	54.0	− 1.4	84	10	24	31	27	2.00	−0.26	1.60	T.	5	15	7	9	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	55.3	− 1.3	92	10	15	31	43	2.28	−0.32	2.36	T.	5	17	5	9	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	56.6	.....	87	8	21	31	43	2.97	.....	1.50	0	8	17	4	10	s.	Jeff. King
Caruthersville	Pemiscot	265	34	60.0	− 1.7	86	11	29	31	37	3.45	+0.49	1.37	0	8	24	1	6	n.	Sam Smith
Doniphan	Ripley	344	26	57.8	− 0.6	86	9	23	31	43	5.50	+2.45	2.95	0	5	18	6	7	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	54.8	− 3.2	85	10†	25	29	38	1.28	−1.94	0.83	T.	4	15	6	10	n.	John G. Putz
Marble Hill	Bollinger	470	35	57.2	− 0.8	85	4†	27	29†	42	2.55	−0.10	1.65	0	3	22	1	8	s.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	2.35	−0.25	0.58	T.	7	20	7	4	n.	John A. Spence
Poplar Bluff	Butler	339	26	58.0	− 2.3	85	8†	24	31	47	3.21	+0.01	1.22	0	7	19	4	8	w.	J. H. Wolpers
Sikeston	Scott.	318	29	59.2	+ 0.4	86	11	27	31	38	2.08	−0.52	0.66	0	9	19	7	5	n.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	58.6	− 1.8	84	12	32	31	28	1.05	−1.71	0.49	T.	7	14	8	9	n.	U. S. Weather Bureau
Section means and	extremes	....	..	57.8	− 1.4	87	8	21	31	47	2.76	−0.19	2.95	T.	6	18	5	8	n.	
Ozark Plateau																				
Arcadia	Iron	926	48	52.9	− 3.2	81	9	24	31	39	3.47	+0.40	1.71	0	4	21	1	9	w.	Arcadia College
Aurora	Lawrence	1,370	38	54.9	− 3.6	82	9	23	31	31	4.08	+0.81	1.74	0	6	16	8	7	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	54.8	− 3.4	82	9	24	31	36	7.09	+4.51	4.25	0	5	22	1	8	se.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	54.6	− 5.3	86	9†	18	31	45	6.45	+2.96	1.95	0	6	14	8	9	ne.	H. E. Dean
Eldon	Miller	934	34	54.5[a]	− 3.2	88	9	22	31	38	3.04	+0.01	2.33	T.	6	10[a]	15[a]	5[a]	sw.	E. H. Shepherd
Farmington	St. Francois	918	19	54.7	− 1.7	87	10	24	31	41	2.38	−0.51	2.12	T.	6	14	9	8	sw.	Robert Forsyth
Goodland	Iron	1,000	36	54.0	− 1.8	83	10	22	31	42	4.31	+1.09	3.16	0	4	18	5	8	n.	F. M. Adams
Greenville	Wayne	381	7	55.0	.....	85	11	18	29†	52	5.28	.....	2.00	0	5	18	8	5	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	4.20	.....	2.90	0	3	18	5	8	e.	A. W. Madison
Koshkonong	Oregon	958	29	56.2[b]	− 3.8	79	4†	25	31	25	6.36	+3.45	3.00	0	6	18	5	8	nw.	R. M. Hitt
Lebanon	Laclede	1,265	43	53.5	− 4 5	86	10	18	31	37	4.04	+0.78	1.95	0	5	20	3	8	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	56.7	− 1.9	84	12	22	31	30	4.89	+1.44	1.62	0	7	15	3	13	nw	C. S. Crow
Mountain Grove (near)	Wright	1,463	29	54.5	− 3.1	82	9†	23	31	33	4.57	+1.52	2.00	0	5	19	5	7	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	57.2	− 2.0	87	9	20	31	35	4.79	+1.40	1.77	0	7	19	2	10	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	55.4	− 0.5	82	9	23	31	32	2.21	−0.74	1.17	T.	7	13	6	12	se.	F. H. Lane
Salem (near)	Dent	1,173	26	53.6	− 4.4	82	10	21	31	36	3.04	−0.84	1.93	T.	6	19	4	8	nw.	A. C. Leech
Seligman	Barry	1,542	28	55.0[a]	− 3.2	84	9	20	31	33	5.08	+2.14	1.38	0	5	19	2	10	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	53.7	− 3.8	82	9	22	31	33	4.45	+1.44	1.78	0	5	19	2	10	s.	Ira H. Hailey
Springfield	Greene	1,324	42	55.5	− 2.7	84	9	25	31	30	3.05	0.00	1.26	0	7	20	5	6	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	54.8	− 3.1	88	9	18	31	52	4.36	+1.17	4.25	T.	6	18	5	8	se.	
Southwest Plain																				
Appleton City	St. Clair	853	36	55.8	− 3.3	87	9	22	31	31	3.29	+0.95	1.19	T.	6	11	12	8	se.	W. G. Bigelow
Clinton	Henry	765	37	55.8	− 2.8	90	9	21	31	34	3.80	+0.99	1.28	0	7	14	5	12	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	55.1	− 0.9	86	9†	20	31	34	3.48	+0.89	1.60	0.5	9	11	2	18	se.	John H. Patterson
Lamar	Barton	980	43	57.4	− 1.5	88	9†	23	31	38	4.15	+1.02	1.85	0	6	16	5	10	se.	Jesse A. Mann
Lamonte	Pettis	867	30	55.2	− 2.8	85	9†	20	31	35	3.96	+1.63	1.25	T.	8	18	5	8	sw.	J. E. Wheeler
Marshall	Saline	779	42	55.8	− 0.8	88	10†	21	31	38	2.91	+0.33	1.84	T.	5	17	7	7	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	56.5	− 0.8	84	1†	22	31	34	3.00	−0.08	1.18	0	3	17	1	13	s.	George A. Kaupp
Warrensburg	Johnson	878	43	55.2[c]	− 2.9	92	9†	20	31	42	3.36	+0.81	....	T.	6	12[a]	9[a]	9[a]	se.	E. A. Markey
Warsaw	Benton	687	29	56.6	− 2.5	89	9	20	31	40	3.80	+0.49	1.80	T.	9	16	5	10	e.	Everett Martin
Section means and	extremes	.....	..	55.9	− 2.0	92	9†	20	31	42	3.53	+0.77	1.85	T.	7	14	6	11	se.	
Northwest Plateau																				
Bethany	Harrison	916	37	54.4	− 0.3	85	10	16	31	37	3.50	+1.29	1.15	T.	6	19	5	7	se.	A. S. Cumming
Chillicothe	Livingston	779	20	53.2	− 5.0	89	10	11	31	40	2.12	−1.33	1.44	T.	6	14	9	8	e.	Wm. J. Olenhouse
Conception	Nodaway	980	41	53.6	− 1.9	84	9†	19	31	33	2.13	−0.32	0.74	T.	7	10	11	10	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	54.3[a]	− 2.0	85	9	15	31	39	2.88	+0.63	0.64	T.	11	19	1	11	se.	Fred L. Stiff
Grant City	Worth	1,134	26	53.5	− 1.9	84	10	19	31	30	1.83	−0.89	0.71	T.	7	15	10	6	sw.	W. P. Spillman
Kansas City	Jackson	963	41	56.4	− 1.3	88	9	28	31	28	2.10	−0.82	1.07	T.	11	14	8	9	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	51.0	− 5.4	84	10	17	31	37	2.96	+0.34	1.11	T.	7	16	2	13	nw.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	2.83	.....	1.14	0.1	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	57.0	− 0.5	88	9†	21	31	34	2.37	−0.20	1.65	T.	8	14	11	6	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	53.0	− 0.3	85	2†	15	31	37	2.06	−0.61	0.68	T.	7	13	11	7	s.	J. R. Brink
Oregon	Holt	1,048	74	56.2	+ 1.3	88	10	19	31	37	2.15	−0.41	0.61	T.	9	15	7	9	sw.	Mina Wright
St. Joseph	Buchanan	967	22	55.0	− 1.7	86	9	23	31	32	3.99	+1.11	1.79	T.	10	14	9	8	se.	U. S. Weather Bureau
Tarkio	Atchison	916	27	52.5	− 3.0	84	9	15	31	35	1.30	−1.27	0.69	T.	5	13	6	12	se.	Albert Volker
Trenton	Grundy	822	34	54.6	− 1.7	86	10	19	31	32	3.30	+0.74	1.13	T.	7	15	10	6	s.	W. H. Estes
Section means and	extremes	.....	..	54.2	− 1.8	89	10	11	31	40	2.54	−0.13	1.79	T.	8	14	8	9	s.	
State means and	extremes	.....	..	55.3	− 2.1	92	9†	11	31	52	3.06	+0.17	4.25	T.	6	16	6	9	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for October, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Becker	Missouri							1.90	.01							.28	.50	.01		T.	T.		T.	.02									2.72
Boonville‖	do							2.10	.04							.08	.65						.04	.05									2.96
Brunswick‖	Grand						.25	.98							.02	.31	.10			.01													1.67
Clifton Hill	Chariton			T.	T.	T.	.73	1.45							.02	.30	T.			T.	T.	T.	.04	.03						T.	T.		2.57
Columbia***	Missouri				T.		.13	1.56							T.	.26	.54				T.									T.	T.		2.49
Downing	Mississippi					.02	2.10	.05								.35	T.		T.	T.		.02	.04								T.		2.58
Fayette‖	Missouri							1.98	T.							.60	.47						.05								T.		2.58
Fulton‖	do							.38	1.63						.04	.53																	2.22
Gorin	Mississippi			T.				.48	1.60							.13	T.			T.	T.		T.							T.	.01		2.34
Hannibal***	do								1.35	.30							.62	.01		T.	T.			.04							.02	T.	2.25
Hermann‖	Missouri						.03	T.	1.82	.20						1.08	T.		T.	T.		T.	.10								.02		2.33
Jefferson City‖	do						.25	1.70							.03	.35						T.								T.		2.25
Kirksville	Mississippi							1.95								.30																2.40
Louisiana	do							1.27								.23	.90															0.48
Lucerne‖	Grand				.08			.02									.38						T.									2.89
Macon ‖	Chariton							2.15	.16							T.	.50			.05				.03							T.		2.74
Mexico ‖	Mississippi							1.58							.12		.65	.28															2.75
Milan‖	Grand				.11			2.36							T.	.24	.02						.01							.01			2 07
Monroe City	Mississippi					.11		.74	.65								.68							T.	T.						T.		0.62
Pacific‖	Meramec							.44	.18											T.			T.								T.		1.84
St. Charles	Missouri						.17	1.08								.43	.12			T.			.02	.02			T.				T.		1.59
St. Louis (1)***	Mississippi						.19	.90								.37	.10			T.			.03								T.		2.33
St. Louis (2)*	do							1.98	.07								.26							.02									2.95
Shelbina ‖	do						.15	1.90							T.	.35	.55						T.								T.		2.44
Steffenville	do							1.35	.43								.63							T.								.03	2.71
Union‖	Meramec				.10		.20	1.50							.15	.45	.30				.01		T.								T.	T.	2.37
Unionville	Chariton							.70	.67								1.00			T.				T.							T.		2.07
Valley Park ‖	Meramec						.08	1.72									.23			T.			.04	T.							T.		2.00
Warrenton	Mississippi						.40	1.20							.25	.12	.03						T.	T.			T.		T.	T.			
Keokuk, Ia.***	do			T.																													
Southeast Lowlands																																	
Campbell‖	St. Francis						T.	.30	.42								.13	.26					.20	1.50	.06				.10				2.97
Cape Girardeau‖	Mississippi							.09	.49								.28	.16					.01	.42	T.			.02	.03				1.50
Caruthersville ‖	do							.16	.47								.57	.05					.13	1.37	.20				.50				3.45
Dexter‖	St. Francis							.37	.55								.10	.80					.32	.78				.07					2.99
Doniphan	Black							2.95									.50						.95	.96				.14					5.50
Jackson	Mississippi							.83	.14								.24						.07								T.		1.28
Marble Hill	Mississippi							1.65									.40							.50									2.55
Morehouse	do						T.	.58	.33								.12	.34					.42	.45				.11			T.		2.35
New Madrid‖	do							.16	.83								.01	.32					.24	1.03	.12				.46			.02	3.19
Poplar Bluff‖	Black							.55	.85								.15					.06	.35	1.22			.03					3.21
Sikeston‖	Mississippi							.18	.65								.06	.29					.10	.66	.02			.08	.04	T.			2.08
Cairo, Ill.***	do						.01	.24	T.								.05	.12				T.	.23	.29				.11			T.		1.05
Ozark Plateau																																	
Arcadia ‖	St. Francis							.93	1.71								.28						T.	.55			T.	T.		T.		3.47
Aurora	Neosho						.90	.75									.27					.12	1.74	.30									4.08
Birchtree (near)	Black						.35	4.25									.68						1.39	.42									7.09
Caplinger Mills	Osage					.68	1.35								.16	.14	T.					.02	1.15	.15									3.65
Dean	Neosho					T.	1.65	1.95								T.	.30				T.	.34	.86	1.35									6.45
Eldon‖	Missouri							2.33								.05	.49	.01			.05	.11											3.04
Farmington	St. Francis						.04	2.12									.08			T.			.03	.08							.03		2.38
Galena‖	White						.05	1.03	.04								.63						1.10	.98									3.83
Goodland	Black						.18	3.16															.70	.27									4.31
Greenville	St. Francis							2.00	.20								1.08						1.70	.30									5.28
Hailey	White						2.90									.70								.60									4.20
Koshkonong	Black						.49	3.00									.27						1.40	1.08				.12					6.36
Lebanon ‖	Osage						T.	1.95	.09						T.	T.	.20			T.		T.	.90	.90									4.04
Leeper‖	Black							1.05	1.43								.24	T					.45	.66					T.				3.83
Lockwood	Osage						1.05	1.25							.12	.10	.15					.60	1.62										4.89
Mountain Grove‖	White						T.	2.00	.28								.96					T.	.68	.65	T.			T.					4.57
Neosho	Neosho					.03	1.45	1.77							T.		.28					.12	.85	.29									4.79
Owensville ‖	Gasconade							1.50	.39								.40	.21															2.50
Ozark Beach‖	White																																
Rolla ‖	Meramec							1.17	.30								.12				.08		.20	.32	.02					T.			2.21
Salem (near)	do							.23	1.70								.20				.05		.52	.34									3.04
Seligman	Neosho						1.10	1.38									.17						1.13	1.30									5.08
Seymour (near)	White						.40	1.78								T.	1.01					T.	1.10	.16									4.45
Springfield***	do					T.	.92	.26							.02	.53	T.				T.	.21	1.09	.02								T.	3.05
Steelville‖	Meramec							.98	.57								.06				.04			.21									1.86
Stover ‖	Missouri						T.	2.26									.62				T.		.06										2.94
Tuscumbia ‖	Osage						T.	1.88	.03								.40	.08			T.		.06	.22									2.67
Williamsville‖	Black							.73	1.55								.24	.19					.41	.80	.04				.12			.12	4.20
Willow Sprgs. ‖ (near)	White							2.55	1.53								.39					.03	.51	1.42									6.43
Southwest Plain																																	
Appleton City	Osage																																
Clinton	Osage				T.	T.	.89	1.19							.06	.75	T.			T.		.05	.35	T.									3.29
Concordia‖	Missouri						.97	1.28							.32	.63	.05			.05		T.	.50										3.80
Harrisonville‖	Osage							1.80									.96																2.76
Joplin‖	Neosho						.07	1.60	.02						.64	.20	.74				.09	.07		.05									3.48
Lamar‖	do						2.05	.30								.10						.27	.73									3.45
Lamonte	Missouri						.08	1.85								.37	.20						1.15	.50									4.15
Marshall	do						1.10	1.25							.05	.60	.80			.04	.02		.10										3.96
Nevada	Osage				T.		.40	1.84							.03	.59	T			T.			.05										2.91
Oseeola‖	do						.90	.92									T.						1.18										3 00
Warrensburg	Missouri						.09	2.17	.09								.18						.44	.15									3,12
Warsaw	Osage						**	2.10							.14	.68	.16				T.	T.	.28							T.	T.		3.36
Waverly ‖	Missouri						.41	1.80							.16	.37	.40			.01		.07	.56	.02									3.80
								1.76	T.								.55						T.	.05									2.36
Northwest Plateau																																	
Bethany	Grand						.41	.79					T.	1.15	.05	.75	.35				T.		T.											3.50
Chillicothe ‖	do						.14	1.44	.04							.07	.39			T.			T.	.04									2.12
Conception	Missouri			T.		T.	.25	.39					.18	.45	.07	.74	.05			T.	T.									T.			2.13
Edgerton	do			.18			.43	.46	.01				.12	.47	.26	.64	.23			.05	T.	T.	.03	T.									2.88
Gallatin ‖	Grand		T.				.02	1.18	T.					.61	.04	.22	1.46			T.				.03									3.56
Grant City	do		T.	.03	T.			.43					.07	.31	.03	.71	.25				T.		T.								T.		1.83
Kansas City***	Missouri		T.	T.		.01	.97	.18					.68	.07	.03	.06	T.			.01	.05	.01	.03										2.10
Kidder ‖	Grand						.16	1.11						.27	.25	.08	1.03			.06											T.		2.96
King City	Missouri		T.	T.		T.	.38	.37					T.	.71	.14	1.14	.07			.01	T.		.01	T.									2.83
Lexington	do						.08	1.65	.03								.32			.05		.04	.08	.12							T.		2.37
Maryville ‖	do		T.	T.			.06	.54						.61	.07	.07	.68			T.	T.	T.	.03										2.06
Oregon	do		.02	T.			.13	.45					.31	.50	.05	.61	.05		T.	T.			.03							T.			2.15
St. Joseph***	do		.01	.03		T.	.68	.03					.05	1.07	.30	1.36	.43			T.	T.		.03							T.			3.99
Tarkio	do							.69						.31	.09	.14	.07				T.												1.30
Trenton	Grand		T.	T			.41	.83						.04	.04	.77	1.13				T.		.05										3.30

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for October, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	77	78	90	85	84	66	65	82	91	92	89	89	78	62	74	60	59	49	50	51	55	47	60	65	73	74	72	69	64	47	53	69.4
	Minimum	49	49	54	61	59	59	56	51	56	62	61	60	60	55	55	54	32	32	32	24	29	34	40	32	35	42	41	45	33	32	22	45.4
Columbia	Maximum	73	80	81	82	76	64	66	76	85	84	81	81	80	62	70	67	52	43	41	45	46	44	52	59	65	71	66	57	58	42	46	64.4
	Minimum	51	54	54	63	60	56	55	53	63	61	64	61	57	57	57	41	32	33	31	25	35	40	37	33	39	42	49	38	32	30	22	46.0
Fayette	Maximum	78	85	86	83	78	63	68	80	88	89	85	85	83	60	70	65	65	46	42	49	52	44	52	64	68	74	70	60	62	42	50	67.3
	Minimum	46	49	49	51	57	59	54	47	50	57	57	59	54	55	56	57	29	30	33	21	23	35	39	30	29	31	43	42	29	31	19	42.6
Hannibal	Maximum	70	80	84	84	73	68	68	75	85	84	83	83	83	64	69	67	53	47	46	43	45	43	53	59	62	71	66	57	59	39	46	64.8
	Minimum	47	55	58	60	61	57	57	53	62	63	62	62	55	57	58	42	35	32	32	24	30	40	39	32	35	40	48	40	34	32	25	46.0
Jefferson City§§	Maximum	76	79	79	83	78	65	69	77	86	80	84	82	82	65	73	67	56	47	38	47	50	45	51	63	67	72	68	59	62	42	49	65.8
	Minimum	48	49	48	57	58	57	54	52	55	60	59	58	54	57	57	58	31	31	33	25	27	32	38	33	32	34	42	46	33	34	21	44.3
Kirksville	Maximum	71	82	79	81	81	67	63	76	85	86	83	83	78	75	66	62	49	46	45	41	46	42	56	61	64	67	67	60	57	40	45	64.6
	Minimum	43	53	53	62	58	56	54	49	58	62	59	58	54	52	55	39	29	28	31	22	22	37	37	34	34	40	45	45	30	29	20	43.5
Louisiana	Maximum	72	79	83	85	82	72	67	70	85	83	85	82	83	75	71	69	59	50	45	43	47	45	50	60	62	70	70	67	59	45	52	66.7
	Minimum	47	43	50	58	50	57	57	50	60	60	58	60	50	57	63	48	32	33	34	20	29	36	40	30	28	32	50	43	27	35	25	43.9
Macon§§	Maximum	76	83	82	82	75	65	65	77	86	87	85	83	77	60	67	59	51	47	45	46	47	43	55	60	65	70	65	57	58	38	50	64.7
	Minimum	44	51	55	57	57	58	53	50	54	60	59	58	58	54	54	55	29	30	29	21	24	31	38	31	34	40	45	46	30	29	20	43.7
Mexico§§	Maximum	75	83	82	85	79	67	66	78	87	85	84	82	83	63	70	62	54	49	44	46	47	43	51	60	65	71	65	58	58	39	45	65.4
	Minimum	44	46	53	53	59	59	54	51	52	61	59	59	54	55	54	55	31	31	31	23	22	31	38	34	34	40	47	48	34	33	20	44.0
St. Louis(1)	Maximum	70	75	82	80	68	70	65	74	80	84	83	82	80	78	73	74	54	51	42	47	47	45	49	61	61	69	68	60	62	43	45	65.2
	Minimum	48	52	56	62	57	58	57	62	60	63	66	65	66	60	60	44	38	37	34	32	36	41	42	38	39	40	54	47	40	35	31	49.0
Unionville	Maximum	75	82	80	80	76	72	65	84	77	88	84	84	74	65	66	64	48	45	38	42	50	50	55	65	68	70	67	63	55	45	47	65.3
	Minimum	44	56	54	57	60	57	53	57	50	60	60	60	54	50	54	40	28	26	30	22	18	34	35	30	34	44	43	44	43	30	20	43.0
Warrenton	Maximum	73	80	86	86	76	71	65	77	87	86	84	82	82	76	75	72	55	51	43	45	49	43	46	58	65	71	66	63	63	53	45	66.9
	Minimum	45	48	54	58	57	59	54	55	59	60	61	61	59	55	57	50	33	33	32	24	34	39	40	34	35	40	54	47	35	32	23	46.0
Southeast Lowlands																																	
Campbell	Maximum	74	77	83	85	76	72	70	87	85	86	86	85	84	82	83	82	75	61	60	51	53	45	47	62	69	71	63	66	64	55	55	70.8
	Minimum	46	40	40	46	52	54	55	60	50	52	55	49	50	51	51	56	39	31	32	35	36	37	40	30	30	31	44	46	27	32	21	42.5
Caruthersville	Maximum	85	77	78	83	84	79	72	72	79	81	86	85	85	85	83	84	82	63	61	63	57	56	48	49	61	67	71	60	67	63	53	71.6
	Minimum	52	48	49	50	55	60	60	65	61	61	62	60	56	57	55	55	45	38	38	42	41	40	40	35	37	41	44	51	36	37	29	48.4
Doniphan	Maximum	81	77	85	85	75	68	74	80	86	85	85	84	85	83	82	79	65	63	63	52	55	48	52	65	60	63	70	71	67	63	56	71.2
	Minimum	48	42	42	48	57	59	55	57	54	55	56	56	52	51	52	53	40	33	37	40	39	39	42	32	41	33	43	39	29	30	23	44.4
Jackson	Maximum	70	71	78	81	74	72	67	74	79	85	85	83	79	77	75	79	75	56	52	46	46	45	47	60	63	69	64	64	61	54	44	66.9
	Minimum	41	38	41	47	52	54	55	59	56	57	56	54	51	51	57	57	37	30	34	28	34	32	39	27	30	37	46	40	25	31	26	42.6
Poplar Bluff	Maximum	75	78	81	82	72	69	69	85	85	84	84	83	84	81	81	82	75	62	62	55	50	45	54	65	80	71	68	71	65	50	52	71.0
	Minimum	47	42	43	50	56	57	58	59	54	56	57	55	54	52	54	61	42	32	36	40	40	38	39	32	33	34	45	42	30	35	24	45.1
Sikeston	Maximum	73	75	83	85	82	75	71	80	82	85	86	85	83	83	81	83	80	60	58	52	50	48	48	62	66	70	64	68	64	59	47	70.6
	Minimum	48	44	48	55	58	56	59	58	59	59	61	60	56	55	59	62	42	35	38	39	38	43	34	35	49	53	49	33	34	27	47.9	
Cairo, Ill	Maximum	70	74	80	82	72	73	72	79	82	84	84	84	82	80	78	82	57	55	54	50	49	45	47	59	63	69	61	66	60	48	46	67.3
	Minimum	51	49	53	56	58	63	61	64	64	62	62	62	63	62	60	54	42	41	41	38	40	40	43	37	40	42	52	47	37	33	32	50.0
Ozark Plateau																																	
Arcadia§§	Maximum	70	75	79	78	69	67	66	77	81	80	79	80	80	75	75	75	58	55	44	50	48	45	45	62	62	66	68	61	63	42	48	65.3
	Minimum	41	38	40	44	47	53	54	56	56	56	54	52	46	47	50	56	34	33	35	28	29	34	34	28	28	29	39	35	25	29	24	40.5
Aurora	Maximum	76	76	73	75	74	66	64	77	82	78	77	78	75	69	75	72	54	53	51	44	43	43	50	57	61	69	63	54	58	50	43	63.9
	Minimum	55	54	51	58	58	55	57	50	58	57	59	59	54	54	54	49	32	33	38	36	33	39	38	34	35	38	51	45	34	31	23	45.9
Birchtree	Maximum	75	76	79	80	75	65	69	76	82	81	80	79	80	79	76	75	60	57	54	47	49	43	47	59	64	64	67	63	57	47	47	66.2
	Minimum	49	42	43	50	58	56	55	49	56	55	58	57	51	50	50	53	35	32	35	35	36	35	40	28	32	40	50	27	35	28	24	43.4
Eldon§§	Maximum	76	81	79	81	78	60	69	..	88	86	82	82	83	69	73	66	57	52	33	44	49	50	51	53	68	72	68	58	62	43	49	°65.4
	Minimum	48	48	51	51	55	59	57	50	..	50	58	58	55	56	58	59	33	31	31	26	26	36	38	33	34	43	45	32	31	22	°43.6	
Farmington	Maximum	70	78	84	82	71	67	69	78	82	87	86	84	78	76	79	75	59	55	39	46	49	40	44	62	66	68	68	60	61	35	44	65.9
	Minimum	44	41	43	49	55	55	54	58	58	56	58	56	48	51	57	56	33	32	33	25	34	36	40	32	28	39	53	41	29	31	24	43.5
Koshkonong	Maximum	72	72	76	79	74	64	79	73	79	79	..	..	78	76	76	78	61	56	55	47	47	44	52	57	62	65	62	62	60	54	45	°65.0
	Minimum	56	48	51	58	59	57	57	55	60	60	..	..	58	59	57	61	38	38	40	38	37	37	42	34	38	43	51	46	36	38	25	°47.5
Lebanon§§	Maximum	79	82	81	82	75	61	65	78	86	85	81	81	82	69	78	70	56	54	45	42	47	45	44	63	61	69	66	43	60	43	48	65.2
	Minimum	46	50	48	49	52	56	55	48	49	56	57	57	52	53	50	52	28	28	30	31	31	32	37	30	30	36	33	42	29	30	18	41.8
Mountain Grove§§	Maximum	76	76	75	78	74	62	67	74	82	80	79	77	82	77	75	73	57	57	55	43	43	44	44	63	63	66	67	60	61	44	41	65.0
	Minimum	50	48	50	49	57	56	55	52	53	58	61	59	50	53	51	54	33	32	32	35	34	34	37	30	31	41	43	43	29	32	23	44.0
Neosho	Maximum	82	81	77	79	76	69	70	82	87	85	81	85	81	76	74	57	60	61	48	45	48	55	64	69	72	67	65	62	58	53	53	69.2
	Minimum	47	52	48	58	57	57	58	48	60	55	56	58	52	56	52	52	31	31	40	38	35	40	39	30	34	45	52	36	27	33	20	45.1
Rolla	Maximum	73	76	79	80	72	68	65	73	82	80	80	79	77	73	77	74	53	51	46	45	47	46	45	57	64	67	64	60	62	54	43	64.9
	Minimum	48	49	50	54	59	57	55	52	60	59	59	51	55	57	51	33	33	35	28	35	37	43	32	32	45	55	42	32	34	23	45.6	
Springfield	Maximum	77	77	73	76	71	62	62	75	84	80	77	77	78	69	74	70	54	53	47	44	43	45	47	59	63	69	64	56	59	43	47	63.7
	Minimum	57	56	56	59	61	57	56	50	61	61	63	62	60	55	55	40	34	35	36	36	34	39	38	36	40	45	52	42	36	30	25	47.3
Southwest Plain																																	
Appleton City	Maximum	82	83	76	81	72	65	64	80	87	84	81	84	76	66	69	66	56	50	46	39	41	47	53	62	67	72	67	60	58	53	47	65.6
	Minimum	53	58	54	59	59	56	56	51	61	58	60	59	58	55	57	43	31	42	34	33	32	38	36	33	36	43	46	45	30	31	22	46.1
Clinton	Maximum	84	86	78	84	74	66	65	80	90	86	83	85	80	65	67	66	60	55	46	39	46	47	47	65	68	73	65	71	56	55	38	66.8
	Minimum	50	56	52	58	58	56	56	50	60	58	60	57	57	56	58	44	30	30	35	31	34	40	36	31	34	40	38	43	30	32	21	44.9
Harrisonville§§	Maximum	84	85	80	79	81	59	70	79	86	84	86	83	68	64	68	52	56	55	38	38	44	45	58	65	65	72	71	62	61	41	50	65.5
	Minimum	52	54	58	60	61	57	55	52	54	58	60	60	58	54	55	51	29	30	33	26	30	34	33	31	34	39	43	43	32	29	20	44.7
Lamar§§	Maximum	86	81	80	84	73	63	67	82	88	88	84	86	86	68	80	71	61	58	50	43	46	50	55	66	69	73	70	60	66	50	53	68.9
	Minimum	48	55	52	53	60	58	58	52	54	58	58	61	57	59	56	60	33	33	35	36	34	35	38	34	34	37	47	44	31	31	23	45.9
Lamonte	Maximum	80	82	83	82	78	66	64	77	85	85	81	82	74	60	69	65	54	45	43	41	46	46	53	60	70	71	68	57	58	44	48	65.1
	Minimum	51	59	55	59	60	56	56	51	61	62	61	62	58	55	58	41	30	33	32	25	34	40	37	32	36	36	45	39	32	28	20	45.3
Marshall	Maximum	82	84	84	83	80	71	64	70	82	88	88	85	84	68	69	65	53	53	43	44	46	47	54	61	68	73	67	61	68	51	48	67.2
	Minimum	50	52	56	60	59	57	55	54	56	55	50	55	59	55	52	43	31	30	32	25	34	34	34	34	40	46	46	34	34	31	21	44.3
Nevada	Maximum	84	82	78	81	72	68	66	82	82	84	82	84	78	68	75	67	56	54	46	41	41	48	54	61	67	77	67	58	60	50	48	66.5
	Minimum	50	59	57	61	59	57	57	53	62	60	59	62	58	55	56	43	32	33	34	34	33	38	38	33	39	43	45	44	35	31	22	46.5
Warrensburg	Maximum	84	87	75	..	..	..	68	82	92	92	88	89	75	64	70	66	55	49	43	40	65	46	54	61	66	71	67	60	59	52	47	°66.7
	Minimum	42	57	52	..	..	..	55	51	61	62	61	61	58	54	57	42	31	32	31	25	32	39	37	33	38	45	44	45	30	27	20	°43.6
Warsaw	Maximum	81	83	80	83	79	70	66	80	89	86	83	83	83	72	71	68	56	53	49	42	49	50	52	63	69	72	69	62	60	55	49	68.0
	Minimum	51	57	49	57	58	57	57	47	61	60	59	60	54	57	59	45	31	34	34	29	33	40	40	29	29	43	50	43	28	33	20	45.3
Northwest Plateau																																	
Chillicothe§§	Maximum	82	86	87	81	82	61	65	80	88	89	87	86	61	58	65	50	51	44	47	46	49	45	56	65	68	71	68	57	57	42	50	65.3
	Minimum	45	50	53	58	55	56	52	48	53	58	57	57	59	50	50	47	26	28	29	19	21	22	37	37	28	35	37	43	29	28	11	41.2
Grant City	Maximum	78	83	81	78	73	67	68	77	83	84	82	80	70	55	66	63	41	41	42	39	45	44	58	61	67	65	67	58	54	42	41	63.0
	Minimum	51	59	58	60	59	55	54	52	59	61	60	61	51	50	53	38	29	27	31	23	32	33	30	31	37	45	43	41	34	29	19	44.0
Kansas City	Maximum	83	82	82	80	72	60	68	80	88	85	82	80	67	63	68	65	53	44	44	40	41	45	58	64	70	69	68	57	56	41	31	64.6
	Minimum	55	64	65	64	59	56	56	54	64	64	63	64	53	52	60	40	36	35	32	28	33	39	35	40	44	48	45	45	45	41	28	48.2
Kidder§§	Maximum	79	82	82	78	73	60	66	77	82	84	82	80	58	58	65	47	49	40	43	42	43	44	55	58	67	67	65	55	55	40	46	62.0
	Minimum	44	48	55	56	55	50	52	48	50	57	57	57	54	48	49	44	26	26	27	21	21	23	31	27	30	34	39	41	29	27	17	40.1
Lexington	Maximum	85	85	82	84	75	69	68	81	88	88	85	85	77	63	68	65	55	48	47	44	50	45	58	64	69	71	70	59	59	48	50	67.3
	Minimum	51	62	58	61	59	59	55	52	62	62	62	62	61	54	57	50	30	32	32	24	33	40	36	33	38	46	45	46	34	31	21	46.7
Maryville	Maximum	80	85	83	77	71	64	65	79	84	85	85	78	71	55	67	64	46	41	41	39	42	41	55	64	70	67	66	59	54	44	49	63.6
	Minimum	50	60	58	60	56	57	53	51	59	60	58	60	51	49	52	37	26	27	30	21	22	35	25	27	38	45	39	39	29	26	15	42.4
Oregon	Maximum	85	85	86	82	73	64	74	83	87	88	87	85	68	56	71	65	51	45	49	43	43	42	64	69	73	67	72	62	58	45	54	66.6
	Minimum	53	60	63	61	61	50	53	55	64	64	61	63	53	51	55	45	28	30	32	23	25	37	28	32	50	48	49	50	34	26	19	45.9
St. Joseph	Maximum	82	83	83	79	72	60	70	80	86	85	83	77	61	58	67	66	50	40	44	41	43	43	58	63	69	67	68	57	55	41	50	64.0
	Minimum	52	63	62	62	60	57	56	55	64	64	61	63	53	52	57	36	32	32	30	26	28	36	32	31	42	49	43	40	37	27	23	46.0
Trenton	Maximum	78	83	84	80	77	70	67	76	84	86	83	84	75	58	65	64	49	46	45	41	46	47	57	62	67	67	66	60	56	42	47	64.9
	Minimum	49	55	56	60	59	58	55	50	59	60	60	61	56	52	56	41	29	30	33	22	23	38	36	31	35	43	44	44	32	30	19	44.4

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 11-21-30—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., NOVEMBER, 1930 No. 11

GENERAL SUMMARY

Unlike November of 1929, which was abnormally cold, the month of November, 1930, was inclined to be mild in all Missouri, particularly the middle part from about the 11th to the 20th. The first week was mainly cool, and the last decade varied from mild to cold but mainly rather cold.

For the State as a whole, the month averaged 1.4° warmer than normal. By sections, it was warmer than normal in the northeast, northwest, southwest, and southeast divisions, and cooler than normal in most of the Ozark Plateau. The 18th, and 19th, were warm summer-like days generally, and several other days were almost as pleasant. The 26th, 27th, and 28th, were rather typical of early winter, snow flurries being in the air, and temperatures varying between 14° and 8° above zero at night.

The month was wetter than normal, except in the southeast section and along the eastern border as far north as St. Louis; slightly above normal in the Ozarks, but 35 per cent to 50 per cent wetter in western areas. There was no precipitation of consequence anywhere the first thirteen days, except in the southeastern lowlands. More or less rainy generally 16th, and 20th, and the 24th to the 29th made a period of misty rains with occasional snow flurries, especially frequent over the northeastern plain. Perhaps the most general and substantial rain was on the 29th-30th. The month's snowfall was light, mostly flurries generally, though 10 stations had from 0.1 to 0.5 of an inch. The normal snowfall for November is less than one inch.

The general farm situation was relatively satisfactory. The weather was favorable for fall sown grains. More than half the corn crop had been husked; and stockwater had been replenished. As a rule pastures were thin, but many fields of early sown wheat and rye were furnishing good grazing.

TEMPERATURE

The monthly mean for the State, based upon the records of 67 stations, was 45.8°, or 1.4° warmer than normal. The highest local monthly mean was 50.0° at Doniphan, Ripley County; and the lowest was 41.2° at Kidder, Caldwell County. The highest temperature recorded was 83° at Doniphan on the 18th; the lowest recorded was 8°, at Unionville, Kirksville, Downing, and Steffenville, on the 28th. Minimum values of 32° or lower occurred on 14 to 16 days.

PRECIPITATION

The average precipitation for the State, 98 stations reporting, was 2.93 inches, or 0.53 inch more than the 60 years' average, and 1.47 inches more than November, 1929. The greatest local monthly amount was 6.10 inches at Lamonte, Pettis County; and the least was 1.27 inches at Doniphan, Ripley County. The greatest fall in any twenty-four consecutive hours was 2.70 inches at Unionville, Putnam County, on the 19th-20th.

The snowfall was light and unimportant.

MISCELLANEOUS PHENOMENA

Fogs, dense.—General over northern and central sections, 3d, 4th, 5th, 10th, 11th, 12th, 13th, 25th, and 29th.

Halos, lunar.—1st, 3d, 6th, 15th, 28th, and 30th.

Halos, solar.—1st, 7th, 15th, 22d, and 23d.

Sleet.—Light, with damage, 18th, 23d, 24th, 25th, and 28th.

Thunderstorms.—Local, 15th, 19th, and 20th.

Winds.—Strong winds to gales over western and northern parts of State 19th to 26th. Some little damage to shacks at Fulton on the 25th, and to telephone and telegraph poles at Maryville on the 25th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity 7 a. m.	Mean relative humidity 7 p. m.	Sunshine Total hours	Sunshine Percentage of possible	Wind Total movement miles	Wind Average hourly velocity	Max. velocity Miles per hour	Max. velocity Direction	Max. velocity Date
Columbia	30.11	78	57	232	77	6,014	8.4	38	nw.	25
Hannibal	30.12	80	..	...	..	6,465	9.0	32	sw.	16
Kansas City	30.09	70	53	252	83	7,318	10.2	48	nw.	25
St. Joseph	30.07	72	54	229	76	6,591	9.2	47	nw.	25
St. Louis	30.11	77	63	202	67	8,948	12.4	40	sw.	16
Springfield	30.12	78	56	234	77	8,057	11.2	40	se.	19
Cairo, Ill.	30.15	83	67	..	..	5,567	7.7	27	se.	15
Keokuk, Iowa	30.11	75	57	201	67	5,723	7.9	31	nw.	25

Beginning January 1, 1928 wind velocities are by Robinson anemometers.

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COMPARATIVE DATA FOR NOVEMBER

Year	Temperature Mean	Temperature Departure	Temperature Highest	Temperature Lowest	Precipitation Mean	Precipitation Departure	Precipitation Greatest in 24 hours	Precipitation Total snowfall unmelted	Number of days With .01 inch or more	Number of days Clear	Number of days Partly cloudy	Number of days Cloudy
1888	41 6	− 2.0	87	15	3.26	+0.94	....	....	11	..	..	..
1889	39.9	− 3.7	73	8	3.43	+1.11	....	....	7	..	..	..
1890	46.5	+ 2.9	80	20	2.31	−0.01	....	....	5	..	..	..
1891	39.6	− 4.0	82	− 2	3.60	+1.28	....	....	5	..	..	..
1892	40.1	− 3.5	79	9	2.60	+0.28	....	1.0	6	11	7	12
1893	40.9	− 2.7	79	− 1	1.54	−0.73	4.86	0.3	4	14	9	7
1894	41.0	− 2.6	80	3	1.58	−0.74	2.20	T.	4	15	9	6
1895	41.6	− 2.0	82	2	3.37	+1.05	2.98	3.2	8	10	7	13
1896	42.3	− 1.3	82	5	2.18	−0.14	4.00	0.2	6	11	7	12
1897	43.4	− 0.2	82	− 3	2.40	+0.08	3.39	T.	6	13	8	9
1898	39.9	− 3.7	79	− 8	2.28	−0.04	2.75	2.3	6	14	8	8
1899	49.5	+ 5.9	82	16	1.90	−0.42	2.66	0.2	7	11	9	10
1900	43.7	+ 0.1	84	7	2.58	+0.26	4.55	0.2	6	15	7	8
1901	43.6	0.0	84	9	1.38	−0.94	1.90	0.3	4	17	7	6
1902	50.1	+ 6.5	85	18	3.62	+1.20	2.14	0.4	9	8	9	13
1903	40.9	− 2.7	79	2	1.24	−1.08	2.44	1.1	5	13	8	9
1904	46.3	+ 2.7	83	11	0.22	−2.10	0.68	T.	2	21	5	4
1905	45.8	+ 2.2	83	2	1.94	−0.38	2.49	T.	6	18	6	6
1906	42.5	− 1.1	88	− 3	2.60	+0.28	3.60	5.0	8	12	6	12
1907	43.8	+ 0.2	88	5	2.52	+0.20	3.00	T.	4	19	4	7
1908	47.6	+ 4.0	87	9	4.14	−1.82	4.00	0.2	8	15	7	8
1909	53.6	+10.0	87	11	4.43	+2.11	6.18	0.4	8	12	7	11
1910	42.0	− 1.6	83	11	0 38	−1.94	0.70	0.1	3	15	8	7
1911	39.1	− 4.5	93	− 3	2.55	+0.23	2.15	1.1	7	13	6	11
1912	45.9	+ 2.3	88	12	1.52	−0.80	2.37	0.1	3	20	5	5
1913	51.7	+ 7.4	80	11	2.73	+0.35	2.50	T.	7	10	8	12
1914	48.6	+ 4.0	89	2	0.65	−1.84	1.90	0.1	3	19	6	5
1915	49.5	+ 4.9	87	12	2.76	+0.33	2.62	0.1	5	16	7	7
1916	49.6	+ 5.9	85	3	2.49	+0.14	2.53	0.1	4	19	4	7
1917	46.1	+ 1.5	80	8	1.05	−1.46	3.26	T.	3	14	5	11
1918	44.9	+ 0.5	85	12	3.18	+0.79	4.60	1.2	6	15	4	11
1919	42.2	− 2.2	78	2	3.62	+1.40	3.36	1.0	6	15	5	10
1920	40.9	− 3.5	82	6	1.21	−1.09	1.89	T.	6	12	6	12
1921	45.6	+ 1.2	84	10	2.82	+0.40	4.29	0.4	5	13	7	10
1922	47.8	+ 2.9	84	15	3.82	+1.45	3.40	T.	7	16	6	8
1923	45.1	+ 0.6	79	14	2.15	−0.20	2.30	3.0	6	15	6	9
1924	46.7	+ 2.2	88	4	1.72	−0.63	1.68	0.5	4	15	8	7
1925	42.8	− 1.7	80	− 2	2.99	+0.64	3.20	2.0	6	16	6	8
1926	39.6	− 4.9	78	0	2.98	+0.63	2.25	4.2	7	11	7	12
1927	46.8	+ 2.3	89	12	3.55	+1.20	3.41	0.9	7	6	9	15
1928	44.6	+ 0.1	79	9	5.10	+2.75	6.52	0.5	10	13	4	13
1929	39.0	− 5.4	78	− 8	1.46	−0.96	2.45	2.1	6	11	8	11
1930	45.8	+ 1.4	83	8	2.93	+0.53	2.70	T.	5	18	5	7
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for November, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	47.2	+ 5.7	79	18	15	28	48	3.45	+1.48	1.62	0	4	22	1	7	se.	O. K Benecke
Clifton Hill	Randolph	731	31	45.6	+ 1.8	75	18	10	28	43	2.36	+0.45	0.82	T.	5	18	5	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	46.0	+ 2.7	78	18	16	28	35	2 25	+0.05	1.32	0.3	7	15	11	4	se.	U. S. Weather Bureau
Downing	Schuyler	876	9	44.2	+ 2.6	74	19	8	28	32	3.60	+1.97	1.26	T	6	21	5	4	w.	James Taylor
Fayette	Howard	661	50	45.0	+ 2.7	79	18	15	28	45	3.07	+1.07	1.66	T.	4	..	..	..	.....	J. D Settle
Fulton	Callaway	818	50	44.6	+ 0.1	79	18	14	28	44	3.05	+0.80	1.61	0 2	7	20	3	7	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	2.35	+0.39	1.62	T.	4	20	4	6	se.	J W Pulliam
Hannibal	Marion	534	38	45.3	+ 3.2	75	19	14	28	34	3.36	+1.30	1.84	0.7	8	17	6	7	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	44.3	+ 0.2	79	18	16	28	45	2.81	+0.54	1.20	T.	6	17	10	8	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	44.2	+ 3.7	74	19	8	28	34	2.43	+0.67	0.95	0.4	5	14	4	12	nw.	Prof. J S. Stokes
Louisiana	Pike	469	36	43.0	− 1.2	74	19	10	28	40	2.33	+0.05	1.40	T.	3	15	13	2	s.	Stark Bros. Nurseries
Macon	Macon	875	31	44.0	+ 0.6	75	18†	10	28	38	3.39	+1.46	1.98	T.	4	18	5	7	sw.	W. C. Brown
Mexico	Audrain	800	41	43.7	+ 0.7	75	18	14	28	38	3.00	+0.68	1.30	T.	7	22	1	7	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	3.24	.. ..	1.23	T.	4	16	8	6	n.	J. S. Conway
St. Charles	St. Charles	456	42	46.8	+ 1.3	77	18	14	28	44	1.95	−0.59	0.68	0.2	5	16	9	5	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	47.6	+ 2.2	74	19	15	28	29	1.77	−1.06	0.45	0.2	8	13	11	6	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	46.8	+ 0.3	74	19	15	28	28	1.73	−0.58	0.91	0.4	9	15	7	8	se.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	2.83	+0.75	2.22	0.2	5	..	..	..	.....	J C Jewett
Steffenville	Lewis	650	32	43.8	0.0	81	19	8	28	43	3.55	+1.62	1.60	T.	5	18	6	6	w.	Frank Hall
Unionville	Putnam	1,062	37	44.4	+ 4.2	75	19	8	28	40	5.15	+3.33	2.70	T.	5	21	3	6	sw.	Geo. W. Davis
Warrenton	Warren	816	48	47.6	+ 4.7	77	18	14	28	37	2.96	+0.37	1.05	T.	6	17	8	5	se.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	44.4	+ 3.3	75	19	9	28	33	3.63	+1.69	2.05	0.1	6	18	5	7	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	45.2	+ 2.0	81	19	8	28	48	2.92	+0.78	2.70	0.1	5	18	6	6	se.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	47.0	... ..	80	18	18	28	41	2.80	.....	0.98	0	10	13	3	14	n.	Jeff. King
Caruthersville	Pemiscot	265	34	47.8°	− 2.1	81	19	24	28	30	2.15	−1.70	0.75	T.	7	22°	2°	3°	n.	Sam Smith
Doniphan	Ripley	344	26	50.0	+ 2.4	83	18	20	28	46	1.27	−1.85	0.85	T.	4	18	7	5	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	45.0	− 1.7	77	19	14	28	40	2.51	−0.62	0.88	T.	8	12	3	15	n.	John G. Putz
Marble Hill	Bollinger	470	35	48.0	+ 3.6	82	19	16	28	43	3.22	+0.05	1.30	0	4	14	7	9	e.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	2.36	−1.29	0.98	T.	10	16	2	12	sw.	John A. Spence
Poplar Bluff	Butler	329	26	47.5	+ 0.1	82	18	18	28	43	2.70	−0.56	1.00	T.	7	13	7	10	se.	J H Wolpers
Sikeston	Scott	318	29	48.1	+ 0.7	80	18	20	28	35	2.35	−1.30	0.93	0	6	12	4	14	s.	Glen R. Fisher
Cairo, Ill	Alexander, Ill	358	55	48.6	+ 1.3	79	19	21	28	28	1.83	−1.85	0.71	T.	9	10	6	14	se.	U. S. Weather Bureau
Section means and	extremes	....	..	47.8	+ 0.6	83	18	14	28	46	2.35	−1.01	1.30	T.	7	14	5	11	n.	
Ozark Plateau																				
Arcadia	Iron	926	48	43.1	− 0.9	77	18	12	28	45	2.61	−1.01	1.23	T.	4	18	2	10	sw.	Arcadia College
Aurora	Lawrence	1,370	38	45.2[d]	− 0.8	72	18	21	26	37	3.97	+1.18	1.47	0	5	15[d]	6[d]	5[d]	nw.	W T. Troughton
Birchtree (near)	Shannon	1,000	36	47.3	+ 0.8	78	18	18	28	37	2.11	−0.78	0.65	0	4	19	2	9	n.	V. H. Kirkendall
Dean ††	McDonald	1,000	31	46.4	− 3.3	79	18	17	7	46	4.15	+1.11	2.45	0	3	23	3	4	e.	H. E. Dean
Eldon	Miller	934	34	44.6[b]	− 0.6	78	18	15	28†	47	2.61	+0.40	1.50	T.	3	16	7	7	s.	E. H. Shepherd
Farmington	St. Francois	918	19	45.6	+ 1.3	73	18†	14	28	38	2.12	−1.84	0.80	T.	10	10	13	7	nw.	Robert Forsyth
Goodland	Iron	1,000	36	44.8	+ 0.2	78	18	13	28	45	2.15	−0.74	0.70	0	4	17	5	8	n.	F. M. Adams
Greenville	Wayne	381	7	47.1	.....	80	18	16	28	44	2.75	.....	1.10	0	5	17	5	8	sw.	Wm. E Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	....	....	....	....	..	..	..	..	.....	A. W. Madison
Koshkonong	Oregon	958	29	47.6[b]	− 1.8	79	18	20	28	31	2.97	−0.05	0.91	T.	7	16	2	12	se.	R. M. Hitt
Lebanon	Laclede	1,265	43	43.2	− 2.8	77	18	16	6†	41	1.32	−1.22	0.95	0	3	20	1	9	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	48.2	+ 0.5	78	18	20	26†	34	3.77	+1.56	1.60	T.	5	21	6	3	se.	C. S. Crow
Mountain Grove(near)	Wright	1,463	29	44.5	− 2.1	76	18	19	28†	35	3.82	+1.39	1.43	T.	5	18	4	8	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	48.4	+ 1.2	79	18	19	28	44	4.08	+1.02	1.83	T	6	22	4	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	46.7	+ 1.8	76	18	18	28	36	4.24	+1.93	1.56	0.5	9	12	7	11	se.	F. H. Lane
Salem(near)	Dent	1,173	26	45.6	− 1.2	77	18	15	28	35	2.08	−0.23	1.10	T.	6	18	4	8	se.	A. C. Leech
Seligman	Barry	1,542	28	48.7[a]	+ 1.5	78	18	21	26	35	3.54	+1.18	1.81	T.	3	20[b]	4[b]	4[b]	sw	Floyd E. Fawver
Seymour (near)	Webster	1,642	24	45.8°	− 0.3	75	18	18	28	36	3.87	+1.54	1.35	0.1	7	18	3	9	s.	Ira H. Hailey
Springfield	Greene	1,324	42	46.2	+ 0.5	78	18	20	26	28	2.11	−0.68	1.39	T.	6	21	5	4	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	46.1	− 0.4	80	18	12	28	47	3.02	+0.28	2.45	T.	5	18	5	7	se.	
Southwest Plain																				
Appleton City	St. Clair	853	36	46.6	+ 0.5	77	18	20	26†	36	2.50	+0.37	1.27	T.	5	16	13	1	se.	W. G. Bigelow
Clinton	Henry	765	37	43.0	− 4.3	76	18	19	26†	38	3.31	+1.43	1.23	0	4	20	7	3	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	45.0	+ 2.6	77	18	17	27†	44	2.91	+0.96	1.35	0	4	15	3	12	s.	John H. Patterson
Lamar	Barton	980	43	47.3	+ 0.7	81	18	21	28	43	4.34	+2.10	1.50	0	4	23	4	3	se.	Jesse A. Mann
Lamonte	Pettis	867	30	46.3	+ 1.9	76	15†	18	28	36	6.10	+4.20	2.30	0	5	21	6	3	se.	J. E. Wheeler
Marshall	Saline	779	42	45.8	+ 0.2	74	15	18	26†	40	2.66	+0.58	0.78	T.	4	18	9	3	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	47.4	+ 3.0	79	18	21	6†	32	3.50	+1.62	1.47	0	5	20	4	6	s.	George A. Kaupp
Warrensburg	Johnson	878	43	46.8	+ 1.9	76	18†	14	28	34	1.85	+0.07	1.30	T	4	21	5	4	se.	E A. Markey
Warsaw	Benton	687	29	47.2	− 0.3	79	18	18	6†	44	3.24	+0.83	1.38	0	4	22	0	8	e.	Everett Martin
Section means and	extremes	.....	..	46.2	+ 0.7	81	18	14	28	44	3.38	+1.35	2.30	T.	4	20	5	5	se.	
Northwest Plateau																				
Bethany	Harrison	916	37	44.4	+ 1.5	72	15	12	28	42	2.02	+0.25	0.82	T.	6	17	6	7	se.	A S Cumming
Chillicothe	Livingston	779	20	43.2	+ 0.6	75	15†	11	28†	46	2.53	+0.20	1.20	T.	4	24	4	2	se.	Wm. J Olenhouse
Conception	Nodaway	980	41	44.5	+ 3.1	73	15	11	26†	37	2.93	+1.57	0.80	T.	7	18	6	6	s.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	45 8°	+ 4.0	73	15†	16	6†	42	2.18	+0.71	0.77	T.	6	25	2	3	nw	Fred L. Stiff
Grant City	Worth	1,134	26	43.5	+ 1.1	71	15	12	26	37	2.58	+0.97	1.32	T.	4	20	9	1	w.	W P. Spillman
Kansas City	Jackson	963	41	47.5	+ 3.8	75	18	19	26	27	2.70	+0.87	1.43	T.	6	18	10	2	s.	U S. Weather Bureau
Kidder	Caldwell	1,020	37	41.2	− 1.2	71	15†	12	28†	45	2.62	+0.78	1.07	T.	4	21	1	8	s.	Roscoe L Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	2.52	.....	0.63	0.1	6	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	47.7	+ 3.7	77	15†	17	28	37	2.88	+1.03	1.25	0	4	19	10	1	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	44.1	+ 5.1	71	10†	11	26	41	2.70	+1.05	1.05	T.	5	18	7	5	s.	J. R. Brink
Oregon	Holt	1,048	74	47.0	+ 6.7	74	18	13	26	35	4.30	+2.61	1.55	T.	6	21	5	4	sw	Mina Wright
St. Joseph	Buchanan	967	22	46.0	+ 2.8	73	15	15	26	30	3.87	+2.19	2.06	T.	5	22	4	4	se.	U S. Weather Bureau
Tarkio	Atchison	916	27	44.0	+ 3.4	71	10	13	26	36	3.23	+1.78	1.38	0	6	18	3	9	sw.	Albert Volker
Trenton	Grundy	822	34	45.0	+ 2.6	72	15	13	28	36	2.73	+0.93	1.14	T.	5	19	9	2	s.	W. H. Estes
Section means and	extremes	.....	..	44.9	+ 2.9	77	15†	11	26†	46	2.84	+1.15	2.06	T.	6	20	6	4	s.	
State means and	extremes	.....	..	45.8	+ 1.4	83	18	8	28	48	2.93	+0.53	2.70	T.	5	18	5	7	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson

Daily Precipitation for November, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Total
Northeast Plain																																	
Becker	Missouri																.57				.48				T.	T.	T.			.10	1.20		2.35
Boonville‖	do																.83				.70									.30	1.62		3.45
Brunswick‖	Grand																.60				.23					.03		T.	T.	.82	.68		2.36
Clifton Hill	Chariton														.13	.30	T.			.10	.27				.05	T.	T.	T.	T.	1.20	.20		2.25
Columbia***	Missouri															.13	.76				1.26	T.			T.	.03		T.		.91	.51		3.60
Downing	Mississippi															T.	.81				.46				T.	T.				.14	1.66		3.07
Fayette‖	Missouri														.05		.57			.55					.02	.02	T.		.23	1.61			3.05
Fulton‖	do																.42				.30					.01				1.62			2.35
Gorin	Mississippi														T.	1.01	.03			T.	.33				.03	.01	T.	.02	T.	1.68	.25		3.36
Hannibal***	do															.02	.91				.75	.05			T.	T.	.01	T.		.32	1.40		3.46
Hermann‖	Missouri														.05	.08	.35				.83				T.	T.				.30	1.20		2.81
Jefferson City‖	do																.65			T.	.50				T.	T.		.04		.95	.29		2.43
Kirksville	Mississippi															.50					.43				T.	T.		T.		T.	1.40		2.33
Louisiana	do																.34				1.18				T.	T.		T.			.92		2.44
Lucerne‖	Grand																.63				.40							T.		.38	1.98		3.39
Macon ‖	Chariton												T.			.07	.84				.50				.05		.06	T.		.18	1.30		3.00
Mexico ‖	Mississippi																																
Milan‖	Grand																.52			T.	.54				T.			T.		1.23	.95		3.24
Monroe City	Mississippi															.04	.85				.30	.05			T.	.07	.05	T.	T.	.20	1.20		2.76
Pacific‖	Meramec																.57				.26				T.	T.	T.	.01		.43	.68		1.95
St. Charles	Missouri		T.											T.	T.	.32	.13			T.	.22				.01	T.	T.	.01	.02	.80	.26		1.77
St. Louis (1)***	Mississippi														T	.32	.06			T.	.17				.01	.02		.02	.01	.91	.21		1.73
St. Louis (2)*	do																.21				.33				.02					.05	2.22		2.83
Shelbina ‖	do												.05			T.	.40			T.	.45				T.	T.		T.	T.	1.60	1 05		3.55
Steffenville	do															.04	.42				.62	.02				.01	.03			.18	1.27		2.59
Union‖	Meramec																1.10			.15	2.55				T.	T.		T.		.90	.45		5.15
Unionville	Chariton													T.			.70				T.	.27			T.	T.	T.	T.	T.	.17	1.25		2 39
Valley Park ‖	Meramec															.06	.47			.09	.42				T.	T.	T.	T.		.87	1.05		2.96
Warrenton	Mississippi														T.	.27	.92			T.	.29			T.	.02	T.		T.		1.97	.16		3.63
Keokuk, Ia.***	do																																
Southeast Lowlands																																	
Campbell‖	St. Francis		.24									.30	.07		.11	.25	.98				.21				.02					.30	.32		2.80
Cape Girardeau‖	Mississippi		.26	.01							.01	.01	.15	.01		.07	1.35					.25									.56		2.68
Caruthersville ‖	do			.12							.25	.18				.25	.45					.15									.75		2.15
Dexter‖	St. Francis			.11							T.	.10	.24			.10	1.00				T.	.28				T.				T.	.73		2.56
Doniphan	Black		.12									.10				.20									T.						.85		1.27
Jackson	Mississippi		.25									.18	.08			.08	.88				.25				T.		T.			.03	.76		2.51
Marble Hill	Mississippi																1.30				.80									.50	.62		3.22
Morehouse	do		.18		.01						T.	.31	.07		.03	.08	.98				.16	T.			T.					.02	.52		2.36
New Madrid‖	do			.21							.21	.26	.24	.04	.01	.08	.46					.12					.03				.65		2.31
Poplar Bluff‖	Black			.18								.10	.14					1.00			.18				T.					.10	1.00		2.70
Sikeston‖	Mississippi											.43	.12		.14		.93				.15										.58		2.35
Cairo, Ill.***	do		.14							.10	T.	.29	T.		.02	.32	.11				.14				T.	T.	T.		T.	.53	.18		1.83
Ozark Plateau																																	
Arcadia ‖	St. Francis												T.		T.		1.23					.39				T.				.10	.89		2.61
Aurora	Neosho																.59			.06	1.43									1.47	.42		3.97
Birchtree (near)	Black																.18				.63									.65	.65		2.11
Caplinger Mills	Osage																.34														1.84		2.18
Dean	Neosho															.55					1.15									2.45			4.15
Eldon‖	Missouri																.44				.67					T.				1.50			2.61
Farmington	St. Francis										T.	.05	.03		.02	.03	.80				.38				T.	.06	.02			.32	.41		2.12
Galena‖	White																.10				1.84									.72	1.79		4.45
Goodland	Black																.70				.34									.55	.56		2.15
Greenville	St. Francis		.20													T.	1.10				.40				T.					.77	.28		2.75
Hailey	White																																
Koshkonong	Black														.40	.11	.91			.02	.45				T.					.83	.25		2.97
Lebanon ‖	Osage																T.			.95				T.					.12	.25			1.32
Leeper‖	Black		T.								.15	T.	T.			.15	1.52				.36	.22								.25	.57		3.22
Lockwood	Osage															.10	.20				1.60				T.					1.15	.72		3.77
Mountain Grove‖	White		T.												T.	.06	.91				1.43	T.				T.				.26	1.16		3.82
Neosho	Neosho														T.	.46	.10			T.	.95				T	T.			.04	1.83	.70		4.08
Owensville ‖	Gasconade																.67				.65	.27								.60	.90		3.09
Ozark Beach‖	White																																
Rolla ‖	Meramec											.02					.04	.87			1.56			.06	.05	.07				.52	1.05		4.24
Salem (near)	do														T.		.34			.11	.41					.04				.65	.53		2.08
Seligman	Neosho															T.	.40				1.33				T.					1.81			3.54
Seymour (near)	White										T.	T.		T.	.09	T.	.73			.21	.74					.01			T.	1.35	.74		3.87
Springfield**	do		T.												T.	.13				.33	.18				T.				.04	1.09	.34		2.11
Steelville‖	Meramec																.43				.41					T.				.15	.91		1.90
Stover‖	Missouri																.38				.74									.19	1.54		2.85
Tuscumbia ‖	Osage															.02	.28				.35				T.	T.				.34	1.34		2.33
Williamsville‖	Black										.01	.06	.08			.23	.62				.19	.13			.01	.01				.18	.60		2.12
Willow Sprgs. ‖ (near)	White														.09	.10	1.39				2.50	.05			T.	T.				.43	1.22		5.78
Southwest Plain																																	
Appleton City	Osage															.02	.24			T.	1.27					T.				.53	.44		2.50
Clinton	Osage															.90					1.23									.83	.35		3.31
Concordia‖	Missouri																.65				1.08										1.35		3.08
Harrisonville‖	Osage																.29				1.22									.05	1.35		2.91
Joplin ‖	Neosho															1.15				1.45	.07								.07	1.68	.35		4.77
Lamar ‖	do																1.07				1.32									.45	1.50		4.34
Lamonte	Missouri															.75	.10				.95									2.00	2.30		6.10
Marshall	do																.51			T.	.78				T.	T.				.68	.69		2.66
Nevada	Osage																.41			.37	1.47									.75	.50		3.50
Osceola‖	do																.71				.54									.21	1.85		3.31
Warrensburg	Missouri																.06			.09	1.30				T.					.40	T.		1.85
Warsaw	Osage																.30			T.	.90									1.38	.66		3.24
Waverly ‖	Misouri																.56				1.36									.20	1.45		3.57
Northwest Plateau																																	
Bethany	Grand																.44			.36	.36				T.	.04	T.	T.		.76	.06		2.02
Chillicothe ‖	do																.30				1.00				.03	T.	T.	T.			1.20		2.53
Conception	Missouri															.24	.47			.68	.57				.10	T.				.80	.07		2.93
Edgerton	do														T.	.03	.20			.42	.36				T.	T.				.77	.40		2.18
Gallatin ‖	Grand																.30				1.31				T.					T.	1.31		2.92
Grant City	do																.60			.18	1.32							T		.48			2.58
Kansas City***	Missouri														T.	.35	T.			.79	.07				T.	T.		.09	1.39	.01		2.70
Kidder ‖	Grand														T.		.43				1.04				T.					.08	1.07		2.62
King City	Missouri															.63				.55	.62				.01	T.				.61	.10		2.52
Lexington	do																.34				.94									.35	1.25		2.85
Maryville ‖	do																1.02				1.05	.02			T.					.05	.56		2.70
Oregon	do														T.	.48	1.55			.75	.77				T.					.69	.06		4.30
St. Joseph***	do														T.	.69	.22			1.85	.21			T.	T.	T.			T.	.90			3.87
Tarkio	do															.76	.26			1.38	.48					.05				.30			3.23
Trenton	Grand																.35			T.	1.14				.03	T.				.90	.31		2.73

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for November, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	69	67	67	71	52	53	63	69	74	74	71	73	77	74	77	58	74	79	77	62	55	56	62	37	61	26	39	40	53	52	..	62.1
	Minimum	21	39	33	30	29	19	24	28	38	37	36	37	40	46	54	41	35	39	48	49	33	29	32	29	23	18	19	15	18	32	..	32.4
Columbia	Maximum	60	62	60	65	50	44	56	64	68	66	63	61	65	64	73	57	65	78	74	68	49	51	56	40	52	27	33	36	49	48	..	56.8
	Minimum	32	41	32	30	29	23	29	32	42	39	33	41	44	53	55	42	42	48	56	39	34	30	34	26	22	20	21	16	35	35	..	35.2
Fayette	Maximum	64	66	65	70	50	48	59	66	71	71	68	70	70	76	76	55	66	79	75	61	51	53	59	37	54	59	37	41	49	50	..	60.5
	Minimum	22	31	33	25	27	20	20	22	28	30	31	33	32	35	52	42	32	34	43	49	32	28	29	30	20	18	20	15	16	33	..	29.4
Hannibal	Maximum	58	61	60	65	51	42	54	63	68	67	63	61	60	64	71	62	64	74	75	69	49	50	58	42	47	26	24	33	48	45	..	55.8
	Minimum	26	42	36	31	29	22	27	36	42	38	37	42	38	46	59	44	42	44	54	43	37	32	35	27	23	16	16	14	33	34	..	34.8
Jefferson City§§	Maximum	66	58	65	69	49	47	58	67	69	65	60	54	66	65	74	59	68	79	72	64	51	55	62	37	52	27	35	43	51	46	..	57.8
	Minimum	21	26	34	31	34	21	23	24	28	35	36	37	35	38	47	44	39	41	43	48	33	28	29	30	21	20	20	16	17	24	..	30.8
Kirksville	Maximum	61	62	60	66	57	42	54	63	67	70	65	66	68	60	69	62	63	70	74	68	49	48	52	46	47	33	25	28	45	45	..	56.2
	Minimum	27	37	32	35	28	18	22	32	39	40	40	42	39	48	54	38	37	40	50	49	34	29	31	25	20	13	13	8	15	29	..	32.1
Louisiana	Maximum	50	55	57	65	52	42	55	65	70	66	65	60	62	70	72	55	65	73	74	62	55	47	50	38	35	28	25	30	40	50	..	54.4
	Minimum	19	40	35	27	34	16	18	29	30	29	30	37	30	49	45	47	35	33	54	50	43	30	33	30	22	20	14	10	27	36	..	31.7
Macon§§	Maximum	61	63	60	65	43	45	54	63	69	70	68	66	69	63	70	51	64	75	75	60	48	50	54	33	49	29	31	41	49	45	..	56.1
	Minimum	25	36	33	34	29	18	23	25	41	38	40	43	40	42	54	39	36	41	48	48	33	28	31	27	19	15	15	10	13	31	..	31.8
Mexico§§	Maximum	59	65	59	65	44	44	54	63	68	68	62	62	64	65	70	70	64	75	72	63	50	51	58	35	51	26	33	43	47	45	..	56.5
	Minimum	21	28	33	28	29	18	22	26	32	34	34	36	41	42	52	45	38	40	44	49	33	29	24	30	21	18	16	14	16	34	..	30.9
St. Louis(1)	Maximum	53	66	62	57	51	45	53	67	67	62	59	62	65	64	69	63	63	74	74	67	51	52	61	44	50	30	28	33	46	50	..	56.3
	Minimum	32	43	39	39	31	27	31	38	42	51	50	50	51	53	58	50	46	49	58	49	38	34	37	27	23	17	17	15	32	37	..	38.8
Unionville	Maximum	65	64	63	67	60	47	57	65	70	72	66	72	68	67	70	65	63	70	75	67	50	50	48	50	50	32	22	27	40	44	..	57.5
	Minimum	25	36	28	33	26	11	24	33	40	40	40	42	42	45	56	35	38	40	50	46	34	30	30	25	20	10	12	8	15	26	..	31.3
Warrenton	Maximum	57	66	60	65	60	44	57	67	70	68	59	66	64	64	69	71	65	77	72	70	60	54	61	54	49	43	32	51	47	49	..	59.7
	Minimum	25	42	35	35	35	20	25	33	39	39	42	47	43	53	53	48	39	46	55	49	34	30	33	29	20	19	15	14	31	35	..	35.4
Southeast Lowlands																																	
Campbell	Maximum	55	55	54	56	55	51	56	65	57	58	58	62	65	65	67	65	74	80	75	70	57	56	61	49	52	51	43	40	53	56	..	58.7
	Minimum	29	28	27	29	30	29	23	24	38	46	50	45	42	54	55	50	42	47	48	47	36	28	25	31	28	23	20	18	29	37	..	35.3
Caruthersville	Maximum	48	54	50	48	53	57	52	62	66	51	58	..	..	..	58	60	65	75	81	77	70	59	54	61	42	52	38	43	46	56	..	[c]56.9
	Minimum	28	34	39	36	33	30	30	32	40	45	50	..	..	..	51	55	52	51	54	60	47	39	35	35	27	27	25	24	25	43	..	[c]38.8
Doniphan	Maximum	57	63	65	66	60	60	55	67	63	57	57	65	64	64	64	70	76	83	76	79	74	73	74	72	70	62	64	53	57	56	..	65.5
	Minimum	22	35	35	34	34	31	25	25	30	39	53	55	51	49	49	48	44	38	37	38	29	27	28	27	28	24	22	20	23	34	..	34.5
Jackson	Maximum	52	55	56	54	54	46	55	62	64	58	57	61	61	65	65	67	67	72	77	71	56	54	53	52	45	44	35	37	49	54	..	56.6
	Minimum	17	34	28	32	29	20	20	22	25	46	50	51	48	46	56	51	39	39	52	52	34	28	25	30	20	21	17	14	28	29	..	33.4
Poplar Bluff	Maximum	55	58	64	62	61	52	59	62	58	57	59	62	61	63	66	65	71	82	78	70	68	58	62	45	51	38	44	40	51	54	..	59.2
	Minimum	22	32	33	34	32	25	26	27	27	49	50	50	47	56	58	51	41	39	48	55	35	28	28	33	20	26	23	18	32	28	..	35.8
Sikeston	Maximum	53	52	50	47	54	50	56	65	65	65	62	60	66	65	67	67	72	80	77	72	58	55	61	48	44	44	48	35	51	56	..	58.2
	Minimum	24	34	35	34	32	25	27	31	31	43	52	54	50	58	59	53	47	45	53	55	42	34	32	32	24	27	25	20	32	29	..	38.0
Cairo, Ill	Maximum	50	50	49	48	53	46	55	64	59	58	58	60	65	65	69	65	72	79	79	69	57	52	58	43	47	37	35	37	53	55	..	56.2
	Minimum	31	40	37	37	35	29	30	36	43	50	53	54	53	58	60	55	51	54	61	57	44	39	36	30	26	22	22	21	36	34	..	41.1
Ozark Plateau																																	
Arcadia§§	Maximum	52	66	60	65	50	45	54	63	64	58	54	63	59	60	64	61	65	77	74	60	53	55	60	35	50	30	38	38	51	45	..	55.6
	Minimum	17	21	34	26	28	18	19	22	23	27	48	50	39	49	54	50	36	36	36	48	34	27	29	29	20	20	17	12	13	35	..	30.6
Aurora	Maximum	61	58	59	62	51	46	54	65	69	..	..	..	..	67	69	60	71	77	67	67	53	49	57	42	51	44	38	38	49	52	..	[d]56.6
	Minimum	30	42	33	36	38	22	28	26	36	..	..	..	..	35	51	37	38	44	56	45	30	27	33	32	24	21	26	20	35	35	..	[d]33.8
Birchtree	Maximum	53	67	67	64	53	49	53	63	63	56	55	67	58	58	62	69	68	78	70	68	56	54	59	50	51	49	45	38	45	64	..	58.4
	Minimum	22	38	48	35	36	22	25	26	35	45	50	50	50	43	52	48	41	42	56	48	33	28	27	32	22	22	22	18	32	39	..	36.2
Eldon§§	Maximum	69	67	62	48	49	..	67	67	55	52	61	51	66	64	74	58	70	78	71	62	51	53	60	32	50	32	..	49	49	46	..	[b]57.6
	Minimum	22	23	35	33	32	20	..	20	35	35	35	40	41	53	43	38	36	43	49	34	29	29	31	22	20	20	15	15	34	..	[a]31.6
Farmington	Maximum	53	67	62	66	53	44	56	66	66	58	54	61	58	60	64	60	64	73	73	67	52	52	61	52	49	39	36	36	44	42	..	56.3
	Minimum	18	34	39	28	34	20	21	30	32	49	49	50	50	53	53	51	39	39	53	52	32	30	29	29	18	20	18	14	30	36	..	35.0
Koshkonong	Maximum	52	64	..	62	54	50	53	..	64	55	57	63	58	61	61	64	69	79	71	68	57	54	60	50	55	51	43	40	50	50	..	[b]57.0
	Minimum	28	40	..	37	32	26	27	..	33	46	52	52	48	54	55	51	44	48	59	50	35	32	32	32	24	24	25	20	33	34	..	[b]38.3
Lebanon§§	Maximum	59	65	66	60	50	49	58	65	68	61	60	66	61	63	69	59	67	77	64	50	51	57	38	56	35	40	43	52	45	45	..	56.6
	Minimum	18	31	28	28	25	16	18	25	32	37	36	41	42	44	51	39	38	43	44	29	25	26	29	21	17	17	16	18	30	28	..	29.7
Mountain Grove§§	Maximum	54	65	64	66	54	51	56	62	65	55	56	68	55	59	65	57	68	76	67	62	50	51	56	35	49	30	40	39	52	42	..	55.6
	Minimum	24	30	31	33	36	20	22	28	37	42	44	45	45	47	47	43	40	44	47	45	31	27	27	31	22	20	20	19	19	37	..	33.4
Neosho	Maximum	64	67	65	67	66	53	59	67	71	68	66	69	69	71	72	65	72	79	76	70	52	52	58	58	58	59	43	45	64	55	..	63.3
	Minimum	30	38	28	27	34	20	24	23	33	31	39	35	40	50	53	37	36	45	52	46	29	24	27	33	24	23	26	19	40	35	..	33.4
Rolla	Maximum	55	65	58	61	55	44	54	64	67	63	60	59	62	63	67	63	67	76	70	68	59	50	56	53	50	45	34	36	46	51	..	57.4
	Minimum	24	42	37	30	38	22	24	28	38	43	40	48	41	54	53	45	42	45	56	48	34	37	33	28	21	20	21	18	32	37	..	36.0
Springfield	Maximum	59	63	58	62	50	49	54	60	63	53	60	63	60	59	66	55	67	78	68	58	48	50	56	39	52	33	38	38	52	52	..	55.4
	Minimum	35	44	38	41	32	25	31	37	43	40	42	42	48	53	54	40	45	52	52	38	32	29	34	27	24	20	25	22	34	35	..	37.1
Southwest Plain																																	
Appleton City	Maximum	63	65	61	67	58	44	56	64	67	68	61	63	66	68	75	64	69	77	75	67	47	51	58	47	55	45	36	39	51	50	..	59.2
	Minimum	33	39	35	33	33	22	24	28	35	38	33	33	41	50	52	37	37	43	57	45	30	27	30	31	23	20	23	20	35	32	..	34.0
Clinton	Maximum	66	53	52	56	56	40	42	48	60	60	57	57	58	62	75	55	57	76	68	58	46	46	50	50	44	43	32	38	45	46	..	53.2
	Minimum	28	38	33	30	29	21	23	28	35	25	35	34	38	48	52	38	35	43	53	45	32	27	32	32	23	19	26	19	32	32	..	32.8
Harrisonville§§	Maximum	64	67	62	71	61	45	51	65	70	69	65	69	67	68	75	55	66	77	72	51	50	53	56	38	56	32	40	45	50	50	..	58.7
	Minimum	20	37	36	37	30	21	22	28	30	37	35	35	38	44	52	35	35	37	47	41	29	28	29	29	22	18	17	17	19	31	..	31.2
Lamar§§	Maximum	66	73	65	69	54	50	60	65	71	71	66	70	70	73	77	56	74	81	78	56	53	53	61	41	59	35	41	47	54	51	..	61.3
	Minimum	23	37	31	30	31	24	24	26	32	34	37	42	42	50	55	40	38	42	51	47	30	26	27	32	24	22	22	21	24	35	..	33.3
Lamonte	Maximum	62	62	60	67	53	46	58	64	69	71	66	64	68	67	76	58	67	76	75	68	48	50	55	48	54	32	35	38	50	49	..	58.5
	Minimum	29	38	32	31	32	20	24	31	39	39	35	36	42	50	54	38	39	44	56	43	32	28	32	28	22	19	22	18	36	33	..	34.1
Marshall	Maximum	65	62	60	67	61	44	55	65	69	70	69	68	69	65	74	68	66	68	72	69	49	50	55	47	54	42	35	36	50	50	..	59.1
	Minimum	28	40	33	31	31	20	22	25	32	38	36	36	41	49	52	38	35	32	44	47	32	30	33	28	24	18	21	18	35	26	..	32.5
Nevada	Maximum	64	66	60	66	53	50	56	64	67	67	60	64	68	69	74	54	70	79	75	68	51	53	58	46	57	45	39	41	52	52	..	59.6
	Minimum	35	41	32	40	32	21	21	32	40	38	36	34	45	52	52	38	40	49	57	45	30	28	31	30	28	21	25	21	32	32	..	35.3
Warrensburg	Maximum	63	62	59	65	58	46	55	64	69	70	65	66	67	69	75	65	66	76	76	67	57	50	55	47	55	43	35	39	50	48	..	59.4
	Minimum	31	39	33	34	31	18	25	33	40	39	33	42	44	52	53	40	36	46	58	45	30	27	30	28	21	16	21	14	35	31	..	34.2
Warsaw	Maximum	65	65	62	66	59	55	57	67	70	71	64	65	67	68	77	65	70	79	75	70	52	52	60	53	58	48	38	41	51	54	..	61.5
	Minimum	26	43	29	27	34	18	18	23	28	30	33	33	35	48	54	40	36	41	56	48	33	29	34	32	24	20	23	19	34	35	..	32.8
Northwest Plateau																																	
Chillicothe§§	Maximum	63	65	67	69	46	48	58	68	72	72	69	71	72	67	75	54	66	75	73	53	47	52	53	33	51	25	34	47	50	47	..	58.1
	Minimum	19	30	29	32	25	16	16	22	31	33	32	33	35	41	52	36	32	32	43	45	29	26	26	26	18	14	14	11	11	36	..	28.2
Grant City	Maximum	60	59	60	68	40	41	51	63	67	68	67	68	69	62	71	62	62	67	69	62	45	49	50	42	42	32	23	38	38	41	..	54.5
	Minimum	31	33	33	31	24	19	24	32	38	42	40	41	41	48	54	35	34	40	48	44	30	30	30	25	22	12	17	21	29	28	..	32.5
Kansas City	Maximum	63	61	60	68	49	44	57	65	68	69	65	69	67	66	73	53	65	75	72	54	47	51	52	37	53	29	35	41	50	48	..	56.9
	Minimum	36	43	41	45	30	24	32	40	46	50	47	47	49	53	53	35	42	51	54	37	33	32	35	28	27	19	23	19	39	33	..	38.1
Kidder§§	Maximum	62	59	53	65	45	42	54	63	67	70	66	68	67	65	71	51	62	71	71	53	44	49	50	34	53	24	31	37	43	45	..	54.5
	Minimum	17	33	30	30	22	16	16	22	30	38	37	37	37	38	48	32	32	34	40	43	28	26	25	26	19	13	13	12	12	27	..	27.8
Lexington	Maximum	66	65	69	69	58	49	58	65	70	72	68	71	68	70	77	68	66	77	75	66	49	51	55	46	55	41	38	38	49	49	..	60.6
	Minimum	31	40	33	35	30	21	21	34	42	41	38	40	46	49	54	33	39	45	56	46	33	30	32	30	24	18	22	17	32	32	..	34 8
Maryville	Maximum	62	59	60	69	58	45	57	65	70	71	71	70	69	62	71	56	66	69	66	64	43	50	54	41	49	35	28	33	40	47	..	56.7
	Minimum	31	34	28	28	24	20	25	32	40	39	38	38	41	48	51	31	34	42	53	38	28	28	29	24	20	11	18	12	32	27	..	31.5
Oregon	Maximum	67	65	66	72	56	51	60	67	71	73	72	71	71	62	73	55	67	74	71	64	48	54	52	42	52	35	34	40	42	50	..	59.2
	Minimum	35	35	33	51	27	19	25	38	49	44	40	42	47	42	54	33	39	43	56	39	30	29	31	26	23	13	18	16	35	28	..	34.7
St. Joseph	Maximum	64	60	60	68	45	45	57	65	69	70	69	69	69	65	73	52	63	73	70	60	45	51	51	35	53	25	32	39	43	48	..	56.3
	Minimum	34	40	31	39	28	24	28	40	47	45	42	44	49	51	52	35	40	45	59	37	32	32	33	26	24	15	20	17	34	31	..	35.8
Trenton	Maximum	64	61	59	67	60	44	55	63	69	70	67	69	69	63	72	66	63	69	70	66	47	59	49	42	53	45	28	30	42	45	..	57.5
	Minimum	28	34	31	29	28	20	22	29	39	37	35	35	36	48	57	36	34	48	52	47	32	29	30	24	23	15	20	13	30	30	..	32.4

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., DECEMBER, 1930 No. 12

GENERAL SUMMARY

The last month of 1930 completed a period of about ninety days of unusually bright, pleasant weather. The precipitation was less than the normal but well distributed and occurred in well separated periods of a few days each. There were no severe or sudden temperature changes, no severely cold periods, and no cold, high winds of the "blizzard" type.

The month averaged slightly warmer for the State as a whole. By sections it was 2° warmer over all northern divisions, and slightly colder than normal generally south of the Missouri River. There were 16 stations, mostly confined to the extreme north and northwestern counties, with 10° above zero as the coldest day, and all stations had as low as 16°, but such values occurred on but one to three days, while on most days the minima scarcely touched the freezing point. The value 2° above zero, at Seymour, Webster County, was the lowest recorded, and the first December since 1912 that did not experience zero or subzero cold. The 9th was generally the warmest day, and 70°, at Greenville, Wayne County, was the highest temperature recorded. This day value is equaled or exceeded in almost every December somewhere in the State.

The precipitation was only 59 per cent of the normal; and barely sufficient, in addition to that of the preceding months, for fall-sown grain needs. The snowfall was light and unimportant over the northern and central counties, but about normal and of considerable value in southern counties, especially most of the Ozarks and southeastern lowlands. The weather was favorable for outdoor occupations most of the time. Much plowing was done. Livestock remained in open and roughage was fairly plentiful. As a rule wheat was well rooted and the general condition was satisfactory; however, more moisture, especially deep snows, would be beneficial to the higher lands.

Subsoil moisture is still very low; and while small lakes and ponds contain water enough for present livestock needs, there is little or no water-flow of the creeks and small streams.

TEMPERATURE

The monthly mean temperature for the State, 67 stations reporting, was 34.2°, or 0.3° above the normal and 1° colder than the same month last year. The highest local monthly mean was 39.0° at Sikeston, Scott County; and the lowest 28.9° at Kidder, Caldwell County. The highest temperature recorded was 70° at Greenville on the 9th; the lowest recorded was 2° at Seymour on the 17th. The greatest daily range was 44° at Goodland on the 9th. Minimum values of 32° or lower occurred on 26 days as an average.

PRECIPITATION

The average precipitation for the State, 97 stations reporting, was 1.23 inches, or 0.84 inch less than the 60 years' average, 0.43 inch less than in December, 1929. The greatest local monthly amount was 3.78 inches at Dean, McDonald County; and the least was 0.18 inch at Oregon, Holt County, and Warrensburg, Johnson County. The greatest fall in any twenty-four consecutive hours was 1.62 inches at Doniphan, Ripley County, on the 5th.

The snowfall for the State was 1.9 inches, or about 3 inches less than normal. The distribution was uneven, being heavier and approximately normal over most of the Ozark Plateau and southeastern lowlands, and moderate to light and rather unimportant in other sections, many stations getting but a trace. The heaviest total monthly falls were 5 to over 7 inches in Lawrence and Barry Counties, 8 to over 9 inches in Webster and Wright Counties, 7 inches in Bollinger, and 8 inches in Pemiscot County. Measurable amounts fell on three days; and the heaviest amounts in any one snowstorm was 5 inches, at Caruthersville, Pemiscot County, on the 15th.

MISCELLANEOUS PHENOMENA

Fog, dense.— Nearly all-day in northwestern counties on the 4th, 6th, and 7th.
Halos, lunar.— 2d, 10th, 13th, and 27th.
Halos, solar.— 4th, 10th, 17th, 21st, 27th, and 31st.
Sleet.— Very light 5th, 17th, 18th, and 25th.
Rather high wind, with some light damage, at Rolla on the 12th, and Farmington on the 29th.
Thunderstorms.— None reported.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity		Sunshine		Wind				
		7 a. m.	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
								Miles per hour	Direction	Date
Columbia	30.14	83	68	196	56	5,192	7.0	25	nw.	29
Hannibal	30.14	82	..	...	..	5,777	7.8	24	nw.	29
Kansas City	30.16	83	66	174	60	6,664	9.0	30	nw.	29
St. Joseph	30.15	85	68	153	53	4,933	6.6	24	nw.	29
St. Louis	30.14	77	64	139	47	8,028	10.8	28	sw.	24
Springfield	30.16	85	69	185	62	6,229	8.4	24	nw.	29
Cairo, Ill.	30.16	83	70	...	..	5,528	7.4	24	n.	15
Keokuk, Iowa	30.16	80	68	150	52	5,053	6.8	30	nw.	29

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	35.9	+ 1.7	70	0	2.29	+0.24	....	....	6	..	..	..
1889	46.8	+12.6	78	2	0.96	−1.09	....	....	5	..	..	..
1890	36.0	+ 1.8	76	− 3	1.03	−1.02	....	....	3	..	..	..
1891	39.8	+ 5.6	72	− 1	1.90	−0.15	....	....	6	..	..	..
1892	29.4	− 4.8	75	−22	2.38	+0.33	3.08	4.8	6	8	7	16
1893	35.2	+ 1.0	76	7	0.95	−1.10	2.95	2.7	5	11	11	9
1894	36.7	+ 2.5	75	− 7	2.13	+0.08	3.01	1.3	5	14	8	9
1895	34.3	+ 0.1	69	− 8	6.13	+4.08	6.95	3.4	8	9	8	14
1896	38.6	+ 4.4	79	− 5	0.93	−1.12	2.25	T.	3	13	8	10
1897	29.3	− 4.9	74	−14	2.80	+0.75	2.70	6.3	7	8	8	15
1898	28.7	− 5.5	74	−20	1.69	−0.36	2.50	5.1	5	17	6	8
1899	30.4	− 3.8	72	−13	2.11	+0.06	1.70	6.6	9	12	9	10
1900	35.6	+ 1.4	68	− 3	0.69	−1.36	1.08	0.6	4	14	8	9
1901	28.5	− 5.7	71	−29	2.93	+0.88	4.43	6.9	8	11	7	13
1902	30.7	− 3.5	68	− 7	2.91	+0.06	2.50	3.1	8	10	4	17
1903	30.2	− 4.0	65	11	1.51	−0.54	1.80	2.3	5	16	7	8
1904	32.9	− 1.3	75	−10	1.50	−0.55	1.55	6.0	5	16	7	8
1905	33.3	− 0.9	66	− 2	1.45	−0.60	2.24	1.7	4	18	6	7
1906	36.1	+ 1.9	73	0	2.27	+0.22	2.85	0.6	8	8	6	17
1907	37.7	+ 3.5	76	3	1.84	−0.21	1.78	3.7	7	11	7	13
1908	38.4	+ 4.2	80	− 4	0.85	−1.20	1.35	T.	3	16	7	8
1909	24.9	− 9.3	76	−17	2.86	+0.81	2.50	7.7	8	12	6	13
1910	31.2	− 3.0	67	− 5	1.25	−0.80	2.85	2.4	4	16	5	10
1911	36.7	+ 2.5	74	−11	2.80	+0.70	2.00	5.1	7	13	6	12
1912	36.5	+ 2.3	72	2	0.59	−1.46	0.91	0.6	3	19	5	7
1913	38.3	+ 4.9	74	− 3	2.27	+0.19	2.25	6.6	7	9	4	18
1914	26.8	− 7.1	68	−18	2.48	+0.31	2.30	6.6	9	7	5	19
1915	34.7	+ 1.3	84	−13	2.77	+0.55	3.20	7.8	6	12	6	13
1916	31.3	− 2.3	82	−29	1.85	−0.29	3.40	4.4	6	15	6	10
1917	25.5	− 8.7	82	−23	0.74	−1.40	2.51	7.3	5	11	7	13
1918	40.0	+ 6.6	83	−12	3.21	+1.14	5.50	7.8	7	13	6	12
1919	28.5	− 4.5	74	−22	0.69	−1.50	2.65	0.7	3	12	4	15
1920	35.6	+ 2.6	77	−10	1.93	−0.22	2.30	2.3	5	13	7	11
1921	36.9	+ 3.8	74	− 8	1.86	−0.23	1.91	1.9	6	13	7	11
1922	36.3	+ 2.9	75	− 6	2.11	−0.14	3.04	0.2	6	15	6	10
1923	41.0	+ 7.1	82	− 4	3.06	+1.03	2.23	0.8	8	11	6	14
1924	27.7	− 6.2	80	−28	3.43	+1.40	4.20	4.6	7	13	6	12
1925	31.6	− 2.3	80	−10	1.45	−0.58	2.81	4.8	4	13	7	11
1926	32.6	− 1.3	75	−12	2.18	+0.15	2.00	2.4	6	11	5	15
1927	29.9	− 4.0	74	−11	2.68	+0.65	5.65	2.9	6	15	5	11
1928	36 2	+ 2.3	81	0	2.24	+0.21	3.10	1.4	5	14	6	11
1929	35.2	+ 1.3	76	− 9	1.66	−0.41	1.75	3.7	6	13	5	13
1930	34.2	+ 0.3	70	2	1.23	−0.84	1.62	1.9	5	15	6	10
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for December, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	34.6	+ 4.0	67	9	9	17	42	0.76	−0.86	0.62	0.2	3	16	2	13	nw.	O. K. Benecke
Clifton Hill	Randolph	731	31	32.3	+ 1.2	60	9	8	31	32	0.80	−0.60	0.71	0.2	5	16	2	13	.....	Dr. A. J. Bradsher
Columbia	Boone	784	40	34.2	+ 1.0	62	9	16	17†	28	0.48	−1.38	0.37	T.	4	13	5	13	sw.	U. S. Weather Bureau
Downing	Schuyler	876	9	31.0	+ 1.4	62	9	9	17†	28	1.35	−0.11	1.13	0.5	5	11	10	10	w.	James Taylor
Fayette	Howard	661	50	33.4	+ 2.2	62	9	11	17†	36	0.64	−0.99	0.46	0	3	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	50	32.0	− 1.7	50	10†	12	17	32	0.55	−1.37	0.28	2.0	5	14	6	11	.....	Chamber of Commerce
Gorin	Scotland	700	41	....	.....	..	..	..	..	..	1.01	−0.68	0.95	0.2	3	10	9	12	nw.	J. W. Pulliam
Hannibal	Marion	534	38	33.2	+ 1.7	62	9	15	30	24	0.46	−1.08	0.39	0.5	4	11	7	13	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	33.5	+ 0.7	65	9	13	16	37	0.82	−1.03	0.40	3.0	4	15	6	10	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	41	31.6	+ 2.0	59	9†	9	30	29	1.04	−0.60	0.96	0.7	3	10	1	20	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	36	33.2	+ 1.7	60	9	11	17	27	0.57	−1.12	0.56	0.1	2	14	10	7	w.	Stark Bros. Nurseries
Macon	Macon	875	31	31.0	+ 0.6	57	9	10	30	32	0.90	−0.50	0.70	T.	2	19	8	4	w.	W. C. Brown
Mexico	Audrain	800	41	32.2	+ 0.4	60	9	12	30	34	0.48	−1.52	0.29	T.	3	19	0	12	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	8	....	.....	..	..	..	..	..	0.49	.....	0.42	0.2	3	14	8	9	s.	J. S. Conway
St. Charles	St. Charles	456	42	36.3	+ 1.4	67	9	14	23†	31	0.62	−1.25	0.51	0.2	3	13	6	12	nw	L. C. Saeger
St. Louis (1)	St. Louis City	568	56	35.8	+ 0.9	65	9	18	30	24	0.90	−1.31	0.78	0.5	3	13	5	13	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	18	34.7	+ 0.4	63	9	16	16	24	0.95	−1.15	0.82	0.5	4	13	2	16	w.	St. Louis University
Shelbina	Shelby	779	37	....	.....	..	..	..	..	..	0.69	−0.92	0.47	0	3	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	32	32.7	+ 2.1	59	9	9	30	30	1.02	−0.54	0.82	T.	3	12	9	10	n.	Frank Hall
Unionville	Putnam	1,062	37	30.6	+ 3.2	60	9	8	17†	36	1.50	−0.14	1.20	1.0	4	17	1	13	nw.	Geo. W. Davis
Warrenton	Warren	816	48	35.1	+ 3.1	64	9	13	30	28	0.62	−1.51	0.35	1.0	4	12	9	10	nw	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	58	31.6	+ 1.8	61	9	13	30	26	0.60	−0.85	0.45	0.7	4	9	9	13	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	33.1	+ 1.5	67	9	8	17†	42	0.78	−0.93	1.20	0.5	4	14	5	12	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	4	36.4	.....	65	9	14	22	36	2.45	.....	1.15	3.4	9	14	7	10	n.	Jeff. King
Caruthersville	Pemiscot	265	34	38.6	− 1.4	66	10	20	22†	30	2.82	−1.62	0.78	8.0	7	19	3	9	n.	Sam Smith
Doniphan	Ripley	344	26	36.3	− 1.1	68	11	16	22	35	2.89	−0.44	1.62	6.0	5	15	10	6	sw.	W. W. Martin
Jackson	Cape Girardeau	428	39	34.6	− 2.0	65	9	11	22	41	1.78	−1.42	0.80	4.0	8	12	3	16	n.	John G. Putz
Marble Hill	Bollinger	470	35	38.0	+ 1.8	68	9	12	22	40	1.70	−1.63	0.70	7.0	6	17	2	12	n.	R. A. DeWitt
Morehouse	New Madrid	289	32	....	.....	..	..	..	..	..	2.31	−1.70	1.32	1.2	8	14	6	11	n.	John A. Spence
Poplar Bluff	Butler	329	26	37.8	+ 1.0	65	11	15	22	37	1.73	−2.45	0.94	1.2	7	18	6	7	w.	J. H. Wolpers
Sikeston	Scott.	318	29	39.0	+ 1.5	65	9†	18	16	31	2.43	−1.58	1.32	1.2	5	14	6	11	w.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	55	37.0	− 0.8	62	9	19	16	26	1.97	−1.43	0.78	3.5	11	8	10	13	sw.	U. S. Weather Bureau
Section means and	extremes	....	..	37.2	− 0.1	68	9†	11	22	41	2.23	−1.53	1.62	4.0	7	14	6	11	n.	
Ozark Plateau																				
Arcadia	Iron	926	48	33.6	− 0.7	68	9	12	16†	38	0.34	−2.64	0.19	T.	2	22	1	8	w.	Arcadia College
Aurora	Lawrence	1,370	38	36.5	+ 1.4	62	9	12	17	31	1.89	−0.75	0.69	5.0	6	14	6	11	nw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	36	36.0	+ 0.2	62	11	14	22	34	1.13	−1.44	0.63	3.0	5	19	3	9	n.	V. H. Kirkendall
Dean ‡‡	McDonald	1,000	31	35.2	− 2.2	64	9	12	17†	40	3.78	+1.66	1.05	5.0	7	18	3	10	w.	H. E. Dean
Eldon	Miller	934	34	34.2	− 0.1	67	9	15	17†	36	1.75	−0.41	1.01	2.0	5	6	17	8	n.	E. H. Shepherd
Farmington	St. Francois	918	19	34.8	− 2.2	67	9	13	16	32	1.09	−1.62	0.76	1.7	8	13	8	10	nw.	Robert Forsyth
Goodland	Iron	1,000	36	34.0	− 0.4	69	9	9	22	44	0.95	−1.53	0.65	3.0	3	16	4	11	n.	F. M. Adams
Greenville	Wayne	381	7	36.7	.....	70	9	13	22	36	1.25	... ..	0.80	T.	2	14	11	6	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	4	....	.....	..	..	..	..	..	3.36	.....	0.94	5.7	6	17	6	8	w.	A. W. Madison
Koshkonong	Oregon	958	29	38.1	+ 0.5	64	9	15	16	35	1.88	−1.28	0.80	4.0	7	18	4	9	w.	R. M. Hitt
Lebanon	Laclede	1,265	43	32.6	− 2.4	64	9	12	16†	34	1.23	−1.37	0.80	1.5	4	19	5	7	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	24	37.2	+ 1.7	59	2	17	17	34	1.20	−0.74	0.35	3.5	6	23	0	8	nw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	29	33.2	− 1.1	62	9	8	16†	31	1.82	−0.41	0.75	9.3	7	14	8	9	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	43	38.4	+ 1.7	65	9	16	30	36	2.07	−0.47	0.88	4.0	6	17	4	10	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	29	35.8	+ 2.2	63	9	15	16	27	0.99	−1.08	0.45	2.5	5	7	12	12	nw.	F. H. Lane
Salem (near)	Dent	1,173	26	35.0	− 0.2	67	9	12	16	34	1.53	−0.48	0.94	3.8	6	15	5	11	nw.	A. C. Leech
Seligman	Barry	1,542	28	37.2[e]	+ 0.6	62	9	13	17	32	2.56	−0.01	0.82	7.5	6	14[a]	7[a]	9[a]	w.	Floyd E. Fawver
Seymour (near)	Webster	1,612	24	34.4	0.0	60	9	2	17	34	1.63	−0.42	0.78	8.0	6	16	5	10	nw.	Ira H. Hailey
Springfield	Greene	1,324	42	35.2	− 1.0	60	9	14	16	23	1.30	−1.01	0.59	4.4	10	19	3	9	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	35.4	− 0.1	70	9	2	17	44	1.67	−0.82	1.05	3.9	6	16	6	9	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	36	35.6	+ 1.3	62	9	15	30	35	0.76	−0.88	0.46	0.5	4	13	8	10	nw.	W. G. Bigelow
Clinton	Henry	765	37	33.6	− 0.8	53	10	14	17	30	0.79	−0.94	0.34	0	4	13	8	10	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	52	33.4	+ 2.2	66	9	12	30	37	1.00	−0.78	0.93	0	3	13	2	16	nw.	John H. Patterson
Lamar	Barton	980	43	36.8	+ 1.6	66	9	18	17†	36	0.90	−1.05	0.55	T	5	17	6	8	nw.	Jesse A. Mann
Lamonte	Pettis	867	30	34.4	+ 0.2	61	9	13	30	32	0.85	−0.81	0.46	0	5	14	13	4	sw.	J. E. Wheeler
Marshall	Saline	779	42	33.8	+ 2.2	62	9	14	29†	34	0.66	−1.00	0.56	T.	2	20	5	6	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	37	36.6	+ 2.7	63	9	16	17	28	0.73	−1.13	0.37	1.0	3	19	3	9	sw.	George A. Kaupp
Warrensburg	Johnson	878	43	34.4	+ 1.0	62	9	14	17†	35	0.18	−1.62	0.18	T.	1	14	8	9	nw.	E. A. Markey
Warsaw	Benton	687	29	37.0	+ 2.2	65	9	12	17	34	0.87	−1.45	0.42	0.3	6	17	1	13	w.	Everett Martin
Section means and	extremes	.....	..	35.1	+ 1.4	66	9	12	17†	37	0.75	−1.07	0.93	0.2	4	16	6	9	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	30.8	+ 0.5	60	9	9	30	30	0.49	−0.86	0.39	1.0	3	19	3	9	nw.	A. S. Cumming
Chillicothe	Livingston	779	20	31.0	− 4.6	63	9	8	30†	42	1.76	+0.11	1.28	1.0	4	17	6	8	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	41	31.1	+ 1.8	60	9	9	30	29	0.43	−0.56	0.22	1.0	3	9	12	10	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	10	33.2[a]	+ 2.8	61	9	9	30.	33	1.00	−0.33	0.75	0.4	5	20	1	10	n.	Fred L. Stiff
Grant City	Worth	1,134	26	30.2	+ 2.5	59	9	9	16	29	0.47	−0.69	0.22	2.0	3	12	12	7	nw.	W. P. Spillman
Kansas City	Jackson	963	41	35.2	+ 2.7	63	9	17	16	35	0.95	−0.38	0.90	0.3	3	13	9	9	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	37	28.9	− 0.8	60	9	8	30	32	1.48	+0.18	1.33	0.8	4	17	4	10	nw.	Roscoe L. Terry
King City	Gentry	1,095	4	....	.....	..	..	..	..	..	0.75	.....	0.37	0.8	3	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	45	34.8	+ 3.3	64	9	10	16†	35	1.27	−0.45	1.05	0.5	3	15	10	6	w.	Miss Carrie Loomis
Maryville	Nodaway	1,169	40	30.6	+ 4.3	58	9	8	30	28	0.38	−0.67	0.25	1.0	3	10	10	11	n.	J. R. Brink
Oregon	Holt	1,048	74	33.7	+ 5.2	65	9	12	16	32	0.18	−1.26	0.12	0.5	3	15	8	8	sw.	Mina Wright
St. Joseph	Buchanan	967	22	32.6	+ 2.3	61	9	15	16	31	0.70	−0.31	0.61	0.8	4	14	7	10	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	27	30.0	+ 4.1	60	9	11	16†	28	0.20	−0.72	0.09	1.5	3	8	9	14	nw.	Albert Volker
Trenton	Grundy	822	34	32.1	+ 2.5	59	9	10	30	31	1.52	+0.17	1.18	1.0	3	9	11	11	s.	W. H. Estes
Section means and	extremes	.....	..	31.9	+ 2.0	65	9	8	30†	42	0.83	−0.44	1.33	0.9	3	14	8	9	nw.	
State means and	extremes	.....	..	34.2	+ 0.3	70	9	2	17	44	1.23	−0.84	1.62	1.9	5	15	6	10	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for December, 1930

Stations	Drainage-basins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Becker	Missouri				.08	.33	.10					T.							T.	T													0.51
Boonville‖	do					.62	.12												.02														0.76
Brunswick‖	Grand													T.		T.			.01	.01													0.80
Clifton Hill	Chariton				.05	.71	.02							T.		T.			T	T.						T	T.						0.48
Columbia***	Missouri			.09	.03	.34					.02			T.		T.			.05	T.						T.							1.35
Downing	Mississippi				.07	1.13	.04							.06																			0.64
Fayette‖	Missouri				.05	.46	.13																										0.55
Fulton‖	do			.01	.28	.11	T.				.01					T.			.14													1.01
Gorin	Mississippi					.95								.04					.02													0.46
Hannibal***	do			T.	.04	.38								.01		T.			.03	T.	T.		T			T.	T.						0.54
Hermann‖	Missouri				.03	.20	.20					.08							T.	.01									.02				0.82
Jefferson City‖	do					.40	.10					.10								.22													1.04
Kirksville	Mississippi					.96													.05	.03	T.					T.							0.57
Louisiana	do				.56														.01				T.										1.35
Lucerne‖	Grand					1.25	.08												.02	T													0.90
Macon ‖	Chariton					.70	.20	T.							T.				T.														0.48
Mexico ‖	Mississippi				.07	.29	.12												T.								T.						
Milan‖	Grand																																0.49
Monroe City	Mississippi			T.	.05	.42								T.					.02														0.95
Pacific‖	Meramec	.02			.02	.36	.30					.10								.10							T.	1.	.05				0.62
St. Charles	Missouri			T.		.51					.10								.01				T.				T.						0.90
St. Louis (1)***	Mississippi			T.	T.	.78					.07					T.			.05				T.				T.		T.				0.95
St. Louis (2)*	do			T.		.82					.07								.05								T.		.01				0.69
Shelbina ‖	do				.02	.47	.20							.10					T.	T.													1.02
Steffenville	do				.10	.82														.04									.06				0.89
Union‖	Meramec				.03	.34	.32					.10								T.	T												1.50
Unionville	Chariton				.15	1.20	.05							T.					.10														0.80
Valley Park ‖	Meramec	T			T.	.48	.21					.06				T.				.05								T.	T.				0.62
Warrenton	Mississippi			T.	T.	.35	.07				.10								.10														0.60
Keokuk, Ia.***	do				.20	.33								.04		T.			.03	T.	T.	T.	T.			T.	T.						
Southeast Lowlands																																	
Campbell‖	St. Francis					1.15					.05	.07				.14	.03		.12							.57	.12		.20				2.45
Cape Girardeau‖	Mississippi					.34	.45					.02				T.		T.		.01							.51		.07				1.40
Carruthersville ‖	do					.52	.47					.25				.50	T			.20	T.						.78		.10				2.82
Dexter‖	St. Francis					.62	.45					.02				.15		.02		.04							.68	T.	.15				2.13
Doniphan	Black					1.62			.06							.18	.78							.25									2.89
Jackson	Mississippi					.80								.03		.10		.10						.10		.47	.08		.10				1.78
Marble Hill	Mississippi					.70	.10									T.			.30					.20		.20			.20				1.70
Morehouse	do					1.32	.01				.02					.18		T.	.02							.33	.31		.12				2.31
New Madrid‖	do	.03				.47	.81					.23				.10	.26	.05		.07							.83	.03	.23				3.11
Poplar Bluff	Black					.94	.18				T.					.10	.12			.02							.22		.15				1.73
Sikeston‖	Mississippi					1.32										.15				.20						.64			.12				2.43
Cairo, Ill.***	do			T.		.78	.01				.05	T.		T.		.15	.06	T.	.04					.03		.68	.01	.01	.15				1.97
Ozark Plateau																																	
Arcadia ‖	St. Francis					.15	.19									T.		T.	T.				T.			T.			T				0.34
Aurora	Neosho			.07	.22	.69					.10					.42			T				T.						.39				1.89
Birchtree (near)	Black					.63					.10					T.			.08							.18			.14				1.13
Caplinger Mills	Osage										.15					.03													.13				0.81
Dean	Neosho			T.	.18	.32					.15					.43			.90										.38				3.78
Eldon‖	Missouri			.22	.65	1.05														1.01									T.				1.75
Farmington	St. Francis				.49	.13	.08					.04																						1.09
Galena‖	White					.76	.03				.02					.08			.04				T.			.02	.02		.12				1.09
Goodland	Black			.10	.07	.97	.14					.14																	.14				1.56
Greenville	St. Francis					.65										.05			.25														0.95
Hailey	White					.80					T.					T.			T.							.45			T.				1.25
Koshkonong	Black			.52	.66	.94										.56			.61											.07			3.36
Lebanon ‖	Osage				T.	.80					.05	.05				.30			.10							.48			.10				1.88
Leeper‖	Black	.60				.80	.18					.10							T.									.15						1.23
Lockwood	Osage					.60	.10					T.	T.			.05		T		.12							.31		.10				1.88
Mountain Grove‖	White			.15	.20	.35					.20					.20			.10									T.					1.20
Neosho	Neosho					.75	.02	T				.12				.40			.03	.40			T.			T.		T.	.10				1.82
Owensville ‖	Gasconade			.18	.37	.88	T.				.11					.30													.23				2.07
Ozark Beach‖	White					.45	.28					.12								T.	.15												1.00
Rolla ‖	Meramec				T.	.45	.15				.14					T				.15									.10				0.99
Salem (near)	do					.94	.04				.05					.06			.24										.20				1.53
Seligman	Neosho			T.	.43	.82					.26					.45			.20										.40				2.56
Seymour (near)	White			T.		.78	.06				.11					.28			.19										.21				1.63
Springfield***	do			.05	.16	.46	.01				.10				.01	.25			.04				T.			T.	T.	.05	.17				1.30
Steelville‖	Meramec				T.	.70	.19					.19				.04	T			.07									.15				1.27
Stover ‖	Missouri					.28		.03				.06				T.																	0.37
Tuscumbia ‖	Osage				.05	.29	.03					.05				.02				.11									.12				0.67
Williamsville‖	Black					.88	.07					.06				.06	.02	.01		.06							.27	.02	.11				1.56
Willow Sprgs. ‖ (near)	White					1.02	.19					.19				.03	.02			.14				T.					.18	T.			1.77
Southwest Plain																																	
Appleton City	Osage			T.	.05	.46					.17			T.		.08			T.			T.	T.			T.							0.76
Clinton	Osage			.03	.30	.34					.12															T							0.79
Concordia ‖	Missouri					.70	.05																										0.75
Harrisonville‖	Osage					.93	.03					.04							T.														1.00
Joplin ‖	Neosho			.50	.45	.54					.80				.05	.36												.10	.10				2.90
Lamar	do				.03	.55	.05					.12				T.													.15				0.90
Lamonte	Missouri			.02	.28	.46	.04				.05																						0.85
Marshall	do				.10	.56	T.												T.														0.66
Nevada	Osage				T.	.37					.26					.10																	0.73
Osceola‖	do				.04	.54	.06					.15				.06				.04				.01					.07				0.97
Warrensburg	Missouri				.18											T.																	0.18
Warsaw	Osage			T.	.15	.42					.13					.10			.02									.05					0.87
Waverly ‖	Missouri					.75	.17												.01				T.										0.93
Northwest Plateau																																	
Bethany	Grand				.33	.06								T.					.10		T.												0.49
Chillicothe ‖	do				.05	1.28	.15	T.											.28	T.													1.76
Conception	Missouri				.22	.11								T.				T.	.10		T.												0.43
Edgerton	do				.18	.75	.01	.03						T.		T.			.03		T.		T.			T.	T.						1.00
Gallatin ‖	Grand					1.49	.04								T.				.06														1.59
Grant City	do				.22	.13								T.		T.			.12		T.												0.47
Kansas City***	Missouri			T.	.59	.33								T.	T.	T.		T.	.03			T.				T.	T.						0.95
Kidder ‖	Grand				.04	1.33	.03												.08														1.48
King City	Missouri				.30	.37								T.					.08														0.75
Lexington	do					1.05	.17												.05														1.27
Maryville ‖	do	.03			T.	.25	T.	T.						T.					.10														0.38
Oregon	do				.12	.02													.01		T.												0.18
St. Joseph***	do			T.	.51	.13	T.							T.	T.	T.		.04	.02		T.	T.				T.	T.						0.70
Tarkio	do				.08	.03								T.					.09														0.20
Trenton	Grand				.27	1.18								T.					.07		T.												1.52

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for December, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	31	54	48	47	49	43	47	56	67	62	56	47	40	37	36	37	46	44	47	41	36	38	42	61	40	35	51	42	45	35	41	45.2
	Minimum	26	18	23	31	38	37	32	27	29	36	30	25	29	31	28	16	9	15	27	23	21	16	14	19	27	28	22	23	21	12	15	24.1
Columbia	Maximum	38	48	53	52	48	41	39	50	62	54	52	41	38	33	33	30	35	37	40	37	30	34	35	51	44	32	44	37	40	34	37	41.3
	Minimum	21	20	37	44	41	35	30	27	37	43	32	24	31	31	23	18	16	31	29	22	19	20	19	24	32	27	25	22	23	16	19	27.0
Fayette	Maximum	30	50	54	51	44	43	40	55	62	54	55	44	41	34	33	34	38	39	44	41	34	39	40	53	42	36	47	42	43	37	40	43.2
	Minimum	28	18	21	33	42	36	32	25	26	34	31	24	26	30	27	18	11	13	28	22	16	18	15	16	23	27	20	23	20	11	13	23.5
Hannibal	Maximum	38	42	52	49	44	41	39	50	62	56	49	33	34	33	33	30	34	36	39	36	29	33	30	45	46	29	44	35	38	33	35	39.6
	Minimum	18	18	36	39	39	37	32	29	38	43	33	28	32	32	25	19	18	30	28	24	19	21	15	21	28	27	25	23	22	15	18	26.8
Jefferson City§§	Maximum	34	49	52	54	44	42	46	54	65	55	55	46	43	35	33	31	31	30	35	39	32	35	36	56	48	33	48	46	42	36	42	42.8
	Minimum	33	18	19	38	41	38	32	29	28	32	36	24	25	29	24	13	14	15	14	16	24	20	20	19	21	25	23	24	26	14	15	24.2
Kirksville	Maximum	40	42	45	44	44	41	41	50	59	59	51	35	33	31	32	28	34	35	31	32	31	34	32	48	40	30	49	43	37	33	38	39.4
	Minimum	16	14	27	31	39	34	29	29	35	44	33	26	27	28	23	12	11	26	22	22	14	22	10	19	30	25	22	20	19	9	23	23.9
Louisiana	Maximum	39	39	50	53	47	39	40	42	60	57	53	40	38	38	37	34	35	35	33	33	33	34	30	50	43	30	40	37	40	37	35	40.4
	Minimum	20	16	32	40	35	33	34	29	33	45	32	25	30	33	31	16	11	27	28	21	17	16	12	27	25	24	25	27	22	14	25	26.0
Macon§§	Maximum	24	44	50	47	44	41	38	50	57	56	49	40	36	34	34	33	35	37	39	33	31	34	32	49	39	30	44	36	38	32	35	39.4
	Minimum	22	16	21	32	35	36	30	27	28	31	30	24	25	29	26	15	14	15	25	19	14	19	12	17	27	25	23	21	19	10	14	22.6
Mexico§§	Maximum	28	45	54	50	44	41	42	50	60	53	53	41	41	33	33	29	35	35	38	38	31	32	34	47	49	29	44	38	41	33	39	40.6
	Minimum	26	18	20	35	40	37	30	29	29	36	35	20	21	29	27	17	14	15	29	25	16	20	14	16	21	25	23	24	22	12	13	23.8
St. Louis(1)	Maximum	37	41	52	54	48	49	42	51	65	56	58	38	42	36	36	32	37	34	37	46	32	37	34	44	44	36	47	40	42	32	42	42.6
	Minimum	20	19	36	43	42	39	34	34	41	48	37	32	32	32	21	18	22	28	30	26	22	22	22	23	34	27	27	28	26	18	20	29.1
Unionville	Maximum	42	44	42	42	38	40	44	50	60	56	52	38	38	35	34	33	34	34	38	35	32	30	34	52	44	33	40	38	36	34	32	39.8
	Minimum	15	15	25	28	35	31	28	26	30	35	35	30	25	25	20	10	8	20	21	22	10	18	10	16	26	20	20	18	20	8	18	21.5
Warrenton	Maximum	42	44	55	54	50	44	45	52	64	59	55	49	40	36	34	31	36	33	35	44	36	33	32	47	51	42	47	42	39	37	39	43.5
	Minimum	21	17	35	41	40	38	31	30	38	43	37	25	29	30	29	14	15	26	28	24	16	19	14	19	34	25	23	28	23	13	24	26.7
Southeast Lowlands																																	
Campbell	Maximum	47	45	58	56	50	56	53	55	65	51	63	49	53	48	38	31	36	36	45	51	37	41	43	47	47	40	42	43	50	41	47	47.2
	Minimum	24	18	23	37	40	36	39	23	29	36	39	27	25	29	27	16	23	22	26	19	20	14	19	15	29	27	23	29	24	21	18	25.7
Caruthersville	Maximum	56	50	46	57	59	51	54	53	55	66	57	62	51	54	45	37	31	34	36	43	52	38	41	43	48	41	37	38	40	43	38	47.0
	Minimum	31	23	23	36	44	44	41	31	35	36	45	33	32	33	34	22	22	26	29	29	27	20	20	24	25	36	29	28	27	26	26	30.2
Doniphan	Maximum	43	48	38	58	52	57	56	61	62	64	68	56	57	45	39	35	36	42	50	54	40	37	34	38	40	44	37	39	44	52	50	47.6
	Minimum	19	20	24	30	43	44	42	26	46	29	33	29	24	26	28	18	22	24	25	19	19	16	19	21	18	17	17	19	18	21	18	25.0
Jackson	Maximum	41	39	50	58	51	51	48	51	65	56	62	54	46	40	37	33	38	35	41	49	43	32	37	43	39	39	41	40	45	40	44	44.8
	Minimum	21	15	26	36	39	36	37	30	24	36	33	25	23	30	27	14	22	25	26	19	18	11	12	12	23	27	24	27	21	17	18	24.3
Poplar Bluff	Maximum	49	44	62	47	52	58	54	58	56	59	65	49	54	52	40	34	41	33	46	52	38	42	44	46	41	44	44	46	51	43	50	48.2
	Minimum	25	20	25	40	42	39	40	25	37	35	36	26	27	26	31	17	25	25	25	20	21	15	20	16	34	31	29	31	27	20	20	27.4
Sikeston	Maximum	42	42	56	55	54	52	50	53	65	65	63	62	51	50	45	40	38	36	42	51	48	40	41	44	40	35	40	43	49	50	44	47.9
	Minimum	29	20	28	42	42	41	39	29	34	40	43	31	29	39	31	18	26	29	29	26	24	19	23	19	35	32	28	30	27	23	24	30.0
Cairo, Ill	Maximum	41	41	54	58	53	51	47	50	62	55	60	43	48	40	36	33	33	35	38	48	33	37	32	41	39	38	35	40	48	34	42	43.4
	Minimum	23	20	36	43	44	42	38	29	36	44	43	32	32	36	25	19	26	29	30	28	25	20	24	21	36	32	29	31	28	22	25	30.6
Ozark Plateau																																	
Arcadia§§	Maximum	39	42	48	58	43	49	49	54	68	55	62	47	42	34	31	33	38	31	42	48	33	36	35	43	38	31	46	38	43	39	44	43.2
	Minimum	28	15	15	33	39	38	36	27	30	42	36	24	23	26	28	12	16	23	24	23	17	13	14	12	15	28	23	23	25	17	16	23.9
Aurora	Maximum	44	56	50	49	44	40	47	53	62	52	58	49	48	41	41	31	35	37	40	46	32	35	41	51	46	38	50	39	41	38	41	44.4
	Minimum	32	25	41	42	37	33	34	32	36	45	34	25	32	33	27	14	12	30	24	25	20	20	23	21	37	28	24	30	26	18	27	28.6
Birchtree	Maximum	43	44	56	58	48	49	45	57	64	56	62	53	49	44	35	40	45	37	43	45	43	38	41	45	39	39	42	39	45	45	40	46.1
	Minimum	23	28	32	40	40	40	30	28	30	40	40	26	27	33	28	19	28	25	17	19	17	14	19	17	20	17	18	32	21	18	18	25.9
Eldon§§	Maximum	34	53	52	54	41	45	47	55	67	50	56	46	43	32	30	30	32	36	41	42	30	36	38	53	50	28	49	38	42	29	41	42.6
	Minimum	33	19	20	35	41	38	33	31	31	38	36	26	26	29	30	19	15	15	27	25	18	19	20	20	24	27	21	21	28	17	15	25.7
Farmington	Maximum	35	37	47	60	52	43	46	52	67	57	59	51	42	37	31	30	37	34	40	47	40	37	35	42	36	36	46	38	43	38	42	43.1
	Minimum	25	16	31	40	39	39	36	30	35	40	38	25	27	30	29	13	22	24	20	24	15	17	19	14	28	32	22	32	26	15	19	26.5
Koshkonong	Maximum	52	44	59	62	48	51	47	56	64	57	61	52	50	46	46	32	39	32	44	56	41	41	38	48	38	38	45	42	46	41	45	47.1
	Minimum	31	19	33	41	40	41	39	32	38	44	42	28	30	35	29	15	18	25	26	21	21	18	24	23	33	28	22	32	27	21	25	29.1
Lebanon§§	Maximum	37	47	49	53	42	43	46	53	64	50	57	47	43	35	31	31	36	35	41	43	27	35	34	47	45	30	48	36	40	37	40	42.0
	Minimum	20	18	20	40	38	34	33	29	30	37	33	22	21	29	26	12	12	14	24	23	13	16	18	19	24	24	20	23	23	13	13	23.3
Mountain Grove§§	Maximum	37	43	50	50	43	46	46	56	62	49	59	50	48	35	31	33	38	33	38	42	30	35	36	46	43	28	48	36	41	39	41	42.3
	Minimum	31	19	19	35	38	37	35	30	31	41	35	24	24	29	27	8	8	11	22	24	14	14	15	20	24	27	21	22	25	17	17	24.0
Neosho	Maximum	46	57	52	50	50	44	57	56	65	56	58	55	50	51	42	32	43	43	46	46	41	38	43	55	52	42	50	56	45	44	42	48.6
	Minimum	28	29	38	45	37	34	33	27	29	45	32	23	31	29	29	21	29	23	23	23	19	19	20	24	36	31	21	31	25	16	21	28.1
Rolla	Maximum	41	45	50	52	51	44	43	50	63	59	56	51	41	40	33	32	36	36	39	43	38	34	33	46	48	44	46	42	40	37	40	43.6
	Minimum	26	19	36	42	40	38	34	30	37	45	38	25	31	30	29	15	20	29	25	25	17	17	23	19	35	25	22	30	25	17	23	28.0
Springfield	Maximum	39	48	49	50	43	42	47	52	60	50	56	45	46	39	31	28	31	37	40	43	24	35	37	50	44	32	47	37	42	37	39	41.9
	Minimum	26	25	38	43	36	35	32	34	39	45	35	27	33	30	26	14	15	30	24	23	19	21	24	28	32	28	24	27	27	20	27	28.6
Southwest Plain																																	
Appleton City	Maximum	31	57	51	48	47	40	49	56	62	53	56	48	39	38	32	31	34	43	39	36	30	39	39	53	45	33	49	41	45	37	41	43.3
	Minimum	28	22	36	42	37	35	33	29	34	45	30	26	30	30	28	22	16	28	25	25	18	21	21	26	33	29	24	25	26	15	24	27.8
Clinton	Maximum	45	51	50	47	47	48	41	44	50	53	49	46	38	37	31	31	27	38	37	36	27	30	30	41	41	34	38	36	35	35	35	39.6
	Minimum	27	21	34	43	38	35	31	30	44	48	31	25	30	31	29	20	14	25	26	25	23	20	20	22	33	28	23	25	25	16	15	27.6
Harrisonville§§	Maximum	32	56	38	49	37	44	52	55	66	51	56	43	43	33	32	30	33	40	43	41	35	40	41	54	38	38	48	38	46	39	41	43.0
	Minimum	28	19	21	30	35	33	29	30	31	35	31	22	23	29	28	16	16	18	24	22	17	19	18	18	27	29	21	21	25	12	14	23.9
Lamar§§	Maximum	41	62	51	51	44	44	55	57	66	51	62	49	51	39	35	35	38	45	46	42	33	41	41	55	45	40	50	42	48	42	42	46.5
	Minimum	31	26	30	43	39	35	31	30	30	36	31	26	26	31	30	26	18	18	25	24	19	20	23	21	30	31	23	24	27	19	18	27.1
Lamonte	Maximum	37	52	50	50	47	42	44	51	61	51	52	41	40	38	33	31	35	38	41	38	32	35	39	54	40	34	46	37	41	36	37	42.0
	Minimum	21	20	38	40	40	35	32	30	34	45	30	25	29	31	26	18	15	28	26	23	21	18	20	26	33	25	25	24	25	13	15	26.8
Marshall	Maximum	35	52	48	49	47	43	47	52	62	55	50	41	39	38	34	31	35	40	41	35	34	35	38	55	40	32	32	46	40	36	37	41.9
	Minimum	24	18	36	40	40	35	32	29	35	33	33	27	29	32	27	16	20	16	25	20	18	17	18	25	27	28	24	26	14	14	15	25.6
Nevada	Maximum	43	58	50	50	47	40	50	53	63	54	56	48	45	40	34	32	34	42	42	41	34	39	38	54	42	38	48	44	44	38	40	44.5
	Minimum	28	23	40	40	35	34	30	31	35	46	34	26	31	30	28	22	16	30	25	33	18	22	21	29	35	27	25	27	25	17	25	28.6
Warrensburg	Maximum	40	53	49	49	47	37	47	52	62	52	52	42	39	37	31	31	34	40	42	38	34	35	39	54	46	45	37	40	42	36	38	42.6
	Minimum	23	18	36	38	33	33	31	29	34	45	32	24	28	29	26	15	14	25	24	25	18	18	18	29	25	23	25	28	25	14	24	26.1
Warsaw	Maximum	47	54	52	53	55	45	46	54	65	58	57	50	45	42	35	38	36	41	45	43	38	37	40	55	46	39	49	43	44	39	40	46.2
	Minimum	30	20	36	44	40	36	32	26	36	48	30	23	30	31	29	29	12	27	27	27	18	17	16	20	37	28	22	26	28	14	24	27.8
Northwest Plateau																																	
Chillicothe§§	Maximum	30	50	42	46	40	38	42	53	63	58	48	38	39	31	35	33	36	37	41	31	34	36	39	54	35	33	45	48	38	37	37	40.9
	Minimum	21	14	16	29	33	33	28	24	25	33	30	24	24	28	26	10	10	12	23	21	21	14	11	12	23	25	21	19	26	8	8	21.0
Grant City	Maximum	41	42	36	36	35	34	41	51	59	54	46	36	35	32	32	28	30	34	36	31	33	33	35	51	41	31	40	34	30	35	32	37.5
	Minimum	16	13	29	30	33	29	28	28	34	41	30	26	29	28	23	9	11	23	21	20	17	14	13	22	29	22	21	20	23	11	17	22.9
Kansas City	Maximum	40	55	46	44	37	38	48	53	63	55	51	40	41	33	31	30	34	37	41	35	35	39	41	55	42	36	46	38	41	39	39	42.0
	Minimum	21	20	35	36	33	32	30	35	42	44	31	28	29	30	22	17	22	30	28	25	22	25	24	31	31	31	30	29	25	26	26	28.4
Kidder§§	Maximum	26	42	38	41	35	32	40	49	60	58	45	36	36	31	33	29	33	33	38	30	31	33	37	52	34	31	43	32	37	30	35	37.4
	Minimum	22	14	15	28	30	30	26	26	28	32	30	23	24	26	23	11	10	13	20	20	18	9	12	21	23	25	19	17	19	8	9	20.4
Lexington	Maximum	43	54	49	49	46	39	44	53	64	57	53	40	41	37	32	33	35	38	35	37	34	38	41	54	47	35	48	40	42	38	40	43.1
	Minimum	25	19	32	36	31	35	30	31	38	49	35	27	29	31	28	10	10	28	27	25	21	20	19	20	32	30	26	23	26	10	23	26.6
Maryville	Maximum	42	42	41	35	35	33	44	51	58	52	47	37	36	35	32	29	29	34	37	31	34	33	39	51	44	33	39	35	35	36	32	38.4
	Minimum	16	14	24	29	31	28	27	26	30	40	29	24	29	28	24	11	14	22	25	19	16	13	11	24	26	26	22	18	24	8	26	22.7
Oregon	Maximum	43	49	44	37	37	38	50	56	65	59	49	39	37	35	39	33	30	41	42	34	37	39	43	54	45	39	43	37	40	41	34	42.2
	Minimum	19	17	27	30	30	30	27	30	33	44	33	26	29	30	27	12	18	25	25	24	19	18	17	28	26	28	25	19	27	13	25	25.2
St. Joseph	Maximum	39	49	38	39	34	32	46	53	61	55	48	35	37	33	33	30	32	38	38	29	33	36	39	52	41	36	45	35	38	38	36	39.6
	Minimum	19	18	27	33	32	30	28	30	36	40	27	27	29	30	21	15	19	27	26	23	22	20	18	30	28	29	26	22	24	16	20	25.5
Trenton	Maximum	40	45	42	42	42	37	42	50	59	58	47	37	38	35	34	33	33	34	35	34	31	34	36	52	41	33	45	35	37	35	34	39.7
	Minimum	19	16	28	33	36	33	30	28	36	44	32	25	29	29	25	12	11	27	26	22	19	17	12	21	29	28	21	19	18	10	23	24.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 1-17-31—955.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXIV COLUMBIA, MO., YEAR, 1930 No. 13

GENERAL SUMMARY

The weather of the year 1930 in Missouri was noteworthy from almost any standpoint. The year started in with one of the coldest Januarys and deepest snows in years. February was the warmest of its entire long record; and not in forty years or more have two winter months in Missouri shown such great contrasts in weather as was experienced in the first two months of this year.

Then there was the long and severe drought, beginning in February and running to the middle of September, with only slight and local relief during June and the middle of August. July and the first nine days of August made the driest 40-day period, and also one of the hottest, in the climatic history of Missouri.

Although the year was considered dark at times from the agricultural and business standpoints, it ended in a blaze of bright weather. Never perhaps has an autumn and first winter month in Missouri been more bright and sunny, so near the ideal from the side of personal comfort, nor more favorable for all seasonal farm activities and other outdoor pursuits. All elements, temperature, moisture, sunshine, and wind, combined in an endeavor to erase the sear left by the drought.

Of all the varied phenomena paraded for our review, the great drought and heat wave perhaps furnished the topic for particular discussion. The spring months, March to May for Missouri as a whole, gave only 59 per cent of the normal rainfall. That was starting the crop season with only a little more than half the usual moisture, a very unusual occurrence as Missouri springs usually are if anything too wet. With 78 per cent of normal rainfall in June, the outlook improved somewhat; and this month, the records show, was more favorable than June, 1901, and the same month of several other droughty summers. (See page 54 for droughts of other years). July deficiencies extended to all counties, terminating in the outstanding driest July of record. There was some local relief by showers about the middle of August, but the total for that month was only 56 per cent of normal. However, August of 1913, 1901, 1894, 1881, and 1873, were all drier than the current August; but this July and August combined brought the driest 62-day period of record, save perhaps the same period in 1881. Generous, general and highly beneficial rains prevailed from about the 6th to the 15th of September, breaking or greatly modifying the heat and drought throughout Missouri. Good showers in late September, fairly generous and well distributed moisture during October and November furnished enough moisture for fall plowing and sowing, and starting the wheat crop off in fine shape; also temporarily replenished domestic and livestock water supplies. December, while a beautiful winter month, was deficient in moisture.

The distressing effects of the long drought, intensified by extreme heat during July and the first part of August, were startling. The eastern half of the State from north to south suffered the most; and the east-central counties and especially Randolph, Audrain, Callaway, Montgomery, Warren, and St. Charles were the hardest hit. The northwest and southwest parts of the State suffered less; and the counties of Barton, Jasper, Newton, and McDonald hardly at all; and the suffering and loss to Buchanan, Andrew, Holt, Nodaway and Atchison were relatively small.

Of the eight leading crops of Missouri, pastures and hay and corn were the hardest hit; small grains harvested by the first of July gave fair yields. The great crop loss was not all. The real scarcity of water for domestic and livestock purposes became a serious problem. In addition to its economic effects, the severity and persistence of any drought is indicated by the river stages. The ground water table doubtless reached a low record. Farmers dug deep, 10 to 16 feet, without getting moisture. Springs and small streams and lakes and ponds dried up. The larger rivers dwindled to the lowest stages known, resulting in a serious depletion of fish life. The State Game department was kept active in its endeavors to rescue fish from waters that were dangerously low and transferring them to more favorable localities. The toll of wild life, small mammals, birds and bees as well as fishes was heavy; and this death toll embraced insects both beneficial and harmful. The combined rainfall of the last four months of the year, September to December, was not enough to markedly increase stream flow.

However, looking backward and viewing matters by and large, the drought with its glaring sunshine and heat was not all bad. Reliable statistics show that the general health of the people of Missouri kept unusually good. For comparative table of hot summers see page 55.

TEMPERATURE

The annual mean for the State was 55.9°, or 1.1° above normal.

The highest annual mean was 61.4°, at Caruthersville.

The lowest annual mean was 51.1°, at Kidder.

The highest temperature recorded during the year was 114°, at Campbell and Clinton, on August 9th; and 2° lower than the record maximum of 116°, at Marble Hill, July 22, 1901.

The lowest temperature recorded during the year was —31°, at Neosho on January 22d.

The annual range for the State was 145°.

The greatest local annual range was 138°, at Campbell and Warsaw.

The least local annual range was 118°, at Springfield.

The greatest local daily range was 60°, at Dean, McDonald County, on January 20th.

PRECIPITATION

The average precipitation for the State was 31.27 inches, or 8.20 inches less than the 60 years' average; and nearly 6 inches more than the great drought year of 1901.

The greatest annual amount was 55.26 inches, at Neosho. (More than 9 inches over normal.)

The least annual amount was 19.06 inches, at St. Charles. (Nearly 18 inches less than normal.)

The greatest local monthly fall was 13.58 inches, at Caruthersville in January; and the least local monthly fall was T. (trace), at St. Charles, in July.

The average number of rainy days for the year was 76.

The average snowfall by sections was as follows: Northeastern plain 21.8 inches; southeastern lowlands 12.0 inches; Ozark plateau 16.4 inches; southwestern plain 14.6 inches; northwestern plateau 21.3 inches, and for the State 17.2 inches. The greatest local annual amount was 39.8 inches, at Clifton Hill; and the least was 7.5 inches, at Arcadia. The greatest local monthly snowfall was 30.5 inches, at Lexington in January.

Light to moderate sleet fell in January, February, March, April, and November.

Hail, mostly small, fell during March, May, and June.

Thunderstorms occurred in every month except December.

The highest recorded wind velocity was 54 miles an hour from the northwest, at St. Louis on September 14th.

(Continued on Page 53.)

Climatological Data for Year, 1930

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain.																				
Brunswick	Chariton	652	52	55.8	109	Aug. 3	−22	Jan. 18†	52	26.10	3.69	June	0.23	July	25.2	78	214	26	125	nw.
Clifton Hill	Randolph	731	32	54.7	110	Aug. 3	−25	Jan. 22	22	21.48	4.00	June	0.19	July	39.8	81	208	74	83	.....
Columbia	Boone	784	41	55.8	108	July 28	−16	Jan. 18	41	26.16	4.41	Jan.	0.48	Dec.	15.9	92	146	112	107	s.
Downing	Schuyler	878	10	53.4	108	July 27	−21	Jan. 18	22	24.46	6.16	June	0.02	July	22.6	76	205	89	71	w.
Fayette	Howard	661	51	54.7	110	Aug. 9	−24	Jan. 22†	48	25.99	3.93	Sept.	0.27	July	20.9	68	..	..	..	.....
Fulton	Callaway	818	42	55.1	108	Aug. 9	−22	Jan. 18†	39	21.87	3.43	Sept.	0.46	July	25.8	82	198	89	78	.....
Gorin	Scotland	700	..	....	..	.....	....	.....	44	23.65	6 19	June	0.41	July	10.1	66	185	65	115	nw.
Hannibal	Marion	534	39	55.1	106	July 27	−17	Jan. 18	47	31.55	10.35	June	0.46	Dec.	15.6	85	159	95	111	sw.
Jefferson City	Cole	557	43	55.5	107	Aug. 8†	−19	Jan. 18	47	31.63	4.82	Jan.	0.82	Dec.	20.0	97	190	72	103	s.
Kirksville	Adair	969	42	53.6	107	Aug. 3	−20	Jan. 18†	49	26.26	5.66	June	0.22	July	19.3	64	201	40	124	sw.
Louisiana	Pike	469	37	55.3	110	Aug. 8	−24	Jan. 22	50	25.15	4.90	Jan.	0.54	July	21.1	51	191	119	55	s.
Macon	Macon	875	32	53.8	109	Aug. 3	−20	Jan. 18	38	25.56	7.19	June	0.09	July	23.0	57	221	74	70	w.
Mexico	Audrain	800	42	54.7	113	July 28	−19	Jan. 18	53	22.55	4.21	June	0.07	July	21.2	73	263	9	93	w.
St. Charles	St. Charles	456	43	57.5	112	July 28	−20	Jan. 18	53	19.06	3.56	Jan.	T.	July	21.6	55	163	100	102	s.
St. Louis (1)	St. Louis City	717	57	57.9	108	July 28	−13	Jan. 18	94	23.23	5.70	Jan.	0.25	July	17.4	77	173	100	92	s.
St. Louis (2)	.....do	578	19	57.2	107	July 28	−13	Jan. 18	19	21.56	5.47	Jan.	0.22	July†	19.8	85	197	76	92	se.
Shelbina	Shelby	779	..	....	..	.....	....	.....	38	26.14	6.40	June	0.19	July	18.1	73	..	..	..	.....
Steffenville	Lewis	650	33	54.0	109	Aug. 9	−22	Jan. 18	38	29.80	5.60	June	0.13	July	18.0	67	175	111	79	s.
Unionville	Putnam	1,062	38	53.5	111	Aug. 3	−21	Jan. 18	38	33.03	6.28	June	0.15	July	38.0	66	208	61	96	sw.
Warrenton	Warren	816	49	57.5	110	July 28	−19	Jan. 18	41	22.89	4.69	Jan.	0.10	July	25.5	63	145	136	84	sw.
Keokuk, Iowa	Lee, Iowa	574	59	54.2	107	July 27	−17	Jan. 18	59	24.01	4.06	June	0.30	July	18.4	83	146	101	118	sw
Section means and	extremes	.....	..	55.2	113	July 28	−25	Jan. 22	..	25.34	10.35	June	T.	July	21.8	73	189	82	94	s.
Southeast Lowlands.																				
Campbell	Dunklin	314	5	58.5	114	Aug. 9	−24	Jan. 18	5	41.37	10.28	Jan.	0.69	July	8.4	94	179	91	95	s.
Caruthersville	Pemiscot	265	35	61.4	108	July 28†	−15	Jan. 18	35	47.13	13.58	Jan.	0.74	Sept.	13.3	78	211[c]	63[c]	86[c]	s.
Doniphan	Ripley	344	27	59.1	111	Aug. 8†	−18	Jan. 18	27	36.13	9.25	Jan.	0.40	June	16.0	61	207	104	54	sw.
Jackson	Cape Girardeau	428	40	55.9	109	Aug. 9	−26	Jan. 18	41	34.14	8.66	Jan.	1.16	July	13.7	89	118	76	171	s.
Marble Hill	Bollinger	470	36	58.2	111	July 28†	−22	Jan. 18	37	30.37	7.99	Jan.	0.22	April	20.9	55	166	92	107	w.
Morehouse	New Madrid	289	..	....	..	.....	....	.....	10	36.55	9.74	Jan.	0.46	June	8.1	91	215	75	75	sw.
Poplar Bluff	Butler	339	27	58.2	112	Aug. 9	−23	Jan. 18	27	37.83	7.85	Jan.	0.50	July	10.0	84	199	93	73	s.
Sikeston	Scott	318	30	60.1	111	Aug. 8	−15	Jan. 18	30	33.18	10.91	Jan.	0.43	July	8.2	73	193[c]	59[c]	98[c]	s.
Cairo, Ill.	Alexander, Ill.	359	56	59.4	106	July 28†	− 8	Jan. 18	59	27.68	9.44	Jan.	0.04	July	9.3	101	125	102	138	s.
Section means and	extremes	.....	..	58.8	114	Aug. 9	−26	Jan. 18	..	36.04	13.58	Jan.	0.04	July	12.0	81	180	85	100	s.
Ozark Plateau.																				
Arcadia	Iron	926	50	54.3	107	Aug. 9	−19	Jan. 18	53	23.38	5.66	Sept.	0.34	Dec.	7.5	52	267	8	90	w.
Aurora	Lawrence	1,370	30	56 4	101	Aug. 3	−16	Jan 18	41	37.62	6.03	Sept.	0.68	Mar.	18.5	78	200[i]	70[i]	86[i]	sw.
Birchtree(near)	Shannon	1,000	36	57.2	106	July 28†	−19	Jan. 18	37	39.18	7.09	Oct.	0.84	July	16.5	70	241	44	80	sw.
Caplinger Mills	Cedar	750	..	....	..	.....	....	.....	4	33.73	7.38	June	0.47	Mar.	16.2	68	184	116	65	s.
Dean	McDonald	1,000	28	56.8	109	July 28	−29	Jan. 20	32	51.98	7.70	Sept.	0.45	Mar.	23.0	70	208	82	75	sw.
Eldon	Miller	934	35	55.0	110	Aug. 8	−20	Jan. 18†	31	33.36	6.24	Sept.	1.19	Feb.	17.4	79	104[a]	165[a]	95[a]	sw.
Farmington	St. Francis	918	20	56.8	111	Aug. 9	−18	Jan. 18	34	25.63	7.47	Jan.	0.62	Aug.	13.2	88	167	125	73	sw.
Goodland	Iron	1,000	37	54.8	110	Aug. 9	−26	Jan. 18	37	28.01	4.68	Sept.	0.95	Dec.	15.0	59	206	87	72	n.
Greenville	Wayne	381	7	56.4	111	Aug. 9	−24	Jan. 18	8	34.94	9.52	Jan.	0.90	June†	9.0	52	195[j]	96[j]	64[j]	sw.
Hailey	Barry	1,350	..	....	..	.....	....	.....	6	44.31	7.58	Sept.	0.75	Mar.	14.7	59	222	61	82	w.
Koshkonong	Oregon	958	30	59 0	108	Aug. 9	−16	Jan. 18	30	40.94	7.28	Jan.	0.04	July	18.0	79	192[a]	56[a]	116[a]	sw.
Lebanon	Laclede	1,265	43	54.4	107	Aug. 9	−20	Jan. 17†	44	33.28	6.74	Sept.	0.94	Aug.	12.5	67	228	54	83	s.
Lockwood	Dade	1,078	25	57.4	105	Aug. 9	−22	Jan. 18	35	41.56	7.46	June	0.99	Mar.	18.5	75	231	54	80	sw.
Mountain Grove(near)	Wright	1,463	30	55.7	108	Aug. 9	−18	Jan. 18	32	39.66	7.32	May	0.97	April	17.8	92	199	80	86	se.
Neosho	Newton	1,011	43	57.6	103	Aug. 3†	−31	Jan. 22	48	55.26	12.87	Sept.	0.71	Mar.	29.0	89	236	59	70	sw.
Rolla	Phelps	1,099	31	56.9	107	Aug. 9	−17	Jan. 18	47	32.80	6.08	Sept.	0.99	Dec.	13.3	91	123	100	142	s.
Salem(near)	Dent	1,173	27	55.7	108	Aug. 9	−19	Jan. 18	30	30.09	5.93	Jan.	0.79	July	16.2	83	203	76	86	sw.
Seligman	Barry	1,542	18	57.6	103	July 28†	−20	Jan. 18	28	39.55	6.37	May	0.34	Mar.	19.6	71	202[j]	69[j]	69[j]	sw.
Seymour(near)	Webster	1,642	25	55.2	105	Aug. 9	−21	Jan. 18	25	34.39	5.32	Sept.	0.47	July	15.6	69	214	62	89	s.
Springfield	Greene	1,350	43	56 5	101	Aug. 9	−17	Jan. 18	43	30.73	5.27	Jan.	0.62	July	15.9	90	238	67	60	s.
Section means and	extremes	.....	..	56.3	111	Aug. 9	−31	Jan. 22	..	36.52	12.87	Sept.	0.04	July	16.4	74	204	77	84	sw.
Southwest Plain.																				
Appleton City	St. Clair	853	37	56.3	106	July 28†	−22	Jan. 18	39	32.04	6.44	June	0.70	Feb.	9.9	81	139	164	62	sw.
Clinton	Henry	765	38	57.5	114	Aug. 9	−22	Jan. 18	44	31.73	4.60	June	0.79	Dec.	10.0	75	181[c]	107[c]	74[c]	sw.
Harrisonville	Cass	904	54	55.2	109	Aug. 3	−21	Jan. 18	56	29.22	4.10	June	0.40	Feb.	13.5	82	130	57	178	s.
Lamar	Barton	980	44	56.7	106	Aug. 8†	−22	Jan. 22†	50	42.25	7.16	June	0.69	Mar.	13.0	77	224	63	78	sw.
Lamonte	Pettis	867	30	55 9	110	Aug. 3†	−24	Jan. 18	44	32.93	6.10	Nov.	0.68	Feb.	25.0	77	249	69	47	s.
Marshall	Saline	779	41	56.2	108	Aug. 3	−21	Jan. 18	41	23.88	3.86	Sept.	0.29	July	18.5	63	231	74	60	sw.
Nevada	Vernon	862	38	57.2	106	Aug. 9	−17	Jan. 18	39	24.96	5.44	June	0 04	Mar.	14.5	54	206	61	98	sw.
Warrensburg	Johnson	878	44	56.1	110	Aug. 3†	−20	Jan. 18	51	23.71	4.12	June	0.15	Feb.	14.2	60	211[i]	74[i]	70[i]	sw.
Warsaw	Benton	687	31	....	109	July 28†	−29	Jan. 22	36	34.79	6.91	Sept.	0.87	Dec.	12.8	79	217	66	82	s.
Section means and	extremes	.....	..	56.4	114	Aug. 9	−29	Jan. 22	..	30.61	7.16	June	0.04	Mar.	14.6	72	199	82	84	sw.
Northwest Plateau.																				
Chillicothe	Livingston	779	22	53.1	108	Aug. 3	−29	Jan. 22	25	31.18	6.37	June	0.25	July	36.3	77	218	99	48	e.
Conception	Nodaway	980	42	54.0	107	Aug. 3	−22	Jan. 22	47	29.03	4.80	May	0.43	Dec.	16.0	74	155	133	77	nw.
Edgerton	Platte	856	11	54.3	109	Aug. 4	−29	Jan. 22	19	23.32	3.93	June	0.46	July	18.5	96	255[f]	18[f]	86[f]	s
Grant City	Worth	1,134	27	53.1	108	Aug. 3	−22	Jan. 22	39	25.34	6.16	June	0.47	Dec.	20.5	77	160	161	44	sw.
Kansas City	Jackson	963	42	56.7	107	Aug. 3	−12	Jan. 17	42	28.56	4.39	May	0.67	Mar.	23.7	98	178	116	71	s.
Kidder	Caldwell	1,020	38	51.1	111	Aug. 3	−21	Jan. 18	43	27.30	4.74	May	0.57	Feb.	17.8	69	193	68	104	sw.
King City	Gentry	1,095	..	....	..	.....	....	.....	5	28.69	5.49	May	0.51	July	18.1	86	..	..	..	.....
Lexington	Lafayette	688	44	56.4	107	Aug. 3†	−15	Jan. 18†	49	33.48	5.53	Sept.	1.05	July	33.0	85	204	112	49	s.
Maryville	Nodaway	1,036	41	53.5	111	Aug. 3	−20	Jan. 18†	37	24.05	4.81	Aug.	0.38	Dec.	18.5	72	198	74	93	n.
Oregon	Holt	1,048	75	56.2	108	Aug. 3	−17	Jan. 18	75	35.08	7.90	June	0.18	Dec.	14.0	80	218	85	62	sw.
St. Joseph	Buchanan	967	23	55.0	107	Aug. 3	−17	Jan. 22	59	31.71	5.32	June	0.70	Dec.	17.3	97	195	95	75	se.
Tarkio	Atchison	916	28	52.9	105	July 27†	−20	Jan. 18†	38	27.15	5.72	June	0.20	Dec.	22.5	68	157	92	116	se.
Trenton	Grundy	822	35	54.3	110	Aug. 3	−26	Jan. 22	36	32.23	5.59	June	0.20	July	20.5	81	195[a]	100[a]	69[a]	s.
Section means and	extremes	.....	..	54.2	111	Aug. 3	−29	Jan. 22	..	29.01	7.90	June	0.18	Dec.	21.3	82	194	96	75	s.
State means and	extremes	.....	..	55.9	114	Aug. 9	−31	Jan. 22	..	31.27	13.58	Jan.	T.	July	17.2	76	194	83	88	sw.

† Also on other dates.

a, b, c, indicate the number of days missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Mean Temperatures for the Year 1930, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	14.0	−12.8	41.3	+12.2	42.7	+ 0.8	59.2	+ 5.1	65.4	+ 1.1	73.2	0.0	81.8	+ 6.1	80.0	+ 6.2	73.0	+ 6.3	57.4	+ 2.2	47.2	+ 5.7	34.6	+ 4.0	55.8	+ 3.1
Clifton Hill	16.2	−12.5	41.3	+12.1	41.4	− 0.8	57.8	+ 4.3	63.8	− 0.4	71.8	− 1.2	80.6	+ 4.2	78.8	+ 2.6	71.5	+ 2.6	55.2	− 2.0	45.6	+ 1.8	32.3	+ 1.2	54.7	+ 1.0
Columbia	20.4	− 8.8	44.2	+12.5	42.8	+ 0.2	59.9	+ 5.0	64.2	− 0.1	72.0	− 0.8	81.1	+ 4.2	78.4	+ 2.8	70.6	+ 2.4	55.2	− 1.4	46.0	+ 2.7	34.2	+ 1.0	55.8	+ 1.7
Downing	14.8	−10.6	40.9	+ 8.6	39.7	− 1.9	55.9	+ 2.7	62.9	+ 0.2	70.8	− 0.6	79.8	+ 3.4	77.3	+ 2.4	70.2	+ 2.6	53.7	− 2.2	44.2	+ 2.6	31.0	+ 1.4	53.4	+ 0.7
Fayette	18.8	− 8.4	42.2	+12.0	41.8	− 0.3	58.2	+ 3.9	63.2	− 1.1	71.8[a]	− 1.5	80.2	+ 2.8	77.3	+ 1.2	70.0	+ 1.7	55.0	− 1.7	45.0	+ 2.7	33.4	+ 2.2	54.7	+ 1.1
Fulton	20.6	− 9.1	43.1	+10.4	42.3	− 2.1	59.1	+ 4.8	64.4	− 0.6	72.1	− 1.5	80.4	+ 2.5	77.6	+ 1.1	70.5	+ 1.6	55.0	− 2.7	44.6	+ 0.1	32.0	− 1.7	55.1	+ 0.2
Hannibal	18.6	− 8.5	42.0	+12.3	41.1	+ 0.1	58.4	+ 5.0	64.7	+ 1.1	72.8	+ 0.3	80.5	+ 3.7	78.0	+ 3.0	71.4	+ 3.7	55.4	− 0.6	45.3	+ 3.2	33.2	+ 1.7	55.1	+ 2.1
Jefferson City	20.3	− 9.5	43.4	+12.5	42.7	− 0.5	58.8	+ 2.7	65.2	+ 0.3	72.4	− 1.6	81.7	+ 3.6	78.0	+ 1.3	70.8	+ 1.7	55.0	− 1.7	44.3	+ 0.2	33.5	+ 0.7	55.5	+ 0.8
Kirksville	14.6	−10.3	40.8	+14.9	40.5	+ 1.0	56.5	+ 4.8	62.8	+ 0.3	71.0	− 1.2	79.4	+ 3.3	77.0	+ 3.0	70.3	+ 4.3	54.0	− 0.7	44.2	+ 3.7	31.6	+ 2.0	53.6	+ 2.1
Louisiana	19.9	− 8.0	43.1	+13.4	42.4	− 0.9	58.8	+ 5.2	67.3	+ 3.5	73.0	+ 0.9	80.0	+ 3.6	76.6	+ 1.6	71.0	+ 3.1	55.3	− 1.0	43.0	− 1.2	33.2	+ 1.7	55.3	+ 1.8
Macon	15.4	−13.1	41.5	+12.8	40.1	− 2.5	57.0	+ 3.9	63.6	− 0.3	71.8	− 1.2	79.7	+ 2.3	77.4	+ 1.1	69.7	+ 1.4	54.2	− 2.6	44.0	+ 0.6	31.0	+ 0.6	53.8	+ 0.2
Mexico	18.6	− 9.7	41.6	+12.3	41.2	− 0.8	57.8	+ 4.1	64.6	+ 0.3	71.8	− 1.9	81.4	+ 4.1	78.1	+ 2.0	70.2	+ 1.6	54.7	− 1.7	43.7	+ 0.7	32.2	+ 0.4	54.7	+ 1.0
St. Charles	23.8	− 7.3	44.9	+12.4	44.4	0.0	60.4	+ 5.0	66.0	+ 3.0	73.4	− 0.8	82.7	+ 4.6	80.2	+ 3.5	73.7	+ 5.8	57.6	− 0.5	46.8	+ 1.3	36.3	+ 1.4	57.5	+ 2.4
St. Louis(1)	24.7	− 6.4	45.3	+10.5	44.4	+ 0.3	61.2	+ 5.1	67.3	+ 0.3	75.1	+ 0.1	83.6	+ 4.8	80.4	+ 2.9	72.6	+ 2.1	57.1	− 1.7	47.6	+ 2.2	35.8	+ 0.9	57.9	+ 1.8
St. Louis(2)	23.9	− 6.3	44.4	+12.2	43.8	+ 0.2	60.6	+ 5.4	66 8	+ 0.7	74.4	− 0.5	83.1	+ 3.0	80.0	+ 2.8	72.2	+ 2.0	55 9	− 3.0	46.8	+ 0.3	34.7	+ 0.4	57.2	+ 1.4
Steffenville	17.4	−10.4	41.6	+13.2	40.4	− 2.0	57.0	+ 4.1	63.4	− 0.7	69.4	− 3.8	79.0	+ 1.0	76.9	+ 0.2	71.1	+ 2.0	55.2	− 2.5	43.8	0.0	32.7	+ 2.1	54.0	+ 0.3
Unionville	14.0	− 9.5	41.8	+16.4	40.6	+ 2.0	55.3	+ 4.6	62.0	− 0.4	70.3	− 1.5	80.0	+ 3.4	78.2	+ 3.2	70.7	+ 3.5	54.2	− 1.2	44.4	+ 4.2	30.6	+ 3.2	53.5	+ 2.4
Warrenton	23.6	− 5.4	45.6	+15.7	44.2	+ 2.0	60.7	+ 6.2	66.4	+ 1.4	73.7	+ 0.1	83.0	+ 5.2	80.9	+ 4.5	72.8	+ 4.0	56.4	+ 0 8	47.6	+ 4.7	35.1	+ 3.1	57.5	+ 3.5
Keokuk, Ia	16.9	− 8.0	40.7	+12.4	40.0	+ 1.1	56.8	+ 4.5	63.8	0.0	72.2	− 0.3	80.5	+ 3.8	78.0	+ 3.0	71.0	+ 3.5	54.0	− 1.4	44.4	+ 3.3	31.6	+ 1.8	54.2	+ 2.0
Section Means	18.8	− 9.1	42.6	+12.8	41.9	− 0.1	58.4	+ 4.6	64.6	+ 0.5	72.3	− 0.9	81.0	+ 3.7	78.4	+ 2.5	71.2	+ 2.8	55.3	− 1.3	45.2	+ 2.0	33.1	+ 1.5	55.2	+ 1.6
Southeast Lowlands																										
Campbell	30.4	.....	48.2	.....	46.6	.....	60.8	.....	67.5	.....	75.6	.....	82.8	.....	78.0	.....	72.4	.....	56.6	.....	47.0	.....	36.4	.....	58.5	.....
Caruthersville	34.0[b]	− 5.0	51.0	+12.1	49.6	− 1.6	64.8	+ 4.6	70.8	+ 1.3	79.0	+ 1.2	84.3	+ 3.7	80.5	+ 0.8	76.0	+ 2.6	60.0	− 1.7	47.8[c]	− 2.1	38.6	− 1.4	61.4	+ 1.2
Doniphan	29.3	− 6.9	47.8	+ 9.7	47.1	− 2.3	62.0	+ 4.0	66.4	− 0.5	75.8	+ 1.0	83.2	+ 5.0	80.0	+ 2.6	74.0	+ 3.2	57.8	− 0.6	50.0	+ 2.4	36.3	− 1 1	59.1	+ 1.4
Jackson	24.8	− 9.2	44.8	+ 9.3	42.6	− 4.6	58.1	+ 1.2	65.6	− 0.2	72.8	− 1.3	81.2	+ 3.8	76.3	+ 0.1	70.4	+ 0.5	54.8	− 3.2	45.0	− 1.7	34.6	− 2.0	55.9	− 0.6
Marble Hill	26.8	− 8.0	46.0	+10.7	46.0	− 1.4	60.2	+ 3.5	66.2	+ 0.5	74.8	+ 0.9	84.0	+ 6.7	79.0	+ 2.0	72.4	+ 2.0	57.2	− 0.8	48.0	+ 3.6	38.0	+ 1.8	58.2	+ 1.8
Poplar Bluff	27.7	− 8.9	46.4	+10.1	46.0	− 2.8	61.2	+ 2.0	66.8	− 1.2	74.6	− 0.8	81.1	+ 2.4	78.0	0.0	73.2	+ 1.9	58.0	− 2.3	47.5	+ 0.1	37.8	+ 1.0	58.2	+ 0.1
Sikeston	30.6	− 7.0	48.2	+11.6	48.0	− 0.4	62.0	+ 4.1	69.0	+ 0.4	77.4	+ 2.9	84.5	+ 6.4	80.0	+ 2.4	75.2	+ 4.6	59.2	+ 0.4	48.1	+ 0.7	39.0	+ 1.5	60.1	+ 2.3
Cairo, Ill	30.6	− 4.3	48.0	+ 9.5	46.8	− 0.4	62.2	+ 4.1	68.4	0.0	76.1	− 0.2	83.2	+ 3.6	79.4	+ 1.6	74.0	+ 2.5	58.6	− 1.8	48.6	+ 1.3	37.0	− 0.8	59.4	+ 1.3
Section means	28.6	− 7.8	47.6	+10.4	46.6	− 1.9	61.4	+ 3.4	67.6	0.0	75.8	+ 0.5	83.0	+ 4.5	78.9	+ 1.4	72.8	+ 1.8	57.8	− 1.4	47.8	+ 0.6	37.2	− 0.1	58.8	+ 1.0
Ozark Plateau																										
Arcadia	23.4	− 8.7	42.7	+ 9.2	42.2	− 2.6	58.2	+ 2.9	63.3	− 1.3	70.1	− 1.9	78.8	+ 2.9	74.4	− 0.1	68.4	+ 0.8	52.9	− 3.2	43.1	− 0.9	33.6	− 0.7	54.3	− 0.3
Aurora	24.0	− 9.5	45.7	+12.1	43.2	− 2.4	60.6[f]	+ 4.9	64.6	− 1.3	71.6	− 2.2	80.2	+ 2.4	78.3	+ 1.5	71.4	+ 0.7	54.9	− 3.6	45.2[d]	− 0.8	36.5	+ 1.4	56.4	+ 0.3
Birchtree(near)	26.8	− 7.6	47.8	+12.9	45.8	− 1.6	61.4	+ 4.6	65.3	+ 0.1	73.0	+ 0.3	80.6	+ 4.2	77.2	+ 1.3	70.7	+ 1.2	54.8	− 3.4	47.3	+ 0.8	36.0	+ 0.2	57.2	− 1.1
Dean	23.4	−12.8	48.1	+13.3	45.8	− 3.1	61.1	+ 3.8	65.0	− 0.8	71.0	− 2.0	80.3	+ 2.7	78.3	+ 0.8	72.2[a]	+ 1.5	54.6	− 5.3	46.4	− 3.3	35.2	− 2.2	56.8	− 0.6
Eldon	20.4[a]	−11.0	43.8	+11.9	39.4	− 4.1	58.7	+ 3.3	64.2	− 0.3	70.7[d]	− 2.5	81.0	+ 4.0	77.8	+ 1.4	71.1	+ 1.8	54.5[a]	− 3.2	44.6[b]	− 0.6	34.2	− 0.1	55.0	+ 0.1
Farmington	25.4	− 7.4	45.1	+ 9.5	43.6	− 3.3	60.6	+ 3.7	65.8	+ 2.0	74.2	+ 1.6	82.5	+ 7.2	78.2	+ 3.4	71.0	+ 1.7	54.7	− 1.7	45.6	+ 1.3	34.8	− 2.2	56.8	+ 1.3
Goodland	24.8	− 7.8	43.6	+10.7	41.5	− 3.4	57.6	+ 3.0	64.2	− 0.3	69.1	− 3.0	78.8	+ 3.2	75.2[f]	+ 0.7	69.6	+ 2.3	54.0	− 1.8	44.8	+ 0.2	34.0	− 0.4	54.8	+ 0.3
Greenville	24.9	.....	41.8	.....	41.2	.....	58.4	.....	68.8[i]	.....	73.0	.....	81.2	.....	77.2	.....	71.8	.....	55.0	.....	47.1	.....	36.8	.....	56.4	.....
Koshkonong	27.9	− 8.6	49.0	+11.5	47.0[a]	− 2.6	62.5	+ 4.7	66.8[b]	0.0	75.2	+ 0.9	86.0[a]	+ 7.7	80.8	+ 3.1	72.5	+ 1.6	56.2[b]	− 3.8	47.6[b]	− 1.8	38.1	+ 0.5	59.0	+ 1.1
Lebanon	21.0	−12.0	43.5	+ 9.6	41.6	− 3.8	57.6	+ 1.9	62.9	− 2.7	69.8	− 3.3	80.2	+ 3.3	77.6	+ 1.3	69.9	+ 0.4	53.5	− 4.5	43.2	− 2.8	32.6	− 2.4	54.4	− 1.2
Lockwood	22.4	−10.9	46.4	+10.9	45.2	− 2.7	61.2	+ 5.2	65.0	+ 0.4	72.5	− 1.5	80.6	+ 3.0	80.1	+ 2.9	73.0	+ 1.7	56.7	− 1.9	48.2	+ 0.5	37.2	+ 1.7	57.4	+ 0.8
Mountain Grove(near)	23.6	− 9.6	44.9	+11.1	43.0	− 3.0	60.0	+ 5.8	63.7	− 0.2	71.0	− 0.6	81.4	+ 5.4	78.0	+ 2.9	70.2	+ 1.8	54.5	− 3.1	44.5	− 2.1	33.2	− 1.1	55.7	+ 0.6
Neosho	24.0	−11.1	47.6	+11.0	45.6	− 2.6	61.2	+ 3.2	65.0	− 1.2	71.6	− 2.3	79.5	+ 1.9	79.2	+ 2.3	73.0	+ 2.7	57.2	− 2.0	48.4	+ 1.2	38.4	+ 1.7	57.6	+ 0.4
Rolla	24.0	− 7.3	45.0	+ 9.8	44.0	− 1.0	60.7	+ 5.7	66.4	− 1 9	72.6	− 0.2	81.6	+ 4.2	78.9	+ 3.1	71.2	+ 3.2	55.4	− 0.5	46.7	+ 1.8	35.8	+ 2.2	56.9	+ 1.6
Salem(near)	24.2	− 8.7	45.2	+10.7	43.6	− 3.3	59.2	+ 3.6	64.5	− 0.8	71.1	− 1.7	80.2	+ 3.3	76.3	+ 0.2	69.8	+ 0.3	53.6	− 4.4	45.6	− 1.2	35.0	− 0.2	55.7	+ 0.2
Seligman	26.0	− 8.7	45.8[l]	+ 9.6	47.0[b]	+ 0.8	62.0[b]	+ 6.2	65.4[e]	+ 0.5	71.0[h]	− 1.5	81.1[e]	+ 4.5	79.1[a]	+ 3.5	73.0[b]	+ 4.2	55.0[a]	− 3.2	48.7[a]	+ 1.5	37.2[e]	+ 0.6	57.6	+ 1.5
Seymour(near)	24.2	−10.1	47.6	+15.2	43.0	− 2.2	58.0	+ 2.6	61.8	− 2.3	68.0	− 4.0	78.4[f]	+ 2.9	77.2	+ 2.2	70.2	+ 1.6	53.7	− 3.8	45.8[c]	− 0.3	34.4	0.0	55.2	+ 0.2
Springfield	23.8	− 9.7	46.8	+11.6	44.3	− 0.9	60.4	+ 4.4	63.8	− 0.7	71.4	− 1.1	80.2	+ 3.4	78.9	+ 3.2	71.4	+ 2.5	55.5	− 2.7	46.2	+ 0.5	35.2	− 1.0	56.5	+ 0.8
Section Means	24.1	− 9.5	45.6	+11.2	43.7	− 2.5	60.0	+ 4.1	64.8	− 0.6	71.6	− 1.5	80.7	+ 3.9	77.9	+ 2.0	71.1	+ 1.8	54.8	− 3.1	46.1	− 0.4	35.4	− 0.1	56.3	+ 0.4
Southwest Plain																										
Appleton City	20.0	−11.3	45.5	+13.2	43.8	− 0.8	60.2	+ 4.4	64.0	− 1.1	71.8	− 3.0	80.4	+ 2.1	79.9	+ 2.1	72.4	+ 2.1	55.8	− 3.3	46.6	+ 0.5	35.6	+ 1.3	56.3	+ 0.5
Clinton	20.6	−10.8	47.2	+15.3	46.6	+ 2.3	62.1	+ 6.4	67.6[e]	+ 2.4	74.8	+ 1.4	82.8	+ 5.3	81.8	+ 5.0	73.9	+ 3.7	55.8	− 2.8	43.0	− 4.3	33.6	− 0.8	57.5	+ 1.9
Harrisonville	16.8	−10.4	44.3	+14.6	42.5	+ 1.6	58.8	+ 5.0	63.0	− 1.0	71.8	− 1.6	80.6	+ 2.8	78.8	+ 3.0	72.2	+ 3.9	55.1	− 0.9	45.0	+ 2.6	33.4	+ 2.2	55.2	+ 1.8
Lamar	20.2	−12.2	45.3	+10.8	43.9	− 2.3	60.0	+ 3.4	64.3	− 1.6	71.8	− 2.6	80.4	+ 1.9	80.0	+ 2.5	73.0	+ 2.4	57.4	− 1.5	47.3	+ 0.7	36.8	+ 1.6	56.7	+ 0.3
Lamonte	18.0	−10.7	43.8	+12.2	43.6	− 0.1	59.4	+ 4.3	64.4	− 0.3	73.0	− 1.3	81.5	+ 2.0	79.4	+ 2.7	71.6	+ 1.5	55.2	− 2.8	46.3	+ 1.9	34.4	+ 0.2	55.9	+ 0.8
Marshall	19.6	− 8.0	44.0	+14.5	42.5	0.0	59.8	+ 5.4	65.6	+ 1.5	73.3	− 0.6	82.2	+ 4.9	79.9	+ 4.3	72.5	+ 4.2	55.8	− 0.8	45.8	+ 0.2	33.8	+ 2.2	56.2	+ 2.3
Nevada	21.4	−10.3	46.2	+14.3	45.8	+ 1.5	61.4	+ 6.3	63.7	− 0.9	72.5	− 1.1	80.9	+ 0.7	80.4	+ 3.5	73.2	+ 4.1	56.5	− 0.8	47 4	+ 3.0	36.6	+ 2.7	57.2	+ 1.9
Warrensburg	18.2	−10.7	44.4	+13.1	42.8	− 0.8	59 2	+ 3.1	64.0	− 1.3	72.7	− 1.5	83.0	+ 4.2	80.3[d]	+ 3.3	72.3[g]	+ 2.2	55.2[c]	− 2.9	46.8	+ 1.9	34.4	+ 1.0	56.1	+ 1.0
Warsaw	23.2	− 9.6	46.8	+13.0	....	.....	61.2	+ 5.4	65.6	− 0.2	73.5	− 0.2	82.6	+ 4.3	80.8	+ 3.4	73.7	+ 3.7	56.6	− 2.5	47.2	− 0.3	37.0	+ 2.2	....	.....
Section Means	19.8	−10.4	45.3	+13.4	43.9	+ 0.2	60.2	+ 4.9	64.7	− 0.3	72 8	− 1.2	81.6	+ 3.1	80.1	+ 3.3	72.8	+ 3.1	55.9	− 2.0	46.2	+ 0.7	35.1	+ 1.4	56.4	+ 1.4
Northwest Plateau																										
Bethany	....	.....	....	.....	....	.....	56.0	+ 4.8	62.0	− 0.6	70.3	− 2.1	79.8	+ 3.8	77.5	+ 2.6	69.6	+ 2.6	54.4	− 0.3	44.4	+ 1.5	30.8	+ 0.5	....	.....
Chillicothe	13.8	−15.0	41.1	+ 8.6	39.3	− 2.3	56.9	+ 3.6	62.2	− 4.9	71.1	− 3.1	80.0	− 0.2	76.2	+ 0.1	69.2	− 0.4	53.2	− 5.0	43.2	+ 0.6	31.0	− 4.6	53.1	− 1.9
Conception	13.8	−11.0	42.8	+15.7	42.0	+ 2.5	57.2	+ 5.3	62 9	+ 0.9	71.5	− 0.1	81.2	+ 4.8	78.0	+ 3.4	69.8	+ 2.6	53.6	− 1.9	44.5	+ 3.1	31.1	+ 1.8	54.0	+ 2.3
Edgerton	13.8[k]	−13.1	44.0	+ 9.7	42 6[m]	− 0.6	57.8[f]	+ 4.0	62.4[b]	− 0.6	71.3[b]	− 0.6	80.0	+ 3.9	76.0[f]	+ 0.9	70.4	+ 2.5	54.3[a]	− 2.0	45.8[e]	+ 4.0	33.2[a]	+ 2.8	54.3	+ 0.9
Grant City	13.6	−11.3	41.7	+14.4	40.6	− 0.7	55.6	+ 4.1	61.4	− 0.7	70.1	− 1.2	79.5	+ 3.3	77.5	+ 2.6	69.7	+ 2.7	53.5	− 1.9	43.5	+ 1.1	30.2	+ 2.5	53.1	+ 1.2
Kansas City	18.6	− 9.6	46.2	+15.0	43.6	+ 0.9	60.4	+ 5.6	63.9	− 0.9	73.4	− 0.2	82.8	+ 4.7	80.2	+ 3.6	72.4	+ 3.5	56.4	− 1.3	47.4	+ 3.7	35.2	+ 2.7	56.7	+ 2.3
Kidder	11.9	−15.0	39.4	+11.6	37.2	− 4.0	53.9	+ 1.5	59.8	− 3.3	68.9	− 3.5	78.2	+ 1.3	76.4	+ 0.7	66.9	− 0.8	51.0	− 5.4	41.2	− 1.2	28.9	− 0.8	51.1	− 1.6
Lexington	18.5	− 9.0	44.8	+15.4	43.6	+ 0.7	59.5	+ 5.4	64.0	− 0.4	72.6	− 0.2	81.2	+ 4.1	80.0	+ 4.0	73.2	+ 4.7	57.0	− 0.5	47.7	+ 3.7	34.8	+ 3.3	56.4	+ 2.6
Maryville	14.2	− 8.2	42.0	+17.9	40.9	+ 3.7	57.1	+ 7.0	62.4	+ 1.3	70.5	+ 0.9	80.2	+ 4.6	77.8	+ 4.2	68.9	+ 3.5	53.0	− 0.3	44.1	+ 5.1	30.6	+ 4.3	53.5	+ 3.7
Oregon	16.4	− 7.5	45.6	+17.4	44.2	+ 4.9	60.0	+ 6.1	64.8	+ 1.6	72.6	+ 0.3	82.0	+ 6.4	79.7	+ 4.7	72.3	+ 5.3	56.2	+ 1.3	47.0	+ 6.7	33.7	+ 5.2	56.2	+ 4.4
St. Joseph	15 4	−11.7	44.3	+13.2	42.6	− 0.1	59.0	+ 5.1	63.2	− 0.8	72.0	− 1.6	81.5	+ 2.9	78.8	+ 2.1	70.2	+ 1.5	55.0	− 1.7	46.0	+ 2.8	32.6	+ 2.3	55.0	+ 1.2
Tarkio	12.7	−10.2	41.8	+13.8	40.8	+ 0.2	56.4	+ 4.2	62.0	− 1.3	70.6	− 2.1	79.8	+ 2.8	75.7	+ 0.1	68.2	+ 1.6	52.5	− 3.0	44.0	+ 3.4	30.0	+ 4.1	52.9	+ 1.1
Trenton	14.8	−11 9	42.3	+13.8	41.7	+ 0.5	56.1	+ 3.5	63.6	− 0.2	71.8	− 0.8	80.7	+ 3.8	78.4[a]	+ 3.2	70.4[a]	+ 3.0	54.6	− 1.7	45.0	+ 2.6	32.1	+ 2.5	54.3	+ 1.5
Section Means	14.8	−10.9	43.0	+14.3	41.6	+ 0.5	57.4	+ 4.7	62.7	− 1.0	71.3	− 1 1	80.5	+ 3.5	77.9	+ 2.4	69.8	+ 2.2	54.2	− 1.8	44.9	+ 2.9	31.9	+ 2.0	54.2	+ 1.5
State means	20.8	− 9.7	44.5	+12.1	43.2	− 0.7	59.1	+ 4.0	64.7	+ 0.3	72.4	− 0.8	81.2	+ 3.9	78.5	+ 2.5	71.3	+ 2.3	55.3	− 2.1	45.8	+ 1.4	34.2	+ 0.3	55.9	+ 1.1

Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days, etc.

Monthly and Annual Precipitation for the Year 1930, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Becker	....	.....	....	.....	....	.....	....	.....	1.86	.....	3.25	.....	0.84	.....	....	.....	4.15	−0.54	2.72	−0.09	2.35	+0.04	0.51	−1.40	25.73	−15.57
Boonville	3.67	+1.80	1.32	−1.10	0.87	−2.16	1.56	−2.35	3.09	−2.14	3.36	−2.11	0.29	−3.63	1.84	−1.89	2.56	−1.83	2.96	+0.23	3.45	+1.48	0.76	−0.86	26.10	−12.74
Brunswick	2.46	+0.83	0.96	−0.89	1.50	−1.06	1.64	−1.84	3.16	−1.73	3.69	−1.50	0.23	−4.41	2.73	−1.16	2.56	−1.83	2.96	+0.23	3.45	+1.48	0.76	−0.86	26.10	−12.74
Clifton Hill	3.78	+2.18	1.34	+0.01	1.38	−1.27	1.03	−3.33	1.75	−3.39	4.00	−0.34	0.19	−3.69	1.91	−2.12	1.27	−3.59	1.67	−0.45	2.36	+0.45	0.80	−0.60	21.48	−16.14
Columbia	4.41	+2.49	1.82	−0.22	1.03	−1.91	1.55	−2.22	2.88	−1.58	3.10	−1.66	0.50	−2.99	2.18	−1.42	3.39	−0.96	2.57	−0.04	2.25	+0.05	0.48	−1.38	26.16	−11.84
Downing	1.14	−0.59	0.83	−0.57	1.49	−0.87	1.21	−2.54	3.53	−0.88	6.16	+1.78	0.02	−4.91	1.20	−2.32	1.44	−3.27	2.49	+0.29	3.60	+1.97	1.35	−0.11	24.46	−12.02
Fayette	3.00	+1.01	0.80	−1.10	1.24	−1.57	1.45	−2.09	3.11	−1.51	3.20	−1.34	0.27	−3.38	2.18	−1.04	3.93	−0.90	3.10	+0.62	3.07	+1.07	0.64	−0.99	25.99	−11.22
Fulton	2.98	+0.63	0.48	−1.41	0.78	−2.26	1.33	−3.00	2.20	−2.57	3.36	−0.84	0.46	−3.53	0.67	−2.84	3.43	−0.96	2.58	−0.17	3 05	+0.80	0.55	−1.37	21.87	−17.52
Gorin	1.44	−0.11	0.55	−0.94	1.05	−1.41	1.94	−2.06	2.22	−2.39	6.19	+2.28	0.41	−3.62	0.89	−2.11	3.02	−1.27	2.58	+0.20	2.35	+0.39	1.01	−0.68	23.65	−11.72
Hannibal	3.45	+1.73	1.73	−0.13	0.94	−1.66	1.63	−1.56	2.08	−2 27	10.35	+6.45	0.76	−2.33	1.45	−1.89	3.12	−0.85	2.22	−0.17	3.36	+1.30	0.46	−1.08	31.55	− 2.46
Hermann	3.49	+1.34	1.50	−0.73	0.94	−2.07	0.68	−3.26	2.69	−1.69	1.84	−2.48	1.86	−1.79	0.82	−2.37	3.17	−0.86	2.34	−0.45	3.46	+0.74	0.54	−1.28	23.33	−14.90
Jefferson City	4.82	+2.60	1.45	−0.64	1.02	−1.80	2.23	−1.31	1.87	−2.68	3.77	−0.25	2.72	−0.73	2.11	−0.95	4.76	+1.48	3.25	+0.66	2.81	+0.54	0.82	−1.03	31.63	− 4.11
Kirksville	2.04	+0.51	0.43	−1.39	1.03	−1.74	2.52	−1.12	3.01	−2.20	5.66	+1.39	0.22	−4.23	3.04	−0.28	2.51	−1.80	2.33	−0.40	2.43	+0.67	1.04	−0.60	26.26	−11.19
Louisiana	4.90	+2.88	0.60	−1.75	0.70	−2.20	0.83	−2.55	2.27	−2.29	4.77	+0.82	0.54	−2.58	1.77	−1.96	3.62	−0.33	2.25	−0.38	2.33	+0.05	0.57	−1.12	25.15	−11.41
Louisiana	1.98	.....	0.72	.....	2.27	.....	1.43	.....	3.82	.....	5.18	.....	T.	.....	3.24	.....	1.09	.....	2.40	.....	2.44	.....	1.35	.....	25.92	.....
Lucerne	2.27	+0.62	0.72	−1.23	1.31	−1.38	1.57	−1.62	2.11	−2.46	7.19	+2.78	0.09	−3.67	2.39	−0.89	3.14	−1.07	0.48	−2.25	3.39	+1.46	0.90	−0.50	25.56	−10.21
Macon	4.08	+2.03	0.97	−1.24	1.16	−1.63	1.02	−2.65	1.48	−3.28	4.21	−0.57	0.07	−3.68	0.84	−2.41	2.35	−2.33	2.89	+0.51	3.00	+0 68	0.48	−1.52	22.55	−16.09
Mexico	1.70	.....	0.45	.....	1.83	.....	1.90	.....	5.15	.....	4.95	.....	0.32	.....	2 25	.....	3.50	.....	2.74	.....	3.25	.....	1.35	.....	29.39	.....
Milan	2.18	.....	0.96	.....	1.00	.....	1.30	.....	1.98	.....	6.27	.....	0.59	.....	1.86	.....	3.57	.....	2.75	.....	3.24	.....	0.49	.....	26.19	.....
Monroe City	5.57	+3.16	2.07	−0.27	1.05	−2.66	1.46	−2.62	1.89	−3.10	2.76	−1.61	1.64	−2.44	0.20	−3.62	5.54	+1.68	2.07	−0.88	2.76	+0.01	0.95	−1.11	27.96	−13.46
Pacific	3.56	+1.29	1.85	−0.78	1.29	−1.80	1.05	−2.63	1.69	−2.49	3.31	−0.65	T.	−3.23	0.30	−3.16	2.82	−0.46	0.62	−2.05	1.95	−0.59	0.62	−1.25	19.06	−17.80
St. Charles	5.70	+3.36	2.35	−0.21	0.99	−2.39	1.32	−2.49	1.69	−2.65	2.63	−1.19	0.25	−2.73	0.28	−2.71	3.51	+0.05	1.84	−0.88	1.77	−1.06	0.90	−1.31	23.23	−14.21
St. Louis(1)	5.47	+2.40	2.06	−0.25	1.08	−1.87	1.31	−2.70	1.01	−3.23	2.20	−1.56	0.22	−2.53	0.22	−5.39	3.72	−0.92	1.59	−2.20	1.73	−0.58	0.95	−1.15	21.56	−19.98
St. Louis(2)	1.56	−0.16	2.06	+0.14	1.30	−1.55	0.97	−2.56	2.17	−2.81	6.40	+1.69	0.19	−3.97	2.38	−0.47	3.26	−0.72	2.33	−0.39	2.83	+0.75	0.69	−0.92	26.14	−10.97
Shelbina	2.22	+0.03	0.77	−1.08	1.20	−1.71	3.62	+0.01	2.11	−2.84	5.60	+1.50	0.13	−4.30	2.43	−1.04	4.20	+0.01	2.95	+0.83	3.55	+1.62	1.02	−0.54	29.80	− 7.51
Steffenville	47.0	+3.38	1.80	+0.40	1.03	−2.51	1.29	−3.34	2.81	−1.34	3.68	−0.13	2.80	+0.06	0.10	−5.07	5.13	+0.98	2.44	−1.30	2.59	+0.02	0.89	−1.61	29.26	−10.46
Union	2.68	+0.84	0.74	−1.09	3.00	+0.61	1.35	−2.46	4.90	−0.06	6.28	+1.60	0.15	−4.14	1.97	−1.99	2.60	−2.01	2.71	+0.25	5.15	+3.33	1.50	−0.14	33.03	− 5.26
Unionville	5.07	+3.91	2.03	+0.67	0.90	−2.67	0.97	−3.77	1.69	−2.56	2.70	−0.51	1.11	−1.11	0.04	−3.98	3.64	−0.04	2.37	−1.52	2.39	−0.26	0.80	−1.79	23.71	−13 63
Valley Park	4.69	+2.31	1.55	−0.64	1.05	−2.32	0.75	−3.56	1.91	−2.88	2.37	−1.59	0.10	−3.32	0.26	−2.92	4.56	+0.52	2 07	−0.79	2.96	+0.37	0.62	−1.51	22.89	−16.33
Warrenton	2.51	+0.95	1.01	−0.54	0.67	−1.71	1.97	−1.02	2.18	−1.75	4.06	−0.07	0.30	−3.11	2.11	−1.09	2.97	−0.87	2.00	−0.26	3.63	+1.69	0.60	−0.85	24.01	− 8.63
Keokuk, Iowa																										
Southeast Lowlands																										
Campbell	10.28	.....	3.37	.....	2.79	.....	1.87	.....	5.08	.....	0.81	.....	0.69	.....	3.53	.....	4.73	.....	2.97	.....	2.80	.....	2.45	.....	41.37	.....
Cape Girardeau	7.66	+3.74	2.52	+0.34	1.89	−1.52	1.57	−2.37	2.61	−1.66	1.15	−2.57	0.67	−2.23	1.34	−2.93	5.56	+3.24	1.50	−1.74	2.68	−0.66	1.40	−1.89	30.55	−10.25
Caruthersville	13.58	+8.83	3.08	−0.72	4.50	+0.50	2.35	−1.77	5.48	+1.22	5.12	+1.14	1.08	−2.33	2.78	−0.79	0.74	−2.36	3.45	+0.49	2.15	−1.70	2.82	−1.62	47.13	+0 .89
Dexter	9.46	.....	3.22	.....	2.90	.....	1.58	.....	3.90	.....	0.61	.....	0.19	.....	2.28	.....	3.65	.....	2.99	.....	2.56	.....	2.13	.....	35.47	.....
Doniphan	9.25	+5.04	3.28	+0.13	2.84	−0.75	1.27	−4.10	4.20	+0.04	0.40	3.98	1.09	−3.64	0.60	−3.71	3.54	−0.10	5.50	+2.45	1.27	−1.85	2.89	−0.44	36.13	−10.89
Fisk	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	2.59	.....	1.62	.....	....	.....
Jackson	8.66	+4.94	3.00	+0.11	1.57	−2.77	2.18	−2.29	2.16	−2.20	1.30	−2.99	1.16	−2.36	1.46	−2.15	7.08	+3.53	1.28	−1.94	2.51	−0.62	1.78	−1.42	34.14	−10.16
Marble Hill	7.99	+4.46	2.78	−0.50	1.34	−2.84	0.22	−4.22	2.44	−1.79	0.30	−3.87	0.42	−4.26	1.07	−2.43	6.34	+2.71	2.55	−0.10	3.22	+0.05	1.70	−1.63	30.37	−14.42
Morehouse	9.74	+5.51	3.79	+0.53	3.35	−1.15	1.25	−3.01	3.03	−1.13	0.46	−3.42	0.66	−4.11	0.82	−2.99	6.43	+3.57	2.35	−0.25	2.36	−1.29	2.31	−1.70	36.55	− 9.44
New Madrid	12.11	+6.75	4.42	+0.57	2.74	−2.51	2.09	−2.26	3.42	−1.17	0.81	−3.40	1.74	−2.17	0.94	−2.94	3.00	−0.31	3.19	−0.06	2.31	−1.54	3.11	−1.25	39.88	−10.29
Poplar Bluff	7.85	+3.88	3.70	+0.74	2.55	−1.97	1.29	−3.18	3.43	−1.60	0.94	−4.08	0.50	−3.05	3.59	−0.68	6.34	+2.76	3.21	+0.01	2.70	−0.56	1.73	−2.45	37.83	−10.18
Sikeston	10.91	+6.68	2 63	−0.63	3.16	−1.34	0.90	−3.36	2.72	−1.44	0.82	−3.06	0.43	−4.34	0.62	−3.19	4.13	+1.27	2.08	−0.52	2.35	−1.30	2.43	−1.58	33.18	−12.81
Cairo, Ill	9.44	+5.68	2.53	−0.60	2.54	−1.21	0.79	−2.93	2.49	−1.22	1.59	−2.24	0.04	−3.03	0.76	−2.26	2.65	−0.24	1.05	−1.71	1.83	−1.85	1.97	−1.43	27.68	−13.04
Ozark Plateau																										
Arcadia	3.02	−0.20	2.35	−0.81	0.57	−3.50	0.85	−3.77	1.13	−3.65	0.68	−3.90	1.62	−2.62	1.08	−2.64	5.66	+2.02	3.47	+0.40	2.61	−1.01	0.34	−2.64	23.38	−22.32
Aurora	5.25	+2.85	2.21	−0.61	0.68	−3.00	1.11	−3.24	3.09	−2.37	4.87	−0.11	1.91	−3.45	2.53	−1.74	6.03	+2.30	4.08	+0.81	3.97	+1.18	1.89	−0.75	37.62	− 8.13
Birchtree (near)	5.47	+2.41	3.93	+1.44	1.75	−2.50	1.71	−3.01	6.63	+2.32	1.00	−3.53	0.84	−3.15	2.69	−1.70	4.83	+1.24	7.09	+4.51	2.11	−0.78	1.13	−1.44	39.18	− 4.19
Caplinger Mills	4.57	.....	1.40	.....	0.47	.....	2.13	.....	4.60	.....	7.38	.....	0.95	.....	1.38	.....	4.21	.....	3.65	.....	2.18	.....	0.81	.....	33.73	.....
Chaonia	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	3.39	.....	2.87	.....	1.68	.....	....	.....
Dean	5.61	+3.37	1.00	−0.83	0.45	−2.90	6.32	+2.28	6.27	+0.31	5.88	+0.61	1.75	−2.30	2.62	−1.65	7.70	+4.08	6.45	+2.96	4.15	+1.11	3.78	+1.66	51.98	+ 8.70
Eldon	4.71	+3.17	1.19	−0.91	1.25	−1.58	2.06	−2.40	2.16	−2.70	3.49	−0.82	2.65	−1.01	2.21	−1.77	6.24	+2.44	3.04	+0.01	2.61	+0.40	1.75	−0.41	35.36	− 5.58
Farmington	7.47	+5.12	2.50	−0.79	1.61	−1.66	1.16	−2.80	0.97	−4.53	1.70	−2.93	1.02	−2.53	0.62	−2.76	2.99	−0.23	2.38	−0.51	2.12	−1.84	1.09	−1.62	25.63	−17.08
Fredericktown	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	0.59	.....	4.29	.....	2.06	.....	1.86	.....	0.78	.....	....	.....
Galena	2.95	+0.59	2.12	+0.04	1.14	−2.73	1.07	−2.41	3.11	−2.13	3.12	−0.44	1.93	−2.40	2.61	−1.00	6.74	+2.61	3.83	+1.39	4.45	+1.55	1.56	−1.06	34.66	− 5.99
Goodland	1.98	−0.89	2.64	+0.15	1.34	−2.91	2.38	−2.71	2.39	−2.23	1.35	−2.75	1.99	−2.19	1.85	−2.18	4.68	+0.95	4.31	+1.09	2.15	−0.74	0.95	−1.53	28.01	−15.94
Greenville	9.52	.....	1.95	.....	2.60	.....	1.15	.....	2.84	.....	0.90	.....	0.90	.....	2.25	.....	3.55	.....	5.28	.....	2.75	.....	1.25	.....	34.94	.....
Hailey	3.56	.....	3.05	.....	0.75	.....	2.63	.....	7.38	.....	4.33	.....	1.30	.....	2.27	.....	7.58	.....	4.20	.....	3.90	.....	3.36	.....	44.31	.....
Koshkonong	7.28	+3.74	3.25	+0.46	2.39	−1.42	1.43	−3.54	5.19	+0.35	1.79	−2.69	0.04	−3.88	4.01	−0.44	4.35	+0.86	6.36	+3.45	2.97	−0.05	1.88	−1.28	40.94	− 4.44
Lebanon	4.96	+2.51	1.90	−0.60	1.51	−1.94	2.59	−1.59	3.24	−2.37	3.57	−1.36	1.24	−2.88	0.94	−2.59	6.74	+2.65	4.04	+0.78	1.32	−1.22	1.23	−1.37	33.28	− 9.98
Leeper	7.39	.....	2.71	.....	1.70	.....	1.36	.....	1.98	.....	1.46	.....	1.20	.....	2.00	.....	3.65	.....	3.83	.....	3.22	.....	1.88	.....	32.38	.....
Lockwood	3.79	+2.13	1.15	−0.82	0.99	−1.47	4.36	+0.70	4.61	−0.44	7.46	+2.66	1.30	−3.57	3.92	−0.25	4.09	+0.09	4.89	+1.44	3.77	+1.56	1.20	−0.74	41.56	+ 1.29
Mountain Grove	5.17	+2.30	3.27	+1.01	1.20	−3.14	0.97	−3.81	7.32	+2.47	1.95	−2.61	1.50	−2.50	1.97	−2.43	6.10	+2.06	4.57	+1.52	3.82	+1.39	1.82	−0.41	39.66	− 4.15
Neosho	5.32	+2.82	1.22	−1.16	0.71	−2.76	6.35	+2.23	6.46	+0.39	6.65	+1.22	2.56	−1.62	2.18	−1.91	12.87	+8.65	4.79	+1.40	4.08	+1.02	2.07	−0.47	55.26	+ 9.81
Owensville	3 59	.....	1.48	.....	1.70	.....	0.87	.....	3.02	.....	2.64	.....	1.14	.....	1.80	.....	4.75	.....	2.50	.....	3.09	.....	1.00	.....	27.58	.....
Ozark Beach	4.22	.....	3.25	.....	1.10	.....	2.43	.....	5.44	.....	3.67	.....	2.83	.....	2.47	.....	4.93	.....	4.18	.....	2.71	.....	2.20	.....	39.43	.....
Rolla	4.81	+2.36	1.63	−0.71	2.10	−1.49	1.93	−2.73	2.09	−2.92	1.74	−2.39	1.35	−2.74	3.63	−0.45	6.08	+2.24	2.21	−0.74	4.24	+1.93	0.99	−1.08	32.80	− 8.72
Salem(near)	5.93	+3.08	3.12	+0.74	2.19	−1.11	1.47	−3.08	2.68	−1 86	1.65	−2.65	0.79	−2.71	2.17	−2.24	3.41	−0 82	3.04	−0.84	2.08	−0.23	1.53	−0.48	30.09	−12.20
Seligman	4.83	+2.59	2.66	+0.78	0.34	−3.60	2.21	−1.72	6.37	+0.78	3.91	+0.38	0.58	−3.82	1.25	−2.74	6.22	+2.10	5.08	+2.14	3.51	+1.18	2 56	−0.01	39.55	− 1.94
Seymour(near)	3.42	+0.72	3.57	+1.12	0.88	−3.18	1.69	−2.27	5.13	−0.57	2.87	−1.76	0.47	−4.28	1.09	−2.75	5.32	+0.74	4.45	+1.44	3.87	+1.54	1.63	−0.42	34.39	− 9.67
Springfield	5.27	+2.93	1.59	−0.76	0.77	−2.62	1.04	−2.82	4.40	−0.79	4.31	−0.37	0.62	−3.59	3.02	−1.07	3.25	−0 27	3.05	0.00	2.11	−0.68	1.30	−1.01	30.73	−11.05
Steelville	4.88	+3.03	3.00	+0.74	2.48	+0.40	1.89	−2.42	2.08	−2.26	1.39	−2.76	2.13	−1.07	2.48	−1.03	5.57	+2.37	1.86	−1.35	1.90	−0.78	1.27	−0.64	30.93	− 5.77
Stover	4.32	.....	1.43	.....	0.69	.....	2.51	.....	2.08	.....	3.25	.....	2 74	.....	1.66	.....	3.65	.....	2.94	.....	2.85	.....	0.37	.....	28.49	.....
Tuscumbia	4.20	+3.06	1.34	+0 02	1.96	−1.49	3.38	−1.06	2.13	−1.96	3.08	−0.59	1.55	−0.79	1.94	−1.70	5.59	+0.17	2.67	−1.45	2.33	−0.09	0.67	−1.44	30.84	− 7.32
Williamsville	8.23	.....	2.66	.....	1.62	.....	1.12	.....	2.54	.....	1.01	.....	0.62	.....	3.20	.....	3.25	.....	4.20	.....	2.12	.....	1.56	.....	32.13	.....
Willow Springs(near)	4.99	.....	4.08	.....	2.07	.....	1.30	.....	6.34	.....	1.36	.....	2.50	.....	2.36	.....	6.38	.....	6.43	.....	5.78	.....	1.77	.....	45.36	.....
Southwest Plain																										
Appleton City	3.96	+2.13	0.70	−1.27	1.00	−2.07	2.24	−2.02	2.49	−3.05	6.44	+1.45	1.60	−3.03	0.82	−2.92	6.24	+2.57	3.29	+0.95	2.50	+0.37	0.76	−0.88	32.04	− 7.77
Clinton	4.47	+2.49	1.15	−0.95	0.93	−1.93	2.34	−1.70	2.25	−3.19	4.60	−0.13	2.05	−1.89	1.74	−1.62	4.30	+0.48	3.80	+0.99	3.31	+1.43	0.79	−0.94	31.73	− 6.96
Concordia	1.16	....	0.50	.....	0.73	.....	1.60	.....	1.45	.....	4 49	.....	1.09	.....	1.64	.....	4.88	.....	2.76	.....	3.08	.....	0.75	.....	24.13	.....
Harrisonville	2.83	+1.23	0.40	−1.62	0.86	−1.83	2.77	−0.38	3.02	−1.79	4.10	−0 36	2.35	−1.43	2.69	−1.46	2.81	−1.55	3.48	+0.89	2.91	+0.96	1.00	0.78	29.22	− 8.12
Joplin	4.42	+2.34	2.11	−0.13	1.00	−1.89	7.72	+3.47	4.66	−0.50	8.17	+2.83	3.42	−0.99	2.25	−2.01	7.50	+4.25	3.45	+0.15	4.77	+2.21	2.90	+1.04	52.37	+10.77
Lamar	4.10	+2.40	1.05	−1.18	0.69	−2.21	3.99	−0.16	4.32	−1.14	7.16	+2.20	1.90	−2.34	3.85	−0.33	5.80	+1.56	4.15	+1.02	4.34	+2.10	0.90	−1.05	42.25	+ 0.87
Lamonte	5.25	+3.47	0.68	−1.23	0.97	−1.63	2.10	−1.67	2.25	−2.70	4.22	−0.27	1.19	−2.81	1.26	−2.46	4.10	−0.40	3.96	+1.63	6.10	+4.20	0.85	−0.81	32.93	− 4.68
Marshall	2.00	+0.18	0.58	−1.26	1.03	−1.68	1.52	−2.17	3.24	−1.62	3.63	−0.69	0.29	−3.67	1.50	−2.16	3.86	−1.02	2.91	+0.33	2.66	+0.58	0.66	−1.00	23.88	−14.18
Nevada	2,76	+0.79	0.47	−1.61	0.04	−2.95	3.31	−0.48	1.63	−4.09	5.44	+0.33	0.62	−3.31	0.30	−3.21	3.16	−1.00	3.00	−0.08	3.50	+1.62	0.73	−1.13	24.96	−15.12
Osceola	6.38	+4.26	1.11	−0.68	0.80	−2.13	3.44	−0.61	2.92	−3.03	6.18	+1.43	0.60	−3.44	0.52	−3.10	6.75	+2.24	3.12	+0.29	3.31	+0.53	0.97	−1.25	36.10	− 5.49
Warrensburg	1.84	+0.05	0.15	−1.98	0.77	−1.77	3.18	−0.02	2.84	−1.82	4.12	−0.64	1.12	−2.83	1.28	−2.31	3.02	−0.57	3.36	+0.81	1.85	+0.07	0.18	−1.62	23.71	−12.63
Warsaw	4.77	+2.39	1.57	−0.99	1.05	−2.18	4.14	−0.08	2.34	−2.89	4.08	−1.09	0.88	−3.42	1.14	−3.15	6.91	+2.59	3.80	+0.49	3.24	+0.83	0.87	−1.45	34.79	− 8.95
Waverly	2.85	+1.23	0.85	−0.29	0.95	−2.27	1.52	−2.77	3.28	−2.03	3.61	−1.51	0.26	−3.10	1.06	−2.93	4.21	−0.73	2.36	+0.28	3.57	+1.73	0.93	−0.10	25.45	−12.49
Northwest Plateau																										
Albany	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	1.43	.....	1.05	.....	0.78	.....	....	.....
Bethany	1.98	+0.68	0.72	−0.72	1.56	−0.74	2.40	−0.82	3.42	−1.56	5.88	+1.40	0.40	−4.11	3.92	+0.04	2.32	−1.54	3.50	+1.29	2.02	+0.25	0.49	−0.86	28.61	− 6.69

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Monthly and Annual Precipitation for the Year 1930, with Departures—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northwest Plateau—Concluded from preceding page																										
Chillicothe	2.38	+0.72	0.46	−1.55	1.80	−0.98	1.97	−2.47	6.13	+1.42	6.37	+1.30	0.25	−4.41	2.20	−2.46	3.21	−2.53	2.12	−1.33	2.53	+0.20	1.76	+0.11	31.18	−11.98
Conception	1.08	+0.13	1.37	+0.18	1.12	−0.63	2.71	−0.10	4.80	+0.03	4.75	+0.20	1.23	−3.07	4.54	+1.06	1.94	−1.91	2.13	−0.32	2.93	+1.57	0.43	−0.56	29.03	−3.42
Edgerton	1.22	−0.05	0.51	−0.94	0.50	−2.25	2.77	−0.77	3.55	−1.90	3.93	−1.18	0.46	−4.34	1.71	−2.13	2.61	−0.67	2.88	+0.63	2.18	+0.71	1.00	−0.33	23.32	−13.22
Gallatin	2.20	+1 01	0.66	−0.94	0.56	−1.99	2.54	−1.18	5.01	−0.49	3.80	−1.51	0.20	−4.15	3.28	−0 84	3.12	−0.92	3.56	+0.94	2.92	+1.14	1.59	+0.07	29.44	−8.86
Grant City	1.08	+0.12	1.09	−0.03	1.51	−0.60	2.06	−1.00	3.29	−1.44	6.16	+1.61	0.69	−4.47	3.32	−0.31	1.26	−2.73	1.83	−0.89	2.58	+0.97	0.47	−0.69	25.34	− 8.66
Kansas City	2.56	+1.37	0.80	−0.95	0.67	−1.86	3.13	−0.01	4.39	−0.26	3.78	−1.21	1.39	−2.74	3.48	−0.61	2.61	−1.95	2.10	−0.82	2.70	+0.87	0.95	−0.38	28.56	−8.55
Kidder	1.10	−0.20	0.57	−0.95	0.67	−1.63	2.27	−0.77	4.74	−0.47	3.82	−0.54	0.60	−3.33	3.55	−0.36	2.92	−1.32	2.96	+0.34	2 62	+0.78	1.48	+0.18	27.30	−8.27
King City	1.43	.....	0.77	.....	1 10	.....	2.68	.....	5.49	.....	4.66	.....	0.51	.....	3.26	.....	2.69	.....	2.83	.....	2.52	.....	0.75	.....	28.69	.....
Lexington	3.52	+1.95	1.12	−0.88	1.42	−0.95	2.17	−1.19	5.31	+0.25	5.13	+0.36	1.05	−3.67	1.71	−1.52	5.53	+1.09	2.37	−0.20	2.88	+1.03	1.27	−0.45	33.48	−4.18
Maryville	1.97	+0.89	0.83	−0.61	1.31	−0.57	1.24	−1.67	4.17	−1.58	2.52	−2.11	0.71	−4.68	4.81	+0.95	1.35	−2.86	2.06	−0.61	2.70	+1.05	0.38	−0.67	24.05	−12.47
Oregon	1.34	−0.05	1.45	−0.17	0.61	−1.41	3.32	+0.03	4.57	−0.29	7.90	+3.17	1.36	−2.96	4.13	+0.16	3.77	+0.03	2.15	−0.41	4.30	+2.61	0.18	−1.26	35.08	−0.55
St. Joseph	1.30	+0.40	0.83	−0.68	0.83	−1.56	2.92	−0.29	4.45	+0.34	5.32	+0.23	1.46	−1.66	3.29	−0.12	2.75	−2.34	3.99	+1.11	3.87	+2.19	0.70	−0.31	31.71	−2.69
Tarkio	0.71	−0.08	0.60	−0.47	1.10	−0.60	2.26	−0.91	4.63	−0.03	5.72	+0.91	0.67	−3.04	3.97	+0.10	2.76	−0.74	1.30	−1.27	3.23	+1.78	0.20	−0.72	27.15	−5.07
Trenton	1.94	+0.56	0.39	−1.14	1.92	−0.52	3.39	+0.12	5.50	+0.16	5.59	+1.29	0.20	−4.13	3.62	0.00	2.13	−2.13	3.30	+0.74	2.73	+0.93	1.52	+0.17	32.23	−3.95

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THE WEATHER BY MONTHS

JANUARY.—For the State as a whole the wettest January since 1916 and the coldest since 1918. While no temperature records were broken at long-time stations, very few Januarys in the past 40 years or more were colder. Zero to subzero cold occurred on 6 to 12 days; —31° on the 22d was the coldest. The minimum temperature reached 32° or lower on 25 to 30 days. The precipitation was 4.51 inches, double the normal. The snowfall was 13 inches, and the heaviest in years. Most of the State was continuously covered for 25 days. Practically all traffic was suspended for short periods, especially about the 9th, the date of about the heaviest single snowstorm. Livestock suffered and required heavy feeding. Some quails and other wild birds perished because of the intense cold and scarcity of proper food.

FEBRUARY.—An unusually warm winter month, 12° warmer than normal, and actually warmer than a normal March. The warmest February of long record; and not in forty years or more have two winter months in the State of Missouri shown such great contrasts in weather as was experienced in January and February of this year. The precipitation was 81 per cent of normal. The snowfall was very light. It was favorable for seasonal outdoor work; and much plowing was done the last week with some sowing of oats and clover. Temperatures reached zero or a little lower on one day at seven stations; 32° or lower on an average of 15 days. Most peaches and some wheat were killed by low January temperatures.

MARCH.—Prevailing dryness and a large amount of sunshine. An unusually fine month for outdoor work, and much plowing, and other work was done. Sowing oats was completed. All farm activities were well ahead of the average. The average temperature approximated the normal; there was no zero cold, and minima were 32° or lower on only 19 days. The rainfall was not much more than half the normal, and the snowfall was also light. The mild weather of February forced most vegetation from its dormant state, but the rather gradual colder weather of March checked it without much damage. Wheat was under normal because of lack of moisture. It is curious to note that the mean temperature was 43.2°, nearly normal, but 1.3° colder than the preceding month of February. Not in the climatological history of Missouri can we find a duplicate of where February leaped ahead of March, when March itself was normal.

APRIL.—As a general rule a uniformly dry, bright, and mild month throughout the State. Night temperatures were 32° or lower on only two or three days; and from the 9th to the 16th, summer warmth was general, 96° on the 11th being the maximum. Only four Aprils in other years back to 1888 have been warmer; but drier Aprils occurred eight or nine times back to 1867. The rainfall was insufficient for normal growth of wheat, oats, all grasses and truck. Fruits were not so good. Much corn was planted, and some received its first cultivation by the end of the month.

MAY.—Except a few severe local storms in the northwest part of the State on the first day, May was comparatively free from noteworthy weather happenings. Averaged warmer than normal but ended quite cool with a few local frosts. Temperatures did not go to 100°, nor fall to 32° at any time. The trend to scanty rainfall, brought over from March and April, became somewhat more widespread and pronounced. There were only 13 stations that received around normal moisture. A few southwest and most of the northwest counties were the best watered; the eastern, central, and southeast suffered the most. May, completing the spring term, brought only 59 per cent of the normal rainfall, consequently all grasses, gardens and truck were unfavorably affected. The corn started off in fine shape.

JUNE.—Except a strong and steadily increasing tendency toward drought over all eastern parts of the State, June was without any outstanding weather features. Relatively warm and cool spells alternated every three or four days; maxima of 100° and higher occurred on two days, the 21st, and 22d, quite widely. While less than the usual June rainfall occurred, the showery spells were timely and well distributed. Over something less than half of the western part of the State moisture received was sufficient for temporary needs, and the same might be said of most of the northeastern counties; but all other sections and especially from the lower Missouri River counties southward to the Arkansas border there was not enough water for normal needs of pastures, meadows, gardens, and truck crops. On the other hand, corn was in a flourishing state. The months rainfall was 78 per cent of normal, and considerably more than in the same month during the droughts of 1914, 1913, 1911, 1901, 1890, and 1870. For the four months March to June, inclusive, 1930, 68 per cent of normal rain had occurred; for the same period in 1901, 56 per cent.

JULY.—Severe and widespread drought, glaring sunshine and excessive heat had become well established in July. For the State as a whole it was the driest July of record going back to more than 70 years. As compared with stations with the longest records it was not as hot as July, 1901, nor as hot as the same month in 1916 by several degrees. The State maximum of the present July, 113°, was 3° lower than the maximum of 1901. The absolute maximum of that summer, 116°, in July, has never been equaled in any July or any other month in the climatological history of Missouri. Local showers, beginning about the 22d, brought some relief to parts of the Ozarks, southwestern plains, and northwestern plateau. Grain

crops that ripened before the middle of July gave fair yields. Hay was short and pastures nearly a failure. The corn was caught in its most critical stage of silk and tassel and was practically ruined, save parts of the northwest and southwest sections and the main river bottoms. Forest trees shriveled and shed leaves. Most ponds, wells, and creeks went dry, and the main rivers were as low as ever known. Many localities suffered from shortage of water for domestic and livestock purposes. Many birds, especially quail, mammals, as well as fishes, and insects suffered and died.

AUGUST.—Excessive heat the first week or more, and continued drought and excessive sunshine, except a period of several days with local showers and cooling breezes after the 10th. August rainfall was 2.02 inches, 56 per cent of the normal. For the State as a whole it made the seventh consecutive month of deficient rainfall, the total received for the seven months being only 15.26 inches, or nearly 11 inches short of normal. As averages go it was the hottest August since 1918, and the driest since 1916. The absolute maximum, 114°, at two stations on the 9th, was the highest recorded for August, the previous high record being 111°. The change brought a very necessary and welcome relief to man and his livestock, and more than likely to every living thing in the State of Missouri. Some water holes were half replenished but there was little stream flow. Legumes were benefited somewhat; and where the rains were heavy enough to soften the ground, plowing started.

SEPTEMBER.—The hot and dry weather continued during the first week of September, but both heat and drought were broken quite generally the second week; and there were some generous and highly beneficial rains from about the 6th to the 15th, and showers later in the month. Late crops were much helped; the soil was wetted to good plow-depths, and ponds, lakes, springs, and streams replenished to sustaining quantities. Pastures were thin and slow to respond. Much plowing and fall seeding was done. Both wheat and rye were sown early for probable winter pasturage.

OCTOBER.—Much sunshine and rather quiet weather ruled this month. During the first two weeks there were several days of summer-like weather. The first killing frost came along about the 17th, but the growing season in the southeastern lowlands was not closed until the last week. There were a few snow flurries on the 19th. The last day of the month was a real winter day. The precipitation was unevenly distributed geographically but very favorable as to time. Generally sufficient for all fall-sown grains, but not enongh for replenishing stock water. The general water table was still unusually low, there being little stream flow. Much plowing was done, with ground in good condition, the wetness being to deep plow depths.

NOVEMBER.—Generally a fine month for outdoor pursuits. For the State as a whole somewhat warmer and slightly wetter than normal. There was scarcely any precipitation the first 13 days, and no prolonged wet spells the latter part. The snowfall was light. The general farm situation was satisfactory, fall sown grains were looking fine, corn mostly husked; and stock water had been replenished to sustaining amounts. Pastures were thin and poor. Early sown wheat and rye furnished good grazing in many localities.

DECEMBER.—Moderate temperature, light precipitation, and much sunshine. Quite the ideal winter month. The year closed with general farm conditions well in hand and satisfactory. Wheat had good color and a good root system. Precipitation, snows especially would greatly help the crop through the the rest of the winter. Much plowing of the heavier soils was done, preparing for next spring. Subsoil moisture was still very low and there was little stream flow; although the domestic and livestock water supplies were sufficient for present needs.

DROUGHT IN MISSOURI OF 1930 AND OTHER SUMMERS

For continuous duration of deficient rainfall, geographic distribution, and the serious economic affects, the outstanding droughts of sixty years or more, 1901 and 1930, are comparable. However, the twelve months' rainfall for 1901 was 25 inches, or 14 inches less than normal. In 1930, 31 inches, or 8 inches less than normal. Both the years of 1871 and 1870 brought less rain to Missouri than the year 1930.

For a more detailed comparison the percentages of normal rainfall for March to May, June, July, and August in Missouri for all droughts back to 1870 are presented for review:

	March to May	June	July	August
1930.....	59	78	24	55
1918.....	108	67	42	89
1916.....	98	143	30	105
1914.....	64	48	67	114
1913.....	94	53	78	28
1911.....	73	37	100	110
1901.....	70	43	50	50
1894.....	88	80	62	41
1890.....	80	54	74	135
1887.....	78	91	58	89
1886.....	76	108	34	72
1881.....	80	114	38	42
1874.....	87	60	63	64
1873.....	103	88	62	45
1871.....	62	70	103	91
1870.....	58	34	64	189

In 1930, state-wide and severe but less severe in extreme southwest and in much of the northwest section. July and August combined brought the driest 60-day period since the same period in 1881.

In 1918, all State, June to first part of August, but only severe in July, materially reducing the corn yield.

In 1916, confined to July and first part of August most of State; modified northern half but continued southern half State through August.

In 1914, May to mid-August but not markedly severe except on some of the higher lands.

In 1913, severe and general latter part of April to mid-September but with considerable relief in July. The hay crop suffered the most.

In 1911, May 9th to July 11th, excessive heat and severe drought most of the State. Rain came in time to save the corn.

In 1901, state-wide and severe; the outstanding drough and heat of record and perhaps of a century or more. Drough began December, 1900 and continued through to December, 1901; 26 inches of water in 13 months. Nearly total failures of all crops except wheat.

In 1894, July to August northern and central sections; July along the western border and generally south of the Missouri River; and June to November in most of the Ozark plateau and southeastern lowlands.

In 1890, local drough spring to July; severe only over rather a limited area across the central part of the State from west to east.

In 1887, quite general but severe only during July, resulting in the usual marked reduction in corn yields.

In 1886, general and rather severe in July and August, affecting the corn yields especially on the higher lands; the main bottom lands did not suffer much.

In 1874, the cut in the state-corn yields indicated that this drough was severe June, July and through August; embracing practically all State July and August.

In 1873, rather local and during July over western section and during August over all eastern parts.

In 1871, general and severe spring drought. July rain saved

the corn crop. July and October the only months with normal or above rainfall. Steadily dry year, total only 29.52 inches, next driest year to 1901.

In 1870, January to July seven months brought only 50 per cent of the normal rainfall. Splendid rains coming early in August saved the corn crop. The year was dry, total yearly amount 30.44, the third driest year of record, August and October being the only two months with good rains.

COMPARATIVE MONTHLY MEAN TEMPERATURES OF OUTSTANDING HOT SUMMERS IN MISSOURI

In the following table are given, for a number of selected and widely distributed stations with long records, the mean temperatures for July, 1930 and 1901, also the highest local monthly means for any month based upon all records up to 1930.

Stations	Length record years	Mean temperature July, 1930	Mean temperature July, 1901	Highest mean previously recorded for any month
Brunswick	51	81.8	84.1	84.1-July-1901
Caruthersville	34	84.3	84.4	87.9-July-1921
Columbia	41	81.1	85.2	85.2-July-1901
Fayette	50	80.2	86.4	86.4-July-1901
Harrisonville	52	80.6	87.6	87.6-July-1901
Jackson	39	81.2	82.6	83.6-July-1914
Lamar	43	80.6	86.0	86.0-July-1901
Lebanon	43	80.2	85.4	85.4-July-1901
Maryville	40	80.2	84.2	84.2-July-1901
Mexico	41	81.4	86.6	86.6-July-1901
Neosho	43	79.5	83.1	83.1-July-1901
Oregon	74	82.0	85.9	85.9-July-1901
St. Charles	42	82.7	86.2	86.2-July-1901
St. Louis	56	83.6	87.4	87.4-July-1901
Springfield	42	80.2	83.9	83.9-July-1901
Unionville	37	80.0	86.7	86.7-July-1901
Warrensburg	43	83.0	87.1	87.1-July-1901
Warrenton	48	83.0	87.4	87.4-July-1901
Means 18 stations		81.4	85.6	
State means 66 stations		81.2	85.4	

The Missouri public generally is of the opinion that July, 1930, brought the hottest weather within the memory of the "oldest inhabitant." The foregoing table show that memory is an unreliable record. Furthermore, the table shows that July, 1930, could hardly be considered in the same class with July, 1901, as far as heat is considered. July, 1901, averaged 4° warmer than July, 1930; and the warmest of all other months for the State as a whole in the climatogical history of Missouri. In 1930, the present year of discomforts, hardships, and losses, excessive heat—at first confined to the eastern half of the State—began June 20th, and continued, although with broken spells, but in the mean time spreading over all the State, to August 9th. At no time, however, did the excessive heat spells continue for more than seven to nine days consecutively, and there were nearly as long relatively moderate spells in between. Day temperatures were 100° or over on two days in June, eleven days in July, and nine in August. On the other hand, in 1901, the period of extreme heat began on June 20th and continued almost uninterruptedly until July 25th—36 days. The temperature was 100° or over in some parts of the State on every day from June 20th to August 4th. A record of continued heat that may be equaled in years to come but not likely will it be exceeded.

Monthly Data of the State for 1930

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	20.8	− 9.7	73	−31	4.51	+2.47	13.58	0.71	10
February	44.5	+12.1	89	− 5	1.71	−0.40	4.42	0.15	4
March	43.2	− 0.7	88	6	1.37	−1.65	4.50	0.04	4
April	59.1	+ 4.0	96	23	2.03	−1.78	7.72	0.22	8
May	64.7	+ 0.3	95	33	3.43	−1.24	7.38	0.97	9
June	72.4	− 0.8	109	36	3.83	−1.04	10.35	0.30	7
July	81.2	+ 3.9	113	42	0.97	−3.03	3.42	T.	3
August	78.5	+ 2.5	114	47	2.02	−1.73	4.81	0.04	6
September	71.3	+ 2.3	105	37	4.18	+0.34	12.87	0.74	8
October	55.3	− 2.1	92	11	3.06	+0.17	7.09	0.48	6
November	45.8	+ 1.4	83	8	2.92	+0.53	6.10	1.27	5
December	34.2	+ 0.3	70	2	1.23	−0.84	3.78	0.18	5
Year	55.9	+ 1.1	114	−31	31.19	−8.28	13.58	T.	76

Comparative Annual Data for the State

Year	Temperature			Precipitation	Year	Temperature			Precipitation
	Mean	Maximum	Minimum			Mean	Maximum	Minimum	
1888	52.9	111	−32	41.22	1910	55.0	109	−24	36.86
1889	54.3	107	− 9	37.91	1911	56.9	113	−19	38.94
1890	54.7	106	−19	35.71	1912	53.6	105	−36	38.68
1891	53.9	108	−11	36.04	1913	56.5	110	−12	37.47
1892	53.4	101	−11	42.76	1914	56.1	109	−18	34.72
1893	52.7	107	−20	38.19	1915	54.8	102	−24	49.62
1894	55.1	111	−35	33.18	1916	55.2	109	−29	40.33
1895	52.9	106	−26	39.30	1917	52.3	107	−23	31.94
1896	55.5	108	−10	44.63	1918	55.5	111	−25	37.16
1897	55.0	108	−16	38.82	1919	55.2	106	−23	40.05
1898	54.4	104	−20	53.67	1920	54.3	105	−10	37.17
1899	54.0	108	−32	37.32	1921	58.2	109	− 8	43.77
1900	55.6	105	−16	38.34	1922	56.8	108	− 6	39.99
1901	55.5	116	−29	25.28	1923	55.3	108	−11	41.23
1902	54.1	103	−17	44.96	1924	52.9	106	−28	40.01
1903	53.6	102	−25	40.15	1925	55.5	110	−14	39.78
1904	53.2	100	−23	41.62	1926	54.5	108	−20	43.07
1905	53.6	103	−40	45.43	1927	55.5	102	−24	53.86
1906	55.1	101	−13	37.34	1928	55.2	102	−18	45.59
1907	55.6	109	−15	41.81	1929	53.5	105	−23	46.61
1908	56.7	102	−10	42.56	1930	55.9	114	−31	31.27
1909	55.6	110	−20	45.16	Average 43 yrs.	54.8	116	−40	40.27

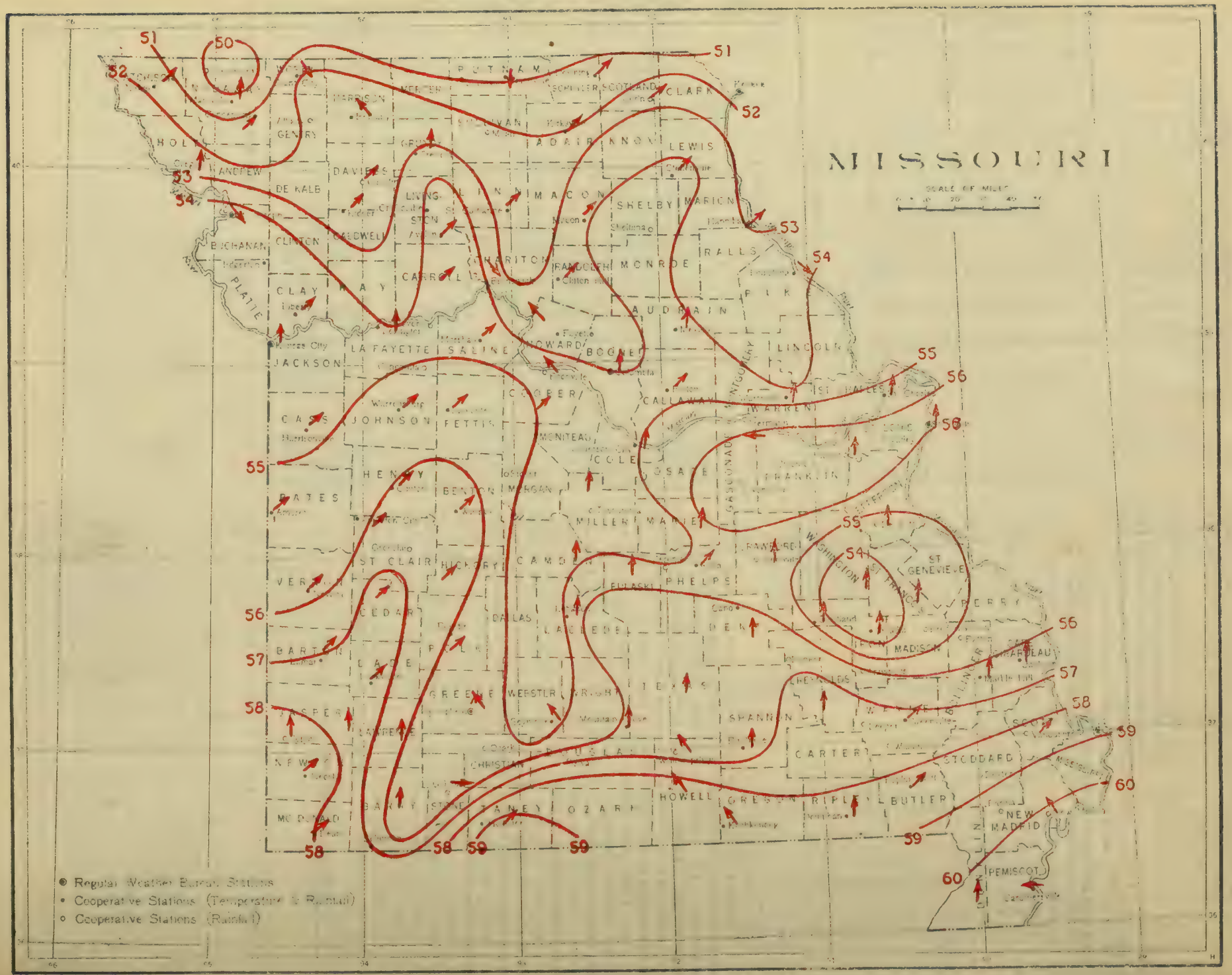
KILLING FROSTS, 1930

Stations	Last in Spring	First in Autumn	Days in Growing Season	Stations	Last in Spring	First in Autumn	Days in Growing Season
Northeast Plain				*Ozark Plateau (continued)*			
Brunswick	April 2	Oct. 17	198	Koshkonong	Mar. 30	Oct. 31	215
Clifton Hill	April 25	Oct. 17	175	Lebanon	April 10	Oct. 17	190
Columbia	Mar. 30	Oct. 17	201	Lockwood	Mar. 30	Oct. 17	201
Downing	April 25	Oct. 17	175	Mountain Grove	Mar. 30	Oct. 18	202
Fayette	April 25	Oct. 17	175	Neosho	Mar. 31	Oct. 17	200
Fulton	April 25	Oct. 17	175	Rolla	Mar. 31	Oct. 20	203
Hannibal	Mar. 30	Oct. 18	202	Salem(near)	April 25	Oct. 17	175
Jefferson City	Mar. 31	Oct. 17	200	Seligman	Mar. 30	Oct. 17	201
Kirksville	April 24	Oct. 17	176	Seymour(near)	April 8	Oct. 17	192
Louisiana	April 25	Oct. 17	175	Springfield	Mar. 30	Oct. 31	215
Macon	April 3	Oct. 17	197				
Mexico	April 25	Oct. 17	175	*Southwest Plain*			
St. Charles	Mar. 31	Oct. 20	203	Appleton City	Mar. 30	Oct. 17	201
St. Louis (1)	Mar. 28	Oct. 20	206	Clinton	Mar. 28	Oct. 17	203
St. Louis (2)	Mar. 28	Oct. 20	206	Harrisonville	April 2	Oct. 17	198
Steffenville	April 25	Oct. 17	175	Lamar	Mar. 31	Oct. 29	212
Unionville	April 25	Oct. 17	175	Lamonte	April 8	Oct. 17	192
Warrenton	Mar. 30	Oct. 19	203	Marshall	April 1	Oct. 17	199
Keokuk, Iowa	Mar. 30	Oct. 20	204	Nevada	Mar. 30	Oct. 17	201
				Warrensburg	April 1	Oct. 17	199
Southeast Lowlands				Warsaw	April 8	Oct. 17	192
Campbell	Mar. 31	Oct. 18	201				
Caruthersville	Mar. 26	Oct. 31	219	*Northwest Plateau*			
Doniphan	April 8	Oct. 24	199	Bethany	April 8	Oct. 17	192
Jackson	April 25	Oct. 18	176	Chillicothe	April 24	Oct. 17	176
Marble Hill	April 25	Oct. 18	176	Conception	April 2	Oct. 17	198
Poplar Bluff	April 8	Oct. 18	193	Edgerton	April 8	Oct. 17	192
Sikeston	Mar. 31	Oct. 31	214	Grant City	April 8	Oct. 17	192
Cairo, Ill.	Mar. 29	Oct. 24	209	Kansas City	April 1	Oct. 17	199
				Kidder	April 8	Oct. 17	192
Ozark Plateau				Lexington	April 1	Oct. 17	199
Arcadia	April 25	Oct. 20	178	Maryville	April 2	Oct. 17	198
Aurora	Mar. 30	Oct. 17	201	Oregon	April 2	Oct. 17	198
Birchtree	Mar. 31	Oct. 24	207	St. Joseph	Mar. 30	Oct. 17	201
Dean	Mar. 31	Oct. 17	200	Tarkio	April 8	Oct. 17	192
Eldon	Mar. 31	Oct. 18	201	Trenton	April 8	Oct. 17	192
Farmington	April 25	Oct. 18	176				
Goodland	April 25	Oct. 18	176				
Greenville	April 25	Oct. 18	176				

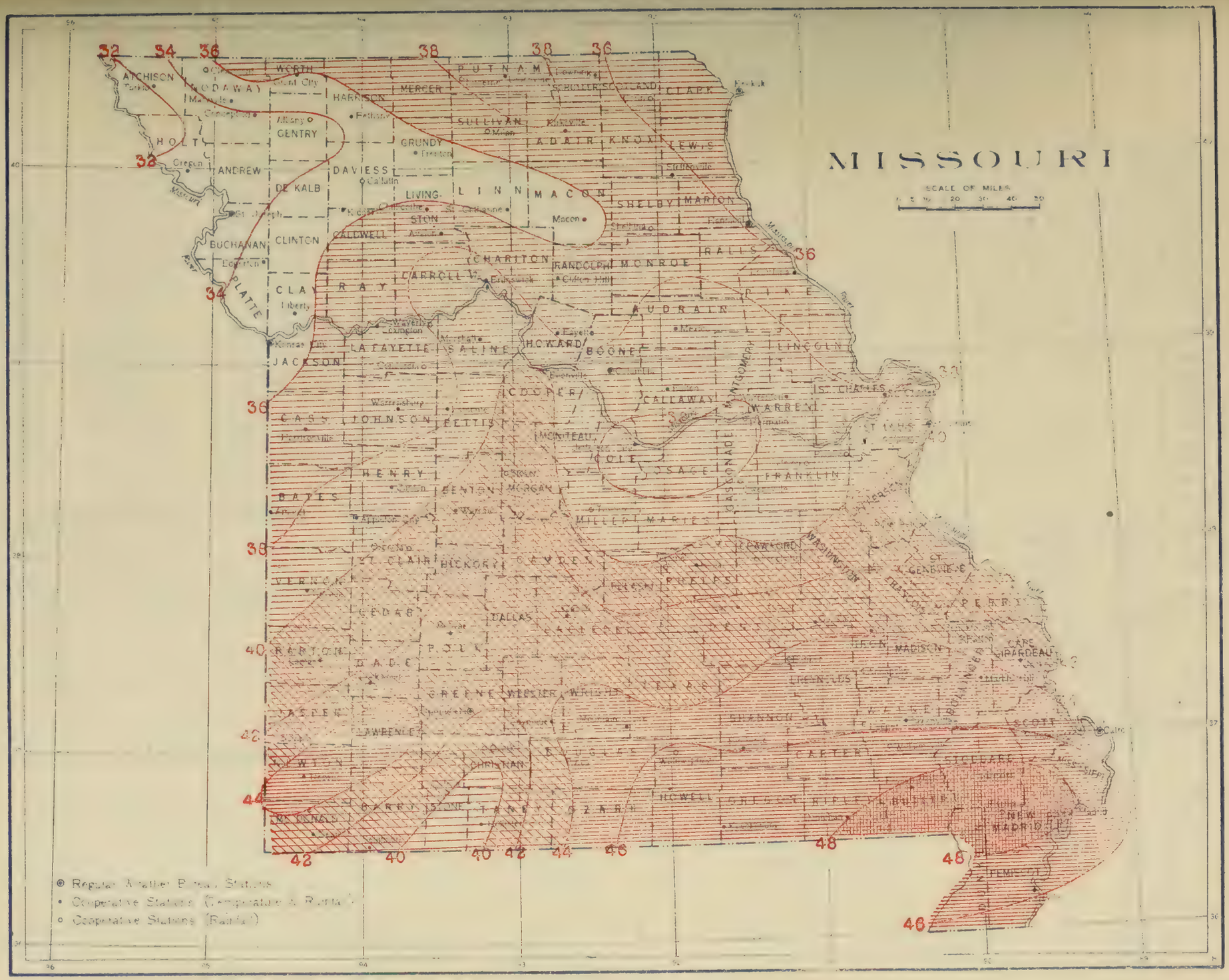
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NORMAL ANNUAL ISOTHERMS AND PREVAILING WIND FOR MISSSOURI

Computed from all past records back to 1888



Computed from all past records back to 1867



551.05
UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., JANUARY, 1931 No. 1

GENERAL SUMMARY

The first month of 1931 was remarkably warm for winter over the whole of Missouri and there were but few sudden temperature changes of any real importance, the continued mild and dry weather being brought over from December. It was the warmest January since 1923, and in the past 44 years but three other Januarys were warmer. From the precipitation standpoint it was the driest since 1919, and only three other Januarys running back to 1867 were drier.

For the State as a whole, there were not more than six or seven days colder than normal, all occurring in the first half of the month; and during the last ten days the daily excess varied between 10° and 25°. The coldest spell came along on the 14th, and 15th; and the warmest days probably were the 29th, and 30th, when afternoon temperatures ranged into the 70's, except in the northwestern plateau. The extremes, 76° and −5°, are quite well within the limits of other years. Generally the northern half of the State was milder than the southern half; about 11 stations north of the Missouri River were as much as 9° warmer than normal, while a number of the southern stations were hardly more than 1° above normal.

From about Webster County east to Dent and Iron counties, and one might include all the Ozarks region, the total precipitation was about 38 per cent of normal; southeastern lowlands, 36 per cent; southwestern plains, 35 per cent, while the remainder of the State received but about 21 per cent of normal. For the State as a whole December and January combined made nearly the driest 60-day winter period of history, receiving only about 52 per cent of the normal, being outdone in this respect only by the same period of the winter of 1874-75. Considering the central and east-central counties (about 15 counties embraced within an area consisting of Moniteau north to Randolph, east-northeast to Marion, south to Jefferson, and west again to Moniteau and the hardest hit during the entire drought) it was the driest two winter months of record, that area not receiving on the average more than 21 per cent of its normal winter supply of water.

The winter has been nearly ideal for all outdoor pursuits, and from the economic side so far as one may consider personal comfort and general health. It has been rather rough in some channels of trade, such as fuel and clothing. Wheat did fairly well but needed moisture, more especially in the form of snow. Much plowing was done with soil in fine shape. Some oats were sown, and a few potatoes planted. Live stock did well in the open and rough feed was fairly plentiful; but water both for domestic and livestock uses was scarce in some of the southern and many of the east-central counties, and in some cases had to be hauled long distances.

TEMPERATURE

The monthly mean for the State, 68 stations reporting, was 36.0° or 5.5° warmer than normal and more than 15° warmer than January, 1930; it also was the warmest January, since 1923. The highest local monthly mean was 39.9° at Seligman, and the lowest local monthly mean was 31.2° at Kidder. The highest temperature reported was 76° at Marble Hill on the 29th, and at Greenville on the 30th; the lowest reported was −5° at Goodland on the 15th. Zero cold or lower occurred at about 16 stations on the 14th or 15th; and minima of 32° or lower occurred on 26 days, the distribution being fairly general and uniform. The greatest daily range was 50° on the 30th at Greenville, Wayne County.

PRECIPITATION

The average precipitation, 103 stations reporting, was 0.69 inch, or 1.35 inches less than the 60 years' average; and the driest January since 1919. Only three Januarys going back to 1867 brought less precipitation than the current month. The deficiencies were marked and of uniform values in all parts of the State. The greatest local monthly amount was 2.12 inches, at Marble Hill; and the least was 0.56 of an inch, at Fulton. The greatest fall in any twenty-four consecutive hours was 0.80 inch, at Koshkonong on the 7th.

The snowfall was rather light and unimportant. For the Ozark hills the monthly total equaled nearly 4 inches; and in the southeastern lowlands about 5 inches, and for the remainder of the State less than one inch. All of it melted within a few days if not at once.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Local 4th, 5th, 8th, 12th, and 17th; general on the 9th, and 10th.
Halos, lunar.—2d, 3d, 7th, 8th, 22d, 25th, 26th, 27th, and 28th.
Halos, solar.—3d, 6th. 15th, 22d, 23d, 24th, 25th, 27th, and 28th.
Sleet.—Light and without damage, 7th, 11th, 16th, and 17th.
Thunderstorms or high winds.—None reported.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	30.12	81	62	64	179	59	5,383	7.2	22	w.	12
Hannibal	30.12	80	63	..	...	..	5,977	8.0	25	sw.	2
Kansas City	30.12	78	61	63	219	72	6,838	9.2	26	nw.	5
St. Joseph	30.11	81	60	65	214	71	5,385	7.2	30	nw.	12
St. Louis	30.12	75	61	64	151	50	8,242	11.1	27	sw.	2
Springfield	30.14	79	62	67	198	64	6,603	8.9	25	nw.	13
Cairo, Ill.	30.15	79	61	65	...	..	5,178	7.0	29	nw.	13
Keokuk, Iowa	30.12	79	61	66	206	69	5,181	7.0	22	sw.	2

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JANUARY

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
1888	21.5	− 8.7	74	−32	1.91	−0.08	....	....	6	..	..	..
1889	31.8	+ 1.6	69	− 2	2.36	+0.37	....	....	6	..	..	..
1890	33.8	+ 3.6	81	−19	4.25	+2.26	....	....	9	..	..	..
1891	34.1	+ 3.9	74	− 1	1.52	−0.47	...	4.3	6	..	..	..
1892	24.0	− 6.2	67	−25	1.80	−0.19	....	....	4	14	8	9
1893	22.5	− 7.7	66	−14	0.45	−1.54	0.90	2.4	3	9	11	11
1894	31.4	+ 1.2	77	−35	2.21	−0.22	2.96	2.7	5	13	9	9
1895	24.7	− 5.5	78	−22	1.49	−0.50	2.20	9.4	5	14	8	9
1896	32.9	+ 2.7	71	− 9	1.17	−0.82	2.44	3.1	4	10	7	14
1897	28.4	− 1.8	72	−16	4.90	+2.91	6.95	4.0	8	12	7	12
1898	34.3	+ 4.1	75	−10	3.98	+1.99	3.35	8.4	9	11	8	12
1899	30.2	0.0	70	−21	1.55	−0.44	2.40	4.0	6	12	8	11
1900	34.5	+ 4.3	77	− 9	1.22	−0.77	2.30	0.2	4	14	7	10
1901	35.0	+ 4.8	72	−11	1.30	−0.69	2.95	0.8	4	17	7	7
1902	30.1	− 0.1	72	−17	1.23	−0.76	3.37	6.9	5	16	7	8
1903	31.4	+ 1.2	73	−11	1.36	−0.63	1.71	5.0	6	13	6	12
1904	27.0	− 3.2	66	−23	2.85	+0.86	4.74	7.4	8	14	6	11
1905	22.3	− 7.9	72	−19	1.79	−0.20	2.52	6.8	8	14	6	11
1906	35.6	+ 5.4	76	− 8	3.64	+1.65	3.00	9.2	6	14	5	12
1907	34.3	+ 4.1	79	− 5	5.10	+3.11	4.42	2.8	12	7	6	18
1908	34.4	+ 4.2	68	−10	1.51	−0.48	2.13	3.6	5	19	5	7
1909	33.7	+ 3.5	83	−20	2.17	+0.18	2.10	6.5	7	6	7	18
1910	32.3	+ 2.1	78	−24	1.83	−0.16	3.98	3.5	5	13	6	12
1911	34.6	+ 4.4	78	−19	1.20	−0.70	3.03	0.7	5	8	7	16
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	6.5	4	14	7	10
1913	33.1	+ 1.8	74	−12	3.67	+1.30	5.30	2.6	8	13	6	12
1914	38.1	+ 6.9	78	− 1	1.42	−0.92	2.00	1.0	4	12	7	12
1915	29.1	− 2.2	76	−24	2.92	+0.59	3.10	5.4	8	12	5	14
1916	31.6	+ 0.7	72	−24	7.36	+5.16	4.65	3.4	12	9	4	18
1917	32.9	+ 2.5	76	−10	1.52	−0.64	2.50	2.3	5	15	7	9
1918	16.4	−14.0	67	−24	1.68	−0.71	3.20	16.6	7	12	7	12
1919	34.0	+ 3.6	70	−23	0.40	−1.88	3.05	1.4	2	20	5	6
1920	28.6	− 1.4	72	− 5	1.57	−0.65	4.15	5.7	5	15	5	11
1921	37.1	+ 7.2	74	− 1	1.88	−0.38	1.45	5.4	6	10	7	14
1922	29.5	− 0.6	66	− 6	1.21	−1.05	2.95	3.9	5	14	5	12
1923	39.2	+ 8.5	75	3	2.72	+1.81	3.52	0.6	6	12	7	12
1924	24.9	− 5.5	68	−25	1.54	−0.49	1.78	5.7	7	14	5	12
1925	29.7	− 0.7	65	−15	1.00	−1.03	2.10	4.7	4	15	7	9
1926	32.7	+ 2.3	70	−20	1.90	−0.13	2.51	4.2	6	11	7	13
1927	30.8	+ 0.4	73	−24	3.05	+1.02	4.40	3.6	6	13	6	12
1928	33.3	+ 2.9	77	−18	0.87	−1.16	1.25	0.5	3	16	7	8
1929	25.1	− 5.4	72	−13	3.47	+1.43	3.50	6.8	8	11	6	14
1930	20.8	− 9.7	73	−31	4.51	+2.47	3.70	13.0	10	12	5	14
1931	36.0	+ 5.5	76	− 5	0.69	−1.35	0.80	2.0	4	16	6	9
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for January, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	36.6	+ 9.8	68	30	5	14	41	0.77	−0.86	0.60	0.2	3	15	3	13	nw.	O. K. Benecke
Clifton Hill	Randolph	731	32	34.6	+ 5.9	65	24	0	14	34	0.54	−1.06	0.50	0.1	4	16	2	13	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	36.1	+ 6.9	66	24	5	14	30	0.28	−1.64	0.17	0.4	4	13	5	13	sw.	U. S. Weather Bureau
Downing	Schuyler	876	10	33.8	+ 8.4	62	24	1	14	36	0.51	−1.22	0.47	1.2	3	17	7	7	w.	James Taylor
Elsberry	Lincoln	449	0	35.0	.....	68	24	2	14	38	0.38	.....	0.30	1.0	2	5	21	5	nw.	Ray E. Mills
Fayette	Howard	661	51	34.3	+ 7.1	69	30	5	14	45	0.39	−1.60	0.39	0.0	1	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	34.4	+ 4.7	65	24	5	14	40	0.07	−2.28	0.02	0.5	4	14	7	10	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	0.09	−1.46	0.06	0.8	2	17	6	8	sw.	J. W. Pulliam
Hannibal	Marion	534	39	35.1	+ 8.0	65	24	6	14	29	0.24	−1.48	0.20	0.6	4	9	13	9	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	34.2	+ 4.4	68	24	4	14	43	0.49	−1.73	0.20	0.0	4	17	3	11	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	34.6	+ 9.7	62	24	1	14	31	0.53	−1.00	0.46	0.7	3	18	2	11	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	34.0	+ 6.1	62	24	6	14	35	0.25	−1.77	0.09	0.2	3	17	8	6	s.	Stark Bros. Nurseries
Macon	Macon	875	32	33.3	+ 4.8	63	24	2	14	38	0.52	−1.13	0.49	T.	2	21	1	9	sw.	W. C. Brown
Mexico	Audrain	800	42	33.6	+ 5.3	66	24	5	14†	41	0.38	−1.67	0.12	T.	4	19	0	12	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	0.45	.....	0.45	T.	1	17	9	5	ne.	J. S. Conway
St. Charles	St. Charles	456	43	37.0	+ 5.9	69	24	6	14	34	0.43	−1.84	0.33	1.0	2	14	11	6	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	37.8	+ 6.7	70	24	9	14	27	0.40	−1.94	0.26	1.5	4	11	11	9	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	36.9	+ 6.7	70	24	7	14	26	0.39	−2.68	0.24	1.1	6	13	8	10	w.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	0.54	−1.18	0.28	T.	4	..	..	..	....	J. C. Jewett
Steffenville	Lewis	650	33	34.3	+ 6.5	61	30	2	14	32	0.92	−1.27	0.50	1.0	3	14	9	8	w.	Frank Hall
Unionville	Putnam	1,062	38	33.6	+10.1	64	24	0	14	36	0.60	−1.24	0.50	4.0	2	20	4	7	sw.	Geo. W. Davis
Warrenton	Warren	816	49	37.2	+ 8.2	69	24†	4	14	33	0.48	−1.90	0.30	2.3	4	12	10	9	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	33.9	+ 9.0	64	24	6	14	30	0.54	−1.02	0.52	1.2	3	11	13	7	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	35.0	+ 7.1	70	24	0	14	45	0.44	−1.52	0.60	0.8	3	15	7	9	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	37.4	.....	73	30	1	15	46	1.69	.....	0.55	3.0	8	17	3	11	n.	Jeff. King
Caruthersville	Pemiscot	265	35	39.6	+ 0.6	73	31	12	15	35	1.17	−3.58	0.60	1.5	5	16	3	12	n.	Sam Smith
Doniphan	Ripley	344	27	38.6	+ 2.4	75	30	3	15	48	1.74	−2.47	0.68	6.8	4	15	11	5	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	35.2	+ 1.2	72	30	− 3	15	47	1.02	−2.70	0.42	7.0	5	13	4	14	n.	John G. Putz
Marble Hill	Bollinger	470	36	38.0	+ 3.2	76	29	− 4	15	48	2.12	−1.41	0.60	7.0	7	12	8	11	n.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	1.52	−2.71	0.52	4.0	9	17	2	12	se.	John A. Spence
Poplar Bluff	Butler	339	27	37.6	+ 1.0	73	30	1	15	45	1.43	−2.54	0.58	4.2	7	16	2	13	w.	J. H. Wolpers
Sikeston	Scott	318	30	39.2	+ 1.6	74	30	3	15	40	1.58	−2.65	0.46	4.0	7	18	1	12	n.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill.	358	56	39.0	+ 4.1	73	30	9	15	36	1.77	−1.99	0.65	7.3	7	11	6	14	s.	U. S. Weather Bureau
Section means and	extremes	....	..	38.1	+ 2.0	76	29	− 4	15	48	1.56	−2.51	0.68	5.0	7	15	4	12	n.	
Ozark Plateau																				
Arcadia	Iron	926	49	33.4	+ 1.3	71	30	− 2	15†	46	0.55	−2.67	0.37	5.7	2	16	1	14	nw.	Arcadia College
Aurora	Lawrence	1,370	39	39.0	+ 5.5	68	24	4	14	43	0.75	−1.65	0.22	1.0	5	17	4	10	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	36.5	+ 2.1	70	29	0	15	41	1.26	−1.80	0.40	8.0	5	20	0	11	s.	V. H. Kirkendall
Buffalo	Dallas	....	..	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	.....
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	0.58	.....	0.25	T.	4	16	8	7	n.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	37.2	+ 1.0	70	30	− 1	14	44	1.12	−1.12	0.60	1.0	4	20	2	9	sw.	H. E. Dean
Eldon	Miller	934	35	35.0[b]	+ 3.6	67	24	6	14†	41	0.50	−1.04	0.18	3.0	4	7[b]	13[b]	9[b]	s.	E. H. Shepherd
Farmington	St. Francois	918	20	36.6	+ 3.8	70	30	3	15	39	0.95	−1.40	0.33	2.8	4	15	7	9	sw.	Robert Forsyth
Goodland	Iron	1,000	37	34.8	+ 2.2	70	24†	− 5	15	47	1.64	−1.23	..	12.0	5	16	7	8	n.	F. M. Adams
Greenville	Wayne	381	7	35.8	.....	76	30	0	15	50	1.10	.....	0.60	2 0	3	18	6	7	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	0.42	.....	0.28	4.0	2	17	6	8	.....	A. W. Madison
Koshkonong	Oregon	958	30	39.4	+ 2.9	72	30	5	14	34	1.92	−1.62	0.80	9.0	5	15	5	11	nw.	R. M. Hitt
Lebanon	Laclede	1,265	44	34.9	+ 1.9	65	30	0	14†	39	0.64	−1.81	0.40	3.0	4	17	3	11	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	39.0	+ 5.7	69	23	7	14	40	0.80	−0.86	0.25	0.5	5	20	2	9	sw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	30	35.9	+ 2.7	66	30	3	14†	38	0.78	−2.09	0.20	3.0	6	19	3	9	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	38.8	+ 3.7	68	24†	− 4	14	38	0.73	−1.77	0.25	4.1	6	21	4	6	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	37.2	+ 5.9	66	24†	4	14	31	0.62	−1.83	0.28	2.5	4	13	7	11	nw.	F. H. Lane
Salem(near)	Dent	1,173	27	35.8	+ 2.9	67	30	2	14	36	1.17	−1.68	0.60	5.8	5	15	6	10	nw.	A. C. Leech
Seligman	Barry	1,542	29	39.9[d]	+ 5.2	69	30	1	14	33	0.88	−1.36	0.38	2.0	5	19[a]	2[a]	9[a]	sw	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	36.8	+ 2.5	64	24†	4	14	33	1.09	−1.61	0.41	2.1	5	16	5	10	nw.	Ira H. Hailey
Springfield	Greene	1,324	43	38.1	+ 4.6	64	24	5	14	29	0.63	−1.71	0.20	1.2	8	19	3	9	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	36.9	+ 3.4	76	30	− 5	15	50	0.96	−1.60	0.80	3.6	5	17	5	9	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	37.2	+ 5.9	68	30	7	14	34	0.66	−1.17	0.29	0.1	6	13	10	8	sw.	W. G. Bigelow
Clinton	Henry	765	38	33.9	+ 2.5	59	24	7	14†	25	0.75	−1.23	0.30	2.1	7	16	8	7	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	34.8	+ 7.6	70	30	4	14	39	0.68	−0.92	0.35	2.2	5	10	6	15	s.	John H. Patterson
Lamar	Barton	980	44	38.5	+ 6.1	70	30	8	14†	39	0.61	−1.09	0.25	T.	4	16	8	7	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	35.8	+ 7.1	65	30	6	14	32	0.36	−1.42	0.10	1.0	5	17	10	4	se.	J. E. Wheeler
Marshall	Saline	779	43	36.7	+ 9.1	65	24	5	14	34	0.54	−1.28	0.45	T.	3	16	9	6	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	38.4	+ 6.7	68	30	7	14	33	0.98	−0.99	0.40	T.	4	15	5	11	s.	George A. Kaupp
Warrensburg	Johnson	878	44	36.2	+ 7.3	67	24	5	14	35	0.44	−1.35	0.15	1.0	6	16	6	9	sw.	E. A. Markey
Warsaw	Benton	687	30	38.0	+ 5.2	68	30	6	14	38	0.79	−1.59	0.32	1.0	6	13	5	13	s.	Everett Martin
Section means and	extremes	.....	..	36.6	+ 6.4	70	30	4	14	39	0.65	−1.23	0.45	0.8	5	15	7	9	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	33.2	+ 8.6	58	30	1	14	37	0.17	−1.13	0.17	T.	1	24	4	3	sw.	A. S. Cumming
Chillicothe	Livingston	779	21	32.6	+ 3.8	65	25	1	1†	44	0.28	−1.38	0.28	T.	1	18	5	8	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	42	33.6	+ 8.8	63	24	− 1	14	35	0.22	−0.73	0.22	2.0	1	17	7	7	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	36.0[m]	+ 9.1	64	24	3	14	37	0.15	−1.12	0.11	0.2	3	19[g]	1[g]	4[g]	sw.	Fred L. Stiff
Grant City	Worth	1,134	27	32.6	+ 7.7	61	24	− 1	14	34	0.26	−0.70	0.22	2.5	2	22	7	2	w.	W. P. Spillman
Kansas City	Jackson	963	42	38.2	+10.0	64	24	7	14	27	0 56	−0.63	0.54	0.2	4	14	10	7	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	31.2	+ 4.3	62	24	0	14†	41	0.52	−0.78	0.52	0.0	1	18	8	5	nw.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	....	..	..	0.43	.....	0.42	T.	2	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	37.2	+ 9.7	67	30	5	14	36	0.49	−1.08	0.47	0.2	2	15	11	5	w.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	32.9	+10.5	64	24	− 1	14	38	0.25	−0.83	0.15	2.5	3	20	9	2	s.	J. R. Brink
Oregon	Holt	1,048	75	36.4	+12.5	68	24	1	14	36	0.25	−1.14	0.20	T.	2	21	7	3	sw.	Mina Wright
St. Joseph	Buchanan	967	23	35.8	+ 9.3	65	24	4	14	29	0.53	−0.39	0.52	0.3	3	21	6	4	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	32.3	+ 9.4	67	24	0	14	43	0.17	−0.62	0.17	3.0	1	15	9	7	sw.	Albert Volker
Trenton	Grundy	822	35	34.6	+ 7.9	63	24	3	14	36	0.41	−0.97	0.41	T.	1	17	7	7	s.	W. H. Estes
Section means and	extremes	.....	..	34.4	+ 8.6	68	24	− 1	14	44	0.34	−0.88	0.54	0.8	2	19	7	5	sw.	
State means and	extremes	.....	..	36.0	+ 5.5	76	29†	− 5	15	50	0.69	−1.35	0.80	2.0	4	16	6	9	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for January, 1931

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri											.01			.01				.08	.12	T.												0.22
Bowling Green	Mississippi																																....
Brunswick	Grand														.02				.60	.15													0.77
Clifton Hill	Chariton										.02			.01				.01	.50														0.54
Columbia***	Missouri					T.					T.	.09	T.	.01				.09	.09	T.	T.												0.28
Downing	Mississippi												T.	.03					.47		.01												0.51
Edina	....do														T.				.20	.32		T.											0.52
Elsberry	....do						T.					.30			.08			T.	T.														0.38
Eolia	....do																																....
Fayette	Missouri																		.39	T.													0.39
Fulton	....do													.02				.02	.02		.01												0.07
Gorin	Mississippi													.03					.06														0.09
Hannibal***	....do										.01		T	.03	T.			.08	.12	T	T												0.24
Hermann	Missouri											.10	.20		.07			.02		.03	.01												0.43
Jefferson City	....do								T.			.20	.12							.05	.12												0.49
Kahoka	Mississippi														.08				.22	.22													0.52
Kirksville	....do													.02					.46		.05												0.53
Knox City	....do					T																											....
Laddonia	....do																																....
LaGrange	....do																																....
Lewistown	....do																																....
Louisiana	....do										T.	.07		.09					.09	T.													0.25
Lucerne	Grand																		.11	.18													0.29
Macon	Chariton																		T.	.49	.03												0.52
McCune	Mississippi																																....
Memphis	....do													T.	T.			T.		.34	T.	T.											0.34
Mexico	....do											.09	.05	T.	T.				.12	.12	T.												0.38
Milan	Grand																			.34													0 34
Monroe City	Mississippi																		.45			T.											0.45
New London	....do											T.		04					**	.18	.03												0.25
Pacific	Meramec											.15	.04		.13				T.		.07												0.40
Palmyra	Mississippi						T.		.01																								....
Paris	....do																		.17	.09		T.											0.26
Perry	....do										T.				.03				.17			.03											0.23
Philadelphia	....do																																....
Plevna	....do																																....
St. Charles	Missouri											.33		T.	.10			T.	T.														0.43
St. Louis (1)***	Mississippi						T.				T.	.26		.09	T.		T.	.03	T.		.02												0.40
St. Louis (2)*	....do					T.	T.	T.	T.			.24		.08			T.	.03	.01		.02												0.39
Shelbina	....do					.01		T.				.01							.28	.17						.08								0.54
Steffenville	....do													.07					.50	.35													0.92
Troy	....do																																....
Union	Meramec							T.				T.	.25		.03						T.												0.28
Unionville	Chariton													T.					.50		.10												0.60
Valley Park	Meramec											T.	.29		.15			T.	T.		.09												0.56
Warrenton	Mississippi						T.		.03			.30		.10	.05			T.	T.		.03												0.48
West Ely	....do										T.		T.	T.				.10	.07	T.	T.												0.17
Winfield	....do																																....
Keokuk, Ia.***	....do											T.	T.	.02				.14	.38	T.	T.												0.54
Southeast Lowlands																																	
Campbell	St. Francis					.30			.55			.17		.26				.24	.02								.14	.01					1.69
Cape Girardeau	Mississippi					.29	.01		.03				.16		.15					T.								.18					0.82
Caruthersville	....do								.60				.20		.12			.15										.10					1 17
Dexter	St. Francis					.25			.38				.19		.32													.08					1.22
Doniphan	Black							.68				.55		.26				T.								.25							1.74
Fisk	St. Francis					.03			.56		.19				.32			T.										.10					1.20
Jackson	Mississippi								.42			.25			.11				.04							.20							1.02
Marble Hill	....do					.36			.20			.42		.12	.30				.12							.60							2.12
Morehouse	....do					.52		.04	.31			.21	.02	.02	.23												.16	.01					1.52
New Madrid	....do					.56	.23		.48				.23		.40				.01	.04								.11					2.06
Parma	St. Francis																																....
Poplar Bluff	Black					.16			.09	.58			.22		.16		.10		T.									.12					1.43
Sikeston	Mississippi					.46			.35			.22		.21				.11	.01							.22							1.58
Cairo, Ill.***	.. .do				T.	.42		.21	.02	T.		.21		.65	T.		T.	T.	.02							.24							1.77
Ozark Plateau																																	
Arcadia	St. Francis								.37			T.			.18		T.									T							0.55
Aurora	Neosho							.04			T.	.22		.18			T.	.10								.21							0.75
Birchtree (near)	Black							.40				.24		.24				.16								.22							1.26
Buffalo	Osage																																....
Caplinger Mills	....do							.25				.20	T.				.10	.03															0.58
Chaonia	St. Francis								.22			.20	.21		.30			.03		.20						.01	.25						1.42
Dean	Neosho								.60		T.	.32		.10		T.	.10		T						T.	T.							1.12
Eldon	Missouri								.18			.15	.08	T.	.09																			0.50
Farmington	St. Francis								.26				.32		.04											.33							0.95
Fredericktown	....do								.22				.26		.08													.16					0.72
Galena	White								.10			.12							.10							.31							0.63
Goodland	Black							**	1.00			.10			.24											.30							1.64
Greenville	St. Francis								.20			.60														.30							1.10
Hailey	White												.28						T.	.14													0.42
Koshkonong	Black							.80				.65		.30				.05								.12							1.92
Lebanon	Osage									.40	T.		.10		.10	.04	T.			T.													0.64
Leeper	Black								.87				.24		.25			.06										.18					1.60
Lockwood	Osage							.25			.05	.25		.03				.22															0.80
Mountain Grove	White								.20			.18			.10	T.	T.	.10		T						.17	.03						0.78
Neosho	Neosho							.07			.05	.20		.25				T.	.10	T.					T.	.06							0.73
Owensville	Gasconade								T				.15						.15														0.30
Ozark Beach	White								.15			.17	.14		.13			.09								.13							0.81
Rolla	Meramec								.28			.16	.15		.03			T.															0.62
Salem (near)	....do							.40	.20			.26		.10												.21							1.17
Seligman	Neosho							.12				.16		.20			.02		T.							.38							0.88
Seymour (near)	White							.19			T.	.41		.06			T.	.12	T.							.31							1.09
Springfield	....do					T		.16			.01	.19	T.	.05			.04	.02							.13	.03							0 63
Steelville	Meramec								.41			.19	.12		.04																			0.76
Stover	Missouri								.17			.25			.08				.05															0.55
Tuscumbia	Osage								.31			.15	.11		.02			T.	T.	T.														0.59
Williamsville	Black								.79				.21		.15				.05								.01	.25						1.46
Willow Sprgs. (near)	White								.30			.11	.18		.13			.10								.14	.07						1.03

Continued on next page

Daily Precipitation for January, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage							.29	.01		.01	.23		T.			T.	.10	.02													0.66
Clinton	do							.30	.03	.05		.12		.05				.15	.05													0.75
Concordia‖	Missouri																															
Harrisonville‖	Osage								.22			.05			.04			.02	.35													0.68
Joplin‖	Neosho							.10			.12	.20		.24			.05	.08	.02													0.81
Lamar‖	do								.25			.25	.05		T.	T		T.	.06													0.61
Lamonte	Missouri							.09			.05			.04				.08	.10													0.36
Marshall	do										.05			T.				.04	.45													0.54
Nevada	Osage							.40				.22	.06		.02			.06	.05	.03												0.98
Osceola‖	do								.35			.22	.06					.06	.02													0.79
Warrensburg	Missouri								.10		.03	.04		.10				.15	.02													0.44
Warsaw	Osage							.32	.05		T.	.27		.07				.05	.03													0.79
Waverly‖	Misouri														T.				.30													0.30
Northwest Plateau																																
Albany‖	Grand													T.					.10													0.10
Bethany	do													T.				T.	.17	T.	T.											0.17
Chillicothe‖	do													T.	T.				T.	.28	T.											0.28
Conception	Missouri													T				T.	.22	T.												0.22
Edgerton	do					T.								T.				.11	.02	.02	T											0.15
Gallatin‖	Grand													.02	T.				.41		T.											0.43
Grant City	do					T.	T.	.01	T.		T.	T.	T.	.01				.43	.22	T.												0.26
Kansas City***	Missouri																		.11	T.												0.56
Kidder‖	Grand																		.52													0.52
King City	Missouri													T.				.01	.42	T.												0.43
Lexington	do											T.			.02				.47		T.											0.49
Maryville‖	do													.05					.15		.05											0.25
Oregon	do												T.	T.				.05	.20	T.	T.											0.25
St. Joseph***	do						T.					T.	T.	.01				.36	.16	T.	T.											0.58
Tarkio	do													T.					.17													0.17
Trenton	Grand					T.							T.	T.					.41	T.												0.41

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for January, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	52	58	62	55	38	31	47	45	51	39	52	34	22	26	46	55	47	42	45	41	46	47	61	67	54	59	61	63	60	68	56	49.4
	Minimum	11	24	28	28	28	24	20	26	19	20	30	25	14	5	6	21	25	32	25	25	18	20	25	27	36	27	29	26	34	34	30	23.9
Columbia	Maximum	42	51	53	48	36	30	38	36	45	40	42	33	28	22	38	43	40	42	40	36	42	46	58	66	53	52	56	58	54	63	49	44.5
	Minimum	13	29	35	36	26	24	25	30	26	29	33	24	11	5	13	36	36	31	26	24	20	24	28	41	34	31	33	29	34	41	32	27.7
Fayette	Maximum	45	53	56	54	31	30	39	36	47	39	46	37	27	27	41	50	41	39	42	38	44	45	59	67	53	56	60	60	59	69	58	46.7
	Minimum	6	8	27	24	27	23	20	25	20	21	29	24	13	5	6	16	23	34	24	24	17	19	20	22	36	27	29	23	25	33	29	21.9
Hannibal	Maximum	40	52	53	50	36	37	38	39	43	37	44	35	30	24	36	49	40	41	40	32	34	37	53	65	51	50	53	56	46	60	45	43.4
	Minimum	12	29	35	32	26	26	28	23	25	24	35	24	10	6	15	32	29	32	28	20	16	26	24	39	34	30	34	28	34	42	34	26.8
Jefferson City§§	Maximum	44	55	57	50	32	29	38	35	43	42	42	31	31	24	36	42	41	45	42	38	44	49	61	68	56	55	58	62	57	67	50	45.9
	Minimum	12	12	16	28	28	24	21	26	29	24	25	27	12	4	5	10	13	28	25	25	19	19	25	25	31	31	31	26	28	33	33	22.4
Kirksville	Maximum	42	50	53	52	42	38	35	43	48	37	44	44	37	25	38	49	47	38	37	37	37	37	52	62	55	49	52	53	53	59	50	45.0
	Minimum	18	30	29	28	24	22	22	27	22	25	25	21	11	1	10	30	20	31	21	16	11	24	21	38	35	25	32	30	30	40	32	24.2
Louisiana	Maximum	35	53	47	55	43	35	40	35	40	39	40	34	33	23	33	46	43	40	37	33	30	40	48	62	52	49	53	58	55	60	57	43.5
	Minimum	7	29	24	28	28	26	21	20	27	21	25	20	13	6	7	31	25	34	29	20	14	20	19	36	45	28	35	23	35	35	31	24.6
Macon§§	Maximum	43	52	54	49	39	33	41	38	47	39	45	30	27	24	37	48	45	38	38	33	38	41	54	63	48	50	55	56	52	62	49	44.1
	Minimum	10	14	32	29	27	23	22	22	17	18	30	22	13	2	3	18	28	32	22	18	13	20	22	28	38	25	29	29	29	31	30	22.5
Mexico§§	Maximum	40	52	55	50	30	32	38	36	47	37	42	30	41	25	36	42	40	42	40	34	40	45	56	66	53	51	57	55	51	65	49	44.4
	Minimum	10	12	26	28	27	23	23	22	24	26	27	25	16	5	5	14	27	34	24	22	10	12	21	25	40	29	28	27	31	30	31	22.7
St. Louis(1)	Maximum	39	52	56	53	44	35	37	37	40	42	39	36	33	25	34	44	41	46	42	36	35	51	58	70	60	48	59	57	48	65	49	45.5
	Minimum	16	26	36	37	27	27	30	30	33	30	36	28	15	9	15	29	36	33	32	26	19	32	31	44	37	34	37	34	38	38	36	30.0
Unionville	Maximum	42	53	53	50	47	33	42	44	48	44	48	40	28	24	40	48	50	42	36	32	37	36	53	64	56	50	50	52	55	57	52	45.4
	Minimum	6	18	30	26	22	18	20	26	20	25	30	18	10	0	10	25	20	30	16	16	6	22	20	32	32	20	32	30	30	40	30	21.9
Warrenton	Maximum	43	53	56	53	49	33	36	35	46	43	39	38	33	24	35	45	43	42	43	39	38	47	57	69	69	55	56	58	56	64	61	47.0
	Minimum	10	25	23	34	27	25	23	25	32	23	34	27	17	4	9	30	34	35	27	22	17	29	25	41	47	31	35	29	32	39	34	27.3
Southeast Lowlands																																	
Campbell	Maximum	41	48	55	54	51	42	41	35	36	47	44	38	35	32	36	38	41	41	41	42	44	57	63	68	70	60	60	61	61	73	61	48.9
	Minimum	16	14	25	36	31	27	19	29	28	25	32	29	21	6	1	23	30	27	30	25	22	25	25	29	38	39	36	29	33	27	29	26.0
Caruthersville	Maximum	42	41	50	57	56	44	38	43	35	35	48	46	48	39	28	38	40	41	44	46	42	44	56	65	69	69	56	64	63	60	73	49.0
	Minimum	21	21	25	34	40	32	31	32	32	21	31	35	25	14	12	14	31	33	33	22	27	26	32	38	43	45	42	35	35	36	38	30.2
Doniphan	Maximum	61	57	51	62	58	56	48	47	51	55	41	48	37	34	37	44	45	48	56	62	64	58	64	73	67	60	55	60	67	75	72	55.3
	Minimum	22	20	18	20	26	21	31	20	18	14	35	27	13	9	3	18	22	27	21	24	19	20	21	26	24	26	21	26	27	27	29	21.8
Jackson	Maximum	38	46	51	51	50	35	37	37	39	44	40	43	37	30	31	38	41	41	43	40	38	55	59	65	62	62	60	57	52	72	62	47.0
	Minimum	11	13	27	35	28	25	22	26	27	23	28	25	19	5	− 3	20	30	26	22	27	17	18	24	27	34	35	31	24	33	25	26	23.5
Poplar Bluff	Maximum	41	49	56	43	50	40	41	35	38	43	44	46	35	32	35	38	44	42	48	43	44	58	63	68	69	59	61	60	64	73	66	49.3
	Minimum	14	14	25	32	34	26	25	32	31	27	34	29	20	8	1	23	28	26	28	24	21	22	29	27	37	37	34	28	30	28	28	25.9
Sikeston	Maximum	43	47	55	55	52	38	40	37	37	43	43	40	45	33	32	36	40	41	46	42	41	56	62	67	69	65	60	60	57	74	72	49.3
	Minimum	17	23	30	37	35	30	28	30	32	29	38	30	24	8	3	21	33	35	31	27	24	26	30	35	36	38	39	32	37	34	34	29.2
Cairo, Ill	Maximum	37	48	54	53	47	37	39	35	38	46	42	42	34	23	32	37	41	43	44	40	39	55	61	66	66	55	58	57	54	73	55	46.8
	Minimum	17	26	34	42	31	30	32	31	30	31	37	28	19	12	9	25	34	34	33	27	24	30	35	42	46	40	41	35	40	37	38	31.3
Ozark Plateau																																	
Arcadia§§	Maximum	40	48	54	52	35	34	34	32	36	43	37	37	31	25	32	37	40	44	43	39	43	55	61	67	67	45	62	59	57	71	58	45.7
	Minimum	9	8	21	30	31	14	16	27	26	19	18	16	19	4	− 2	− 2	27	23	28	26	19	19	21	21	41	35	30	21	23	28	36	21.0
Aurora	Maximum	46	51	56	53	45	37	43	37	46	43	41	38	31	22	41	41	47	44	40	36	67	52	62	68	64	53	54	61	55	66	59	48.4
	Minimum	18	29	33	37	27	24	29	32	32	33	36	26	12	4	12	31	34	32	23	22	24	33	30	44	47	36	39	30	33	39	32	29.5
Birchtree	Maximum	39	45	50	56	50	40	39	37	37	39	39	39	35	24	30	38	41	43	42	39	45	49	62	67	65	59	60	68	70	65	62	47.5
	Minimum	12	19	28	30	29	24	24	29	31	25	31	24	18	4	0	23	32	25	28	24	17	24	27	24	41	41	29	39	29	31	27	25.5
Eldon§§	Maximum	30	53	59	50	30	33	38	39	35	40	44	32	30	26	38	41	36	44	43	49	41	50	61	67	55	55	58	61	..	..	66	[b]45.0
	Minimum	13	13	30	33	29	24	22	26	31	25	25	29	19	6	6	14	26	31	26	26	19	19	26	26	40	33	33	41	30	..	..	[b]24.9
Farmington	Maximum	40	49	51	54	46	35	34	34	36	44	39	39	37	26	33	36	40	46	42	37	42	54	61	67	66	56	58	58	52	70	61	46.5
	Minimum	9	22	31	34	28	25	21	27	29	21	34	32	18	5	3	25	33	28	29	27	19	28	25	39	40	36	33	25	37	31	36	26.8
Koshkonong	Maximum	40	48	54	56	50	42	33	36	35	38	40	40	33	24	35	41	45	45	43	40	46	59	64	68	77	59	61	62	60	72	61	48.6
	Minimum	27	24	30	38	30	26	25	32	32	31	34	29	18	5	10	26	33	29	29	24	23	32	33	40	43	43	37	34	39	39	38	30.1
Lebanon§§	Maximum	43	50	50	54	30	35	45	39	40	44	40	33	32	25	36	44	44	43	40	37	39	51	60	60	62	55	57	60	57	65	56	46.0
	Minimum	9	11	26	34	26	20	20	28	27	27	29	24	16	0	0	14	32	32	21	20	17	19	28	31	42	34	33	27	31	31	30	23.8
Mountain Grove§§	Maximum	40	44	52	56	31	39	33	42	41	37	39	36	27	30	33	37	43	39	39	36	46	59	61	65	64	53	57	60	58	66	62	46.0
	Minimum	15	16	23	31	29	22	22	28	29	28	30	27	19	3	3	12	30	29	25	22	19	21	35	35	41	37	35	30	34	35	35	25.8
Neosho	Maximum	45	52	58	57	50	42	40	37	40	43	45	44	34	28	40	39	51	51	43	42	58	56	62	68	63	57	56	64	59	68	64	50.2
	Minimum	14	27	33	30	29	25	25	32	35	35	38	23	18	− 4	7	31	37	34	25	23	21	25	25	37	41	35	32	26	26	33	28	27.3
Rolla	Maximum	41	50	55	55	50	30	35	37	39	42	41	38	34	20	35	40	43	45	40	38	44	50	58	66	62	58	56	59	57	66	61	46.6
	Minimum	13	26	35	32	28	24	23	28	33	26	34	27	17	4	6	29	34	33	27	26	20	20	27	41	45	35	36	26	35	40	34	27.9
Springfield	Maximum	41	50	53	52	40	34	35	37	37	39	41	34	29	23	40	38	46	40	39	37	53	55	59	64	61	54	53	58	54	64	57	45.7
	Minimum	20	28	36	40	26	23	31	32	32	32	34	24	11	5	14	31	36	29	24	22	24	39	38	43	42	37	39	36	38	42	37	30.5
Southwest Plain																																	
Appleton City	Maximum	43	51	57	50	41	32	39	36	40	39	43	40	31	26	39	38	39	38	43	38	53	45	58	64	59	56	58	63	60	68	58	46.6
	Minimum	15	29	36	31	28	23	25	32	28	27	36	25	17	7	15	15	33	31	24	22	22	27	26	36	44	33	35	29	35	39	33	27.7
Clinton	Maximum	36	42	47	47	45	30	35	35	35	38	38	34	29	20	20	38	38	38	34	37	42	50	50	59	52	52	49	54	53	51	50	41.2
	Minimum	14	30	30	31	28	24	23	32	25	28	34	27	14	7	7	20	34	32	22	24	25	25	25	35	32	35	32	27	32	40	32	26.6
Harrisonville§§	Maximum	45	52	54	46	32	31	36	36	36	38	48	33	21	25	40	40	38	37	43	41	50	45	59	65	51	56	59	62	61	70	60	45.5
	Minimum	15	16	31	30	26	22	22	29	24	28	30	24	15	4	5	18	32	34	22	20	20	20	27	27	30	27	28	30	30	31	33	24.2
Lamar§§	Maximum	48	53	60	53	45	37	40	48	43	44	50	40	29	30	44	41	44	46	44	43	57	55	58	66	59	56	59	63	62	70	62	50.0
	Minimum	16	18	33	30	28	25	25	34	34	30	36	27	22	8	8	21	36	36	25	23	22	23	26	27	41	34	32	27	29	31	30	27.0
Lamonte	Maximum	43	50	55	48	40	31	39	35	35	38	41	34	27	25	40	41	40	38	40	39	45	45	57	63	52	54	54	60	57	65	54	44.7
	Minimum	12	29	31	29	27	22	22	30	26	24	32	25	14	6	14	35	35	31	24	24	20	26	25	38	37	29	33	31	31	40	32	26.9
Marshall	Maximum	46	51	57	54	43	33	38	37	34	38	45	43	30	27	42	47	40	39	41	39	45	43	59	65	60	54	56	58	57	64	60	46.6
	Minimum	13	30	30	25	22	24	21	29	23	27	28	25	16	5	12	34	33	32	24	24	18	27	25	39	42	29	35	31	32	40	35	26.8
Nevada	Maximum	43	54	55	52	45	33	38	38	43	41	49	43	30	24	40	41	41	41	42	41	53	48	58	65	58	56	59	62	59	68	59	47.7
	Minimum	14	30	36	28	27	24	25	33	34	29	38	27	18	7	15	35	34	32	23	22	23	27	27	41	47	32	36	29	31	43	32	29.0
Warrensburg	Maximum	43	51	55	49	42	32	40	35	36	37	43	40	32	25	39	41	39	38	41	39	47	43	57	67	57	55	55	60	58	65	55	45.7
	Minimum	13	28	30	27	27	22	19	32	25	28	34	25	14	5	14	33	34	30	23	22	18	27	22	37	41	29	34	32	31	39	33	26.7
Warsaw	Maximum	46	52	61	54	45	34	40	37	40	41	47	46	36	27	40	42	42	43	41	41	52	50	61	67	63	55	60	62	60	68	59	48.8
	Minimum	9	30	37	26	29	24	23	32	28	24	37	27	16	6	12	27	35	34	25	24	18	20	23	34	47	33	40	24	30	42	27	27.2
Northwest Plateau																																	
Chillicothe§§	Maximum	45	54	58	54	31	31	44	47	51	41	48	32	21	28	42	52	31	33	39	38	43	44	57	61	65	56	55	57	59	62	57	46.3
	Minimum	1	11	27	22	24	22	18	23	16	16	28	22	11	1	1	14	21	22	18	19	12	14	18	21	33	21	24	22	29	29	29	19.0
Grant City	Maximum	43	49	47	47	39	30	38	42	38	47	43	38	26	26	41	40	44	38	29	29	39	38	53	61	53	51	51	55	56	58	51	43.2
	Minimum	9	32	23	27	23	21	20	24	24	21	26	18	9	− 1	11	23	16	27	13	12	6	16	21	35	35	23	32	29	32	39	32	21.9
Kansas City	Maximum	44	53	53	48	34	36	40	46	38	41	48	35	25	25	42	48	40	41	42	43	48	43	58	64	50	55	55	59	59	64	57	46.3
	Minimum	23	35	35	34	26	24	25	33	29	33	35	25	10	7	18	36	36	29	24	22	22	34	31	44	35	33	38	38	37	44	40	30.2
Kidder§§	Maximum	43	52	47	46	30	31	41	42	43	43	44	30	14	24	41	48	41	38	38	32	42	41	51	62	43	52	51	54	56	59	48	42.8
	Minimum	8	12	25	25	22	19	18	22	22	22	28	20	11	0	0	15	19	26	17	16	13	13	21	23	31	23	27	26	28	30	30	19.7
Lexington	Maximum	45	52	58	50	44	33	41	44	34	38	49	42	29	27	42	49	41	38	42	40	47	44	60	64	58	55	57	59	59	67	56	47.2
	Minimum	17	33	32	30	26	23	21	21	22	25	26	25	14	5	14	33	33	37	23	22	19	29	24	40	39	28	35	26	31	33	28	27.2
Maryville	Maximum	42	50	50	45	39	32	37	41	54	41	41	38	25	23	42	41	40	38	34	35	44	40	58	64	59	53	51	54	59	58	49	44.4
	Minimum	10	31	23	25	22	17	22	20	16	27	24	20	8	− 1	13	13	15	26	11	13	11	23	23	33	33	36	28	26	26	36	32	21.4
Oregon	Maximum	45	54	58	49	39	39	43	49	51	48	46	37	26	28	47	52	43	38	39	44	52	50	51	68	55	57	53	58	62	62	56	48.4
	Minimum	17	32	30	28	22	16	24	24	24	29	27	23	9	1	11	27	27	28	16	14	17	26	28	38	35	26	31	33	28	38	32	24.5
St. Joseph	Maximum	45	51	50	48	31	35	42	43	46	45	45	31	21	24	45	48	42	38	38	42	48	43	58	65	48	55	51	56	60	61	52	45.4
	Minimum	18	34	31	29	25	19	24	27	21	30	31	21	7	4	17	29	28	28	20	18	20	27	29	41	34	28	34	32	33	39	33	26.2
Trenton	Maximum	44	52	51	50	41	31	38	35	41	44	45	42	26	26	41	48	42	40	36	34	41	39	54	63	55	52	51	53	55	61	52	44.6
	Minimum	8	32	27	30	27	24	22	31	28	29	33	23	10	3	11	26	21	30	19	18	14	21	20	39	35	24	34	25	31	41	31	24.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 2-24-31—955.

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UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., FEBRUARY, 1931 No. 2

GENERAL SUMMARY

February, 1931, continued to give Missouri the same brand of mild and bright weather that prevailed during the two preceding months, January and December. Seldom do three consecutive winter months offer so marked a contrast to the usual Missouri winter; and our written records covering more than 40 years tell us that only twice in that time have the winters been as mild as the present, namely the winter of 1889-90, and the one of 1920-21.

There were no sudden or marked weather changes; none of the usual severe weather shifts and wintry winds commonly associated with the month of February. The monthly mean temperature was 40.9°, and more than 8° above the normal, but nearly 4° cooler than the same month in 1930, that February being the warmest of record. The present month, however, was more uniformly mild than February of last year, the present month experiencing no zero cold, while February, 1930, had a minimum of −5°.

The monthly precipitation of 2.40 inches, 0.29 inch more than the normal, was fairly well distributed and supplied moisture enough for most temporary needs. There was slightly more moisture south of the Missouri River than northward, but the snow was a little more over the northern counties. However, the snowfall was not of much importance anywhere. Most of the precipitation occurred within the middle decade of the month, but did not interfere much with outdoor occupations.

Missouri wheat condition was satisfactory generally. The top growth had not been as much as the generally mild weather would indicate, because of the shortness of soil moisture in the preceding two months. Oat seeding started early—the earliest seeding for a long time. General plowing and other spring work was well ahead of the average season. Livestock did fairly well, rough feed being plentiful. February's rains relieved the more pressing water needs. Fruit orchards were damaged by the summer drought; this spring buds have been kept back by the lack of subsoil water, in spite of the prevailing mild weather.

TEMPERATURE

The monthly mean temperature for the State, as shown by the records of 66 stations, was 40.9°, or 8.5° above the normal, but about 3.6° lower than the mean of February, 1930, which was the warmest of record. The highest local monthly mean was 45.2° at Caruthersville; and the lowest local monthly mean was 35.4° at Kidder. The highest reported temperature was 75° at Doniphan on the 3d; and the lowest reported was 5°, at Tarkio on the 11th. The greatest daily range was 56°, at Tarkio on the 11th. As an average, temperatures fell to 32° or lower on 17 days, but did not reach zero on any day.

PRECIPITATION

The average precipitation for the State, 102 stations reporting, was 2.40 inches, or 0.29 inch more than the 60 years' average. The moisture was fairly well distributed being a little more over the southern than over the northern half. The largest local monthly amount was 5.07 inches, at Campbell, Dunklin County, while the least amount, 0.50 inch, was reported by Lucerne, Putnam County. The greatest amount that occurred in any 24 consecutive hours was 3.04 inches, at Sikeston, Scott County, on the 8th.

South of the Missouri River the snowfall was inappreciable and north of the river it was light and of little importance, 3 to 4 inches as a monthly total was the heaviest anywhere, and melted quite rapidly.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Local on the 5th, 7th, 8th, 17th, 19th, and 23d.
Halos, lunar.—4th, 5th, 6th, 24th, 27th, and 28th.
Halos, solar.—5th, 7th, 8th, 11th, 12th, 13th, 24th, and 28th.
Sleet.—Light, with no damage, 11th, 15th, and 16th.
Thunderstorms.—6th, 7th, 11th, and 12th.
No high or damaging winds reported.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.10	81	64	63	177	59	4,241	6.3	21	nw.	9
Hannibal	30.11	81	63	..	....	..	4,228	6.3	23	sw.	11
Kansas City	30.10	76	59	63	216	72	5,521	8.2	24	n.	13
St. Joseph	30.09	78	55	59	194	65	4,343	6.5	19	sw.	15
St. Louis	30.10	77	61	61	161	53	6,438	9.6	29	sw.	12
Springfield	30.08	78	58	60	190	63	5,893	8.8	24	se.	21
Cairo, Ill.	30.10	80	59	64	....	..	5,460	8.1	28	n.	24
Keokuk, Iowa	30.12	80	58	63	183	61	3,772	5.6	18	sw.	11

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
1888	33.0	+ 2.0	73	−11	2.04	−0.28	....	....	7	..	..	..
1889	29.3	− 1.7	73	− 9	2.57	+0.25	....	....	7	..	..	..
1890	35.5	+ 4.5	81	− 7	2.24	−0.08	....	....	7	..	..	..
1891	32.7	+ 1.7	76	− 8	2.28	−0.04	....	2.4	6	..	..	..
1892	37.7	+ 6.7	71	2	4.15	+1.83	....	....	9	7	6	16
1893	27.9	− 3.1	65	−20	1.98	−0.34	2.30	4.6	6	10	7	11
1894	30.8	− 0.2	72	−12	2.52	+0.20	2.60	11.2	6	10	8	10
1895	23.6	− 7.4	77	−26	0.55	−1.77	1.10	3.3	5	10	10	8
1896	35.6	+ 4.6	81	−10	1.61	−0.71	2.20	4.1	5	12	8	9
1897	34.8	+ 3.8	74	−15	2.30	−0.02	3.60	8.2	7	7	7	14
1898	35.4	+ 4.4	78	− 9	1.62	−0.70	2.90	0.8	5	13	6	9
1899	20.4	−10.6	72	−32	2.17	−0.15	4.30	5.3	6	12	8	8
1900	26.2	− 4.8	70	−16	3.92	+1.60	2.85	16.6	10	10	6	12
1901	28.1	− 2.9	76	−19	1.63	−0.69	2.36	7.6	6	13	7	8
1902	24.0	− 7.0	72	−17	1.50	−0.82	2.35	5.8	5	11	8	9
1903	29.8	− 1.2	74	−25	2.92	+0.60	2.65	5.3	7	11	6	11
1904	30.0	− 1.0	82	−18	0.91	−1.41	1.46	1.5	5	11	8	10
1905	21.5	− 9.5	69	−40	1.64	−0.68	1.20	13.2	8	11	5	11
1906	33.7	+ 2.7	73	−13	2.28	−0.04	2.40	4.1	7	15	6	7
1907	34.8	+ 3.8	77	−15	1.65	−0.67	3.72	4.5	6	12	5	11
1908	35.6	+ 4.6	78	− 7	4.32	+2.00	4.28	4.1	9	13	6	10
1909	38.8	+ 7.8	71	− 4	3.38	+1.06	2.50	3.1	9	13	5	10
1910	28.3	− 2.7	72	−24	1.98	−0.34	3.00	7.7	6	12	6	10
1911	38.1	+ 7.1	87	0	3.64	+1.32	2.08	6.3	8	12	5	11
1912	28.3	− 2.7	72	−12	2.45	+0.13	3.20	11.9	6	10	7	12
1913	29.8	− 1.7	78	− 9	2.21	−0.18	4.78	8.5	7	12	5	11
1914	28.3	− 3.2	75	−11	2.71	+0.42	2.80	14.0	7	12	6	10
1915	39.4	+ 8.0	72	7	3.18	+0.81	2.05	4.1	8	9	5	14
1916	31.4	+ 0.2	78	−12	0.98	−1.48	2.70	5.0	5	13	5	10
1917	30.5	− 1.0	83	−22	0.41	−2.03	1.24	1.4	2	14	7	7
1918	34.9	+ 4.6	83	−25	1.11	−1.26	2.00	0.6	4	15	6	7
1919	35.3	+ 4.0	71	−10	1.98	−0.35	2.20	6.4	7	13	4	11
1920	34.5	+ 3.2	78	− 5	0.57	−1.68	1.41	1.2	4	11	6	12
1921	40.1	+ 9.1	86	5	0.94	−1.33	2.00	1.8	4	14	6	8
1922	35.4	+ 4.1	80	− 5	1.79	−0.44	1.65	1.9	5	14	6	8
1923	30.2	− 1.2	75	− 9	1.37	−0.88	2.20	1.4	5	13	5	10
1924	33.8	+ 2.0	79	− 5	1.84	−0.31	1.60	8.1	7	14	4	11
1925	38.7	+ 6.9	78	1	1.85	−0.30	1.78	1.7	6	12	6	10
1926	39.4	+ 7.6	76	− 4	2.08	−0.07	2.00	2.9	6	11	6	11
1927	41.3	+ 9.5	78	1	1.08	−1.07	1.48	2.3	5	10	8	10
1928	37.0	+ 5.2	71	− 2	2.28	+0.13	3.25	1.8	7	12	6	11
1929	25.0	− 7.4	64	−23	1.92	−0.19	4.25	9.4	7	10	5	13
1930	44.5	+12.1	89	− 5	1.71	−0 40	2.20	1.3	4	13	8	7
1931	40.9	+ 8.5	75	5	2.40	+0.29	3.04	0.3	6	12	6	10
.....	....	.....	..	....	....	.....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for February, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	41.3	+12.2	73	3	13	10	42	1.57	−0.28	0.40	0	7	16	0	12	nw.	O. K. Benecke
Clifton Hill	Randolph	731	32	36.0	+ 6.8	67	2	9	10	40	1.69	+0.36	0.51	T.	8	13	4	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	40.9	+ 9.2	67	3	17	10	34	3.19	+1.15	1.37	0.8	11	11	5	12	n.	U. S. Weather Bureau
Downing	Schuyler	876	10	38.4	+ 6.1	68	3	3	10	36	0.77	−0.63	0.32	0.8	8	15	4	9	s.	James Taylor
Elsberry	Lincoln	449	0	39.4	.....	67	3	12	10	44	1.77	.....	0.70	T.	4	8	12	6	sw.	Ray E. Mills
Fayette	Howard	661	51	39.2	+ 9.0	71	3	14	10	44	3.24	+1.34	1.21	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	38.4	+ 5.7	68	3	16	10	38	3.01	+1.12	1.08	1.2	9	10	6	12	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	0.82	−0.67	0.27	0.5	4	15	3	10	sw.	J. W. Pulliam
Hannibal	Marion	534	39	39.3	+ 9.6	66	3	16	14	32	2.17	+0.31	0.63	1.4	7	12	3	13	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	40.0	+ 9.1	68	3	14	10	38	4.04	+1.95	1.60	0	10	10	4	14	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	38.3	+12.4	63	2†	9	10	32	0.85	−0.97	0.25	4.0	7	14	3	11	w.	Prof. J. S. Stokes
Louisiana	Pike	469	37	38.5	+ 8.8	64	3	15	10	43	2.68	+0.33	0.90	T.	5	16	3	9	w.	Stark Bros. Nurseries
Macon	Macon	875	32	38.4	+ 9.7	66	3	10	9	39	1.31	−0.64	0.50	0.2	5	15	3	10	w.	W. C. Brown
Mexico	Audrain	800	42	38.5	+ 9.2	68	3	13	10	42	2.61	+0.40	0.90	1.0	9	16	0	12	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	...	.....	..	..	..	..	..	1.96	.....	0.47	3.0	7	9	10	9	ne.	J. S. Conway
St. Charles	St. Charles	456	43	41.8	+ 9.3	72	3	16	10	42	1.89	−0.74	0.43	0.2	9	10	5	13	n.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	41.7	+ 6.9	67	3	18	14	27	1.77	−0.79	0.74	T.	10	11	6	11	n.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	41.0	+ 7.8	66	3	17	14	26	1.46	−0.85	0.55	T.	8	11	3	14	se.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	1.82	−0.10	0.52	3.0	6	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	33	38.8	+10.4	66	3	11	10	34	1.50	−0.35	0.50	T.	6	12	5	11	n.	Frank Hall
Unionville	Putnam	1,062	38	38.6	+13.2	65	27	7	10	33	0.70	−1.13	0.50	1.0	4	16	5	7	n.	Geo. W. Davis
Warrenton	Warren	816	49	42.0	+12.1	69	3	15	10	39	2.21	+0.02	0.65	1.0	9	10	7	11	nw.	Prof. A W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	38.8	+10.5	63	3	14	10	29	1.08	−0.47	0.43	0.1	5	13	4	11	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	39.5	+ 9.4	73	3	7	10	44	1.92	−0.03	1.60	0.8	7	12	5	11	n.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	43.0	.....	71	7	18	15	44	5.07	.....	2.70	0	9	14	2	12	n.	Jeff. King
Caruthersville	Pemiscot	265	35	45.2	+ 6.3	72	8	25	15	34	2.49	−1.31	0.91	0	5	15	5	8	n.	Sam Smith
Doniphan	Ripley	344	27	44.4	+ 6.3	75	3	18	14	47	4.47	+1.32	2.35	0	5	16	7	5	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	40.8	+ 5.3	69	7	17	15	43	3.40	+0.51	1.37	0	8	9	4	15	n.	John G. Putz
Marble Hill	Bollinger	470	36	42.9	+ 7.6	72	3	17	15	45	2.99	−0.29	1.05	0	6	11	4	13	n.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	4.53	+1.27	2.33	0	7	16	2	10	n.	John A. Spence
Poplar Bluff	Butler	389	27	43.4	+ 7.1	70	3	18	15	42	3.62	+0.66	1.25	0	6	16	5	7	se.	J. H. Wolpers
Sikeston	Scott.	318	30	44.8	+ 8.2	72	7	22	15	37	4.63	+1.37	3 04	0	6	15	1	12	s.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	56	43.8	+ 5.3	70	7	23	15	30	3.38	+0.25	1.77	0	7	10	5	13	n.	U. S. Weather Bureau
Section means and	extremes	....	..	43.5	+ 6.6	75	3	13	14	47	3.84	+0.47	3.04	0	7	13	4	11	n.	
Ozark Plateau																				
Arcadia	Iron	926	49	39.0	+ 5.5	70	7	15	10	42	1.58	−1.58	0.57	0	6	16	7	5	nw.	Arcadia College
Aurora	Lawrence	1,370	39	43.8	+10.2	64	2†	17	10	32	2.50	−0.32	0.93	0	4	11	7	10	sw.	W T. Troughton
Birchtree (near)	Shannon	1,000	37	43.0	+ 8.1	68	3†	15	10	40	3.77	+1.28	1.70	0	6	15	2	11	n.	V. H. Kirkendall
Buffalo	Dallas	....	..	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	.....
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	1.67	.....	0.51	0	9	10	7	11	s.	J. M. Atkinson
Dean ††	McDonald	1,000	32	43.2	+ 8.4	66	2†	14	10†	42	3.35	+1.52	1.10	0	4	10	6	12	ne.	H. E. Dean
Eldon	Miller	934	35	39.7	+ 7.8	67	2†	11	10†	42	3.94	+1.84	2.03	0	7	10	8	10	ne.	E. H. Shepherd
Farmington	St. Francois	918	20	40.5	+ 4.9	68	3	16	10	35	2.31	−0.98	0.73	0	9	11	6	11	ne.	Robert Forsyth
Goodland	Iron	1,000	37	40.6	+ 7.7	69	3	13	10	43	2.64	+0.15	1.27	0	4	12	5	11	n.	F. M. Adams
Greenville	Wayne	381	7	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Wm. E. Shoemake
Hailey	Barry	1,350	6	...	.....	..	..	..	..	..	2.12	.....	0.98	0	8	3	15	10	w.	A. W. Madison
Koshkonong	Oregon	958	30	44.2[a]	+ 6.7	68	3	19	10	28	4.25	+1.46	1.85	0	9	13	2	13	ne.	R. M. Hitt
Lebanon	Laclede	1,265	44	40.2	+ 6.3	66	7	11	10	41	4.56	+2.06	1.25	0	9	13	3	12	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	45.3	+ 9.8	68	27	17	10	36	2.19	+0.22	0.75	0	5	8	3	17	nw.	C. S. Crow
Mountain Grove (near)	Wright	1,463	30	40.8	+ 7.0	66	2	15	10†	34	3.46	+1.20	0.80	0	9	13	5	10	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	44.8	+ 8.2	66	5	15	10	41	2.77	+0.39	0.80	0	8	14	8	6	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	42.6	+ 7.4	65	3	16	10	32	2.54	+0.20	0.80	0	6	7	7	14	sw.	F. H. Lane
Salem (near)	Dent	1,173	27	41.4	+ 6.9	67	3	14	10	34	2.65	+0.27	0.75	0	8	13	4	11	nw.	A. C. Leech
Seligman	Barry	1,542	29	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	42.9	+10.5	63	2†	15	10	33	4.04	+1.59	1.56	0	8	14	3	11	s.	Ira H. Hailey
Springfield	Greene	1,324	43	43.2	+ 8.0	63	2	18	10	25	3.06	+0.71	0.86	0	10	15	7	6	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	42.2	+ 7.7	70	7	11	10†	43	3.02	+0.63	2.03	0	7	12	5	11	ne.	
Southwest Plain																				
Appleton City	St. Clair	853	37	42.8	+10.5	69	3	16	10	38	3.77	+1.80	1.29	0	6	6	15	7	sw.	W. G. Bigelow
Clinton	Henry	765	38	41.5	+ 9.6	68	6†	21	14	29	3.79	+1.69	1.80	T.	7	6	8	14	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	40.1	+10.4	69	2†	13	10	43	2.44	+0.42	0.55	0	8	8	7	13	s.	John H. Patterson
Lamar	Barton	980	44	44.0	+ 9.5	70	2†	18	11	42	2.31	+0.08	0.65	0	7	11	6	11	se.	Jesse A. Mann
Lamonte	Pettis	867	31	41.5	+ 9.9	68	3	14	10	35	2.45	+0.54	0.67	T.	7	12	10	6	sw.	J. E. Wheeler
Marshall	Saline	779	43	41.6	+12.1	68	3	14	10	37	3.00	+1.16	1.13	0	9	13	10	5	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	43.4	+12.5	69	3	16	10	39	1.84	−0.24	0.50	0	7	12	0	16	s.	George A. Kaupp
Warrensburg	Johnson	878	44	41.6	+10.3	68	3	14	10	34	1.38	−0.75	0.40	0	7	12	6	10	ne.	E. A. Markey
Warsaw	Benton	687	30	43.2	+ 9.4	68	2	13	10	46	3.16	+0.60	1.24	0	9	8	9	11	w.	Everett Martin
Section means and	extremes	.....	..	42.2	+10.5	70	2†	13	10	46	2.68	+0.59	1.80	T.	7	10	8	10	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	38.6	+11.6	64	2	6	10	37	0.71	−0.73	0.34	2.0	3	17	4	7	se.	A. S. Cumming
Chillicothe	Livingston	779	21	39.0	+ 6.5	66	2†	6	10	51	1.03	−0.98	0.41	1.5	4	15	3	10	sw.	Wm. J Olenhouse
Conception	Nodaway	980	42	39.1	+12.0	64	2†	5	10	35	0.74	−0.45	0.34	2.5	4	11	10	7	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	39.4[a]	+ 5.1	66	2	8	10	45	0.75	−0.70	0.42	T.	5	16	4	8	nw.	Fred L. Stiff
Grant City	Worth	1,134	27	38.6	+11.3	63	2	6	10	38	0.92	−0.20	0.38	1.0	3	13	9	6	s.	W. P. Spillman
Kansas City	Jackson	963	42	42.2	+11.0	66	2†	17	10	26	1.24	−0.51	0.58	T.	5	12	8	8	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	35.4	+ 7.6	63	3	5	10	37	0.90	−0.62	0.35	T.	4	16	6	6	n.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	0.55	.....	0.33	1.0	4	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	41.7	+12.3	68	2†	13	10	33	1.51	−0.49	0.42	0.1	8	9	11	8	n.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	38.0	+13.9	63	27	7	10	34	0.81	−0.63	0.57	2.0	3	12	9	7	s.	J. R. Brink
Oregon	Holt	1,018	75	41.2	+13.0	68	2	11	10	33	0.85	−0.77	0.56	T.	4	15	7	6	nw.	Mina Wright
St. Joseph	Buchanan	967	23	40.1	+ 8.4	64	2	15	10	27	0.81	−0.67	0.43	T	4	15	6	7	ne.	U. S. Weather Bureau
Tarkio	Atchison	916	28	37.4	+ 9.4	64	27	5	10	56	0.58	−0.49	0.43	2.0	2	11	9	8	se.	Albert Volker
Trenton	Grundy	822	35	39.2	+10.7	64	27	7	10	36	0.71	−0.82	0.24	1.0	6	15	5	8	s.	W. H. Estes
Section means and	extremes	.....	..	39.2	+10.2	68	2†	5	10	56	0.86	−0.62	0.58	0.9	4	14	7	7	s.	
State means and	extremes	.....	..	40.9	+ 8.5	75	3	5	10	56	2.40	+0.29	3.04	0.3	6	12	5	10	n.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for February, 1931

Stations	Drainage-basins	Day of month																												Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Northeast Plain																																	
Boonville	Missouri							.70				T.		.73			.10	.38		.28			.02	.17	.04								2.42
Bowling Green	Mississippi						.84						.71			.09	.40		.03				.26	.04								2.37
Brunswick	Grand							.40				.02		.35			.22	.38		.08				.12									1.57
Clifton Hill	Chariton							.51					.47				.36	.12	.02	.05			.10		.06								1.69
Columbia***	Missouri						1.35	.02				.02	.91	.12		.02	.40	.03	.14				.12	.06									3.19
Downing	Mississippi						.07	.07		T.							.08	.05	.04	.05			.09	.32									0.77
Edina	do						.38										.38		.12				.20						T.				1.08
Elsberry	do						T.	.53				T.	T	.70			.30						T.	.24									1.77
Eolia	do																																
Fayette	Missouri							1.21				T.	.12	.83			.17	.45		.18			.04	.23	.01								3.24
Fulton	do						1.08					.02	.95			.24	.22	T.	.15			.15	.19						.01				3.01
Gorin	Mississippi						.24										.26			.05			.27										0.82
Hannibal***	do						.63					T.	.26				.51	.02	.22				.40	.13									2.17
Hermann	Missouri							.70				.03	T.	.77			.13	.32		.05			.10	.32									2.42
Jefferson City	do							1.60				.03		.30		.35		.30		.10	.70		.30	.32	.04								4.04
Kahoka	Mississippi							.33										.33		.15				.32									1.13
Kirksville	do						.04	.25									.18	.10	.20	.06			.02										0.85
Knox City	do																																
Laddonia	do																							.10	.10								
LaGrange	do																.35	.19	.05				.26										0.85
Lewistown	do																																
Louisiana	do						.90						.60				.66			T.			.28	.24									2.68
Lucerne	Grand																			.10				.40									0.50
Macon	Chariton							.34						.07				.50		.15				.25									1.31
McCune	Mississippi																																
Memphis	do							T.										.12		T.				.33									0.45
Mexico	do							.90					.05	.90			.05	.30		.12			.06	.18	.05								2.61
Milan	Grand							.15								.22	.37		.31				.13	.10	.15								1.43
Monroe City	Mississippi						T.	.47				.04	.24				.41			.38			.36	.06									1.96
New London	do						T.	.63						.40			T.	.61		.13				.41	.05								2.23
Pacific	Meramec							1.00						.54			.25	.17	T.	.12			.04	.12									2.24
Palmyra	Mississippi						.06							.12			.53			.02			.40	.01									1.14
Paris	do							.71					.41				.08	.42		T.				.21	.11								1.94
Perry	do							.53						.54			.35	.15		.13				.28									1.98
Philadelphia	do																	.28	T.	.08				.35	T.								0.71
Plevna	do																																
St. Charles	Missouri						.35	.35				.03	.02	.43			.26	T.		.25			.10	.10									1.89
St. Louis (1)***	Mississippi						.58	.16	T.			.02	.12	.46			.31	.01	T.	.01			.08	.02									1.77
St. Louis (2)*	do						.42	.13				.01	.08	.34			.32		T.				.11	.05									1.46
Shelbina	do							.52						.18				.52		.23				.33	.04								1.82
Steffenville	do						.05	.50					T.				.35	.20	T.	T.			.25	.15									1.50
Troy	do																																
Union	Meramec							1.06					.02	.58			.10	.28		.16			.06	.24									2.50
Unionville	Chariton									T.							.05		.15				.10	.40									0.70
Valley Park	Meramec							.64						.53			.11	.20	T.	.09			T.	.05									1.62
Warrenton	Mississippi						.32	.38				T.	.06	.65			.24	.10		.13			.20	.13									2.21
West Ely	do																																
Winfield	do																																
Keokuk, Ia.***	do						.42	.01		T.			T.				.35	.02	.01				.27	T.					T.				1.08
Southeast Lowlands																																	
Campbell	St. Francis						.21	.10	2.70	.42				.70			.34	.10							.06				.44				5.07
Cape Girardeau	Mississippi						.31	.62	.91					.84	.03			.12		.02	T.												2.85
Caruthersville	do								.38	.91				.75				.30								.15							2.49
Dexter	St. Francis						.26		.92	1.42				.69	.04			.30															3.63
Doniphan	Black						.41		2.35	.22			T.				1.25												.24				4.47
Fisk	St. Francis							.28	.89	.95			T.	.74				.28						T.	T.		T.							3.14
Jackson	Mississippi						.32		1.37	.22				.95			.12	.17						.02					.23				3.40
Marble Hill	do						.36		1.05	.30				.86			.12												.30				2.99
Morehouse	do						.35		2.33	.49				.78			.14	.06		T.									.38				4.53
New Madrid	do							.07	1.22	1.56			.01	.43	.27			.21								.02							3.79
Parma	St. Francis							.30	1.50	1.59				.65	.12			.26								.05							4.47
Poplar Bluff	Black							.31	.90	1.25			T.	.82			.07	.27															3.62
Sikeston	Mississippi							.34	3.04					.85			.10	.05					T.	T.					.25				4.63
Cairo, Ill.***	do						.25	.07	1.77	T.			.08	.81			.05	T.	T.	T.			T.	T.					.35				3.38
Ozark Plateau																																	
Arcadia	St. Francis							.10	.49	.25				.57		.10		.07															1.58
Aurora	Neosho						T.	T.	.93				T.	.55			.37						T.	.65	T.								2.50
Birchtree (near)	Black						.35		1.70	.09				1.10			.41							.12									3.77
Buffalo	Osage																																
Caplinger Mills	do						.02	.02	.05			.07		.41			.51	.08					.42	.09									1.67
Chaonia	St. Francis							.35	.83	.95				.80	.03			.33		.02													3.31
Dean	Neosho				T.		T.	T.	1.10			T.		.85			.45	T.				T.	.95	T.	T.								3.35
Eldon	Missouri							2.03					T.	.65			.21	.38		.10			.25	.32									3.94
Farmington	St. Francis						.06	.01	.73	.07				.73			.34	.22					.04	.11									2.31
Fredericktown	do							.07	1.17	.67				.73	.07		.08	.12															2.91
Galena	White					.05		.03		.54				.72			.39	.29															2.02
Goodland	Black								1.27					.80			.37	.20															2.64
Greenville	St. Francis																																
Hailey	White					.02		.22		.98	.32	.02		.32		.07							T.		.16	T.							2.12
Koshkonong	Black							.39	.02	1.85	.17			.08	.97			.47	.05					.25	T.				T.				4.25
Lebanon	Osage									.52	.20				1.25			.87	.35	.08	.02			.85	.42								4.56
Leeper	Black							.48	1.13	1.02				.98	T.		T.	.31	.02						.04								3.98
Lockwood	Osage						.12		.30					.30			.72	T.					.75										2.19
Mountain Grove	White							.03	.80	.79			T.	.80	.01		.20	.37	T.				.37	.09					T.				3.46
Neosho	Neosho						T.	T.	.70	T.		T.	T.	.60		T.	.35	.16				.02	.80	.12	.02								2.77
Owensville	Gasconade							.90						.60			.17	.23	.10					.25	.52								2.77
Ozark Beach	White			.06				.21	.86	1.09				1.07			.57	.25					.38										4.49
Rolla	Meramec							.15	.38					.80			.23	.30					.43	.25									2.54
Salem (near)	do						.07	.05	.71				T.	.75			.40	.11					.50	.06									2.65
Seligman	Neosho																																
Seymour (near)	White						.05	T.	1.56				.12	.66			.51	.04					.96		.14								4.04
Springfield***	do						.02	.11	.75			T.	.41	.31		T.	.56	T.	T.	T.		.06	.81	.02	.01								3.06
Steelville	Meramec							.32	.25					.89			.35	.18					.40	.24									2.63
Stover	Missouri							.83						.55			.25	.22		T.			.44	.08									2.37
Tuscumbia	Osage							1.29				T.		.80			.28	.30		.03			.22	.26									3.18
Williamsville	Black							.29	.92	.89			.02	.70				.14		.01				.04									3.01
Willow Sprgs. (near)	White							.28	1.20	1.11				1.24			.25	.20		.03				.35									4.66

Continued on next page

Daily Precipitation for February, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	.	..	..	
Southwest Plain																															
Appleton City	Osage						T.	1.22				T.	.02	1.29		T.	.42	.14				T.	.68	T.								3.77
Clinton	do						T.	1.80					.15	.48			.53	.15	.08				.60									3.79
Concordia‖	Missouri													.43		.64							.24									1.31
Harrisonville‖	Osage							.37						.40			.49	.55		.15			.32	.13	.03							2.44
Joplin‖	Neosho						.22	.10	.30				.15	.41			.38					.10	.64	.15								2.45
Lamar‖	do							.23	.26				T.	.60			.40	.14					.65	.03								2.31
Lamonte	Missouri						.44	.67					.38				.65	.08	.03				.20									2.45
Marshall	do							1.13				.08	.44	.04			.49	.17	.32	.26			.07									3.00
Nevada	Osage						.02	.20	.05					.50			.50		.10			T.	.47									1.84
Osceola‖	do							1.35						.54			.45	.25					.23	.16								2.98
Warrensburg	Missouri						.35						.40	.11			.22	.08	T.			T.	.16	.06								1.38
Warsaw	Osage						T.	1.24				.03	.05	.42		T.	.65	.12		.02			.60	.03								3.16
Waverly‖	Missouri							.73						.31			.15	.48		.03			T.	.10	T.							1.80
Northwest Plateau																															
Albany‖	Grand																														
Bethany	do							T.									.17		.20				.34									0.71
Chillicothe‖	do							.37										.41		.12								.13				1.03
Conception	Missouri									T							.11		.21				.34	.08					T.			0.74
Edgerton	do						.16	.08									.42	.01	T.			T.	.07	.01								0.75
Gallatin‖	Grand							.06										.37		.08				.23								0.74
Grant City	do						T.										T.		.22				.38	.32								0.92
Kansas City***	Missouri						.39	.01					.03				.58		T.				.23						T.			1.24
Kidder‖	Grand							.10									.25	.35		T.			T	.20								0.90
King City	Missouri																.10		.09				.33	.03								0.55
Lexington	do							.42						.19			.27	.34		.10			.06	.08	.05							1.51
Maryville‖	do																	.03		.21				.57								0.81
Oregon	do																.23		.03				.56	.03					T.			0.85
St. Joseph***	do						.10			T.							.43		.01			T.	.27	T.								0.81
Tarkio	do									T.									.15				.43						T.			0.58
Trenton	Grand							.04									.24	.06	.13				.22	.02								0.71

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for February, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	60	69	73	54	67	67	45	51	40	38	60	52	42	42	57	43	46	40	50	53	58	47	45	58	60	58	69	47	..	..	..	53.2
	Minimum	24	30	31	28	26	30	38	34	27	13	19	38	29	15	20	20	37	33	32	28	29	37	38	33	33	26	36	38	..	..	..	29.4
Columbia	Maximum	54	64	67	48	59	57	51	47	35	37	54	51	43	36	54	44	44	39	40	46	51	44	42	49	54	53	62	52	..	..	..	49.2
	Minimum	27	30	34	28	31	48	41	35	23	17	35	42	26	18	28	36	35	33	33	30	41	40	38	33	36	31	40	37	..	..	..	32.7
Fayette	Maximum	59	59	71	54	63	63	50	48	38	39	55	52	40	39	53	42	45	41	43	50	55	44	42	51	57	56	63	50	..	..	..	50.8
	Minimum	21	24	27	25	20	23	42	33	27	14	15	35	33	16	18	27	31	32	32	26	26	31	37	31	32	29	31	33	..	..	..	27.5
Hannibal	Maximum	51	62	66	49	58	48	46	46	35	34	53	52	40	34	50	43	43	38	39	45	49	40	44	49	52	50	61	47	..	..	..	47.3
	Minimum	24	30	36	31	28	40	38	34	20	16	32	40	23	16	26	37	37	33	33	32	29	37	37	32	34	30	37	35	..	..	..	31.3
Jefferson City§§	Maximum	58	67	68	52	64	56	53	46	38	37	53	47	40	52	54	42	40	43	45	57	53	43	45	48	55	54	61	56	..	..	..	51.0
	Minimum	23	28	33	28	26	26	42	38	29	14	15	24	22	17	20	36	36	30	31	32	32	30	37	33	33	30	31	36	..	..	..	29.0
Kirksville	Maximum	50	63	63	48	60	49	45	42	44	35	54	51	48	38	51	44	40	35	41	44	49	44	43	50	55	51	61	58	..	..	..	48.4
	Minimum	21	33	35	25	28	38	34	31	22	9	27	38	22	10	23	34	31	31	29	24	27	34	35	28	32	23	32	33	..	..	..	28.2
Louisiana	Maximum	50	63	64	59	53	53	49	46	35	33	50	53	42	43	50	50	43	40	40	40	42	40	43	45	50	55	58	48	..	..	..	47.8
	Minimum	20	20	30	28	23	31	40	34	30	15	24	40	34	16	30	26	34	32	34	29	25	33	35	30	30	28	35	33	..	..	..	29.2
Macon§§	Maximum	52	63	66	49	60	52	47	47	34	38	55	53	36	37	51	42	42	37	42	48	52	42	43	55	53	56	63	42	..	..	..	48.5
	Minimum	25	33	32	25	29	33	37	34	24	10	16	37	26	13	16	35	35	31	28	25	28	35	35	29	25	35	31	33	..	..	..	28.4
Mexico§§	Maximum	54	65	68	50	60	54	51	46	35	37	54	53	37	35	53	42	45	40	42	47	51	44	42	48	54	51	64	50	..	..	..	49.0
	Minimum	21	23	29	25	25	30	41	33	28	13	15	34	32	16	16	26	36	32	31	25	27	31	36	30	30	26	34	38	..	..	..	28.0
St. Louis(1)	Maximum	51	58	67	48	58	55	54	45	39	35	50	57	50	32	51	43	46	42	43	42	50	47	48	47	57	52	61	58	..	..	..	49.5
	Minimum	32	38	41	34	33	45	43	37	26	19	28	41	25	18	24	37	39	36	35	33	32	37	40	34	36	34	36	36	..	..	..	33.9
Unionville	Maximum	52	64	60	50	60	50	52	47	44	38	56	55	45	40	54	50	42	36	48	47	54	46	45	50	53	54	65	56	..	..	..	50.5
	Minimum	20	35	34	24	28	30	32	28	24	7	26	30	20	8	22	35	30	30	20	25	24	33	34	27	30	23	32	33	..	..	..	26.6
Warrenton	Maximum	55	66	69	66	60	57	53	51	45	38	55	56	51	35	54	48	44	44	40	47	52	49	45	47	53	54	63	60	..	..	..	52.0
	Minimum	26	37	39	27	29	43	47	36	29	15	25	39	31	16	22	36	37	34	31	30	27	38	37	31	32	28	34	39	..	..	..	32.0
Southeast Lowlands																																	
Campbell	Maximum	56	64	70	54	60	62	71	59	50	41	49	57	52	43	50	47	51	49	50	51	54	60	59	52	58	59	65	52	..	..	..	55.2
	Minimum	26	27	26	34	20	32	46	38	30	21	22	34	39	23	18	35	39	36	26	29	25	29	38	39	39	31	28	32	..	..	..	30.8
Caruthersville	Maximum	61	50	63	69	58	62	65	72	50	50	41	48	58	52	41	51	48	52	51	50	51	54	61	64	46	59	61	62	..	..	..	55.4
	Minimum	31	31	34	35	30	32	52	50	36	26	26	27	44	27	25	28	41	43	34	35	31	31	38	43	38	37	38	39	..	..	..	35.1
Doniphan	Maximum	63	71	75	67	62	58	60	72	52	45	50	54	55	44	53	50	51	53	56	57	55	60	60	60	65	62	65	56	..	..	..	58.2
	Minimum	36	27	28	36	21	43	41	40	31	20	21	40	40	13	15	37	34	31	25	25	26	34	35	33	33	30	28	34	..	..	..	30.6
Jackson	Maximum	51	60	67	61	57	60	69	63	45	37	46	51	51	40	46	45	48	47	45	46	52	56	57	52	57	57	62	60	..	..	..	53.1
	Minimum	20	24	24	29	19	36	45	38	28	18	21	22	35	18	17	35	37	36	33	31	21	29	40	35	30	27	24	29	..	..	..	28.6
Poplar Bluff	Maximum	56	69	70	58	61	59	62	50	51	42	49	53	53	43	49	50	49	47	51	53	54	58	60	48	63	60	63	56	..	..	..	54.9
	Minimum	27	28	33	22	41	50	40	31	20	20	38	38	23	18	38	41	35	30	29	24	31	42	39	35	32	26	33	..	..	..	..	31.9
Sikeston	Maximum	57	60	69	66	60	62	72	70	49	46	49	54	54	43	48	45	50	48	50	50	53	59	63	60	58	57	62	60	..	..	..	56.2
	Minimum	28	35	32	34	26	44	35	42	32	24	26	38	40	24	22	38	42	36	34	32	28	33	32	40	33	32	32	38	..	..	..	33.3
Cairo, Ill	Maximum	50	58	66	51	57	64	70	56	46	37	47	55	50	34	48	46	49	45	47	47	50	55	59	45	56	55	61	48	..	..	..	51.9
	Minimum	30	35	36	36	29	46	56	39	31	24	27	40	34	23	23	41	44	38	37	34	31	34	45	40	34	35	36	40	..	..	..	35.6
Ozark Plateau																																	
Arcadia§§	Maximum	55	62	69	53	58	54	70	42	43	42	50	51	43	40	49	41	44	44	42	49	50	51	55	46	60	55	62	57	..	..	..	51.3
	Minimum	20	20	27	29	22	23	44	39	29	15	16	26	35	17	17	19	32	33	30	28	20	20	36	36	31	29	25	26	..	..	..	26.6
Aurora	Maximum	63	64	64	56	63	63	60	57	42	42	53	54	49	41	49	45	45	56	49	53	55	48	48	45	55	55	60	54	..	..	..	53.1
	Minimum	34	40	40	29	31	49	50	40	28	17	32	40	33	19	25	34	37	34	32	28	34	38	42	38	34	31	38	41	..	..	..	34.6
Birchtree	Maximum	62	66	68	67	68	60	68	60	45	46	49	55	47	41	48	43	46	49	46	52	52	49	54	49	60	57	61	56	..	..	..	54.4
	Minimum	30	30	30	28	45	48	37	29	15	25	37	30	19	18	34	29	33	33	27	28	39	42	38	33	31	32	29	37	..	..	..	31.6
Eldon§§	Maximum	59	67	67	52	64	53	53	45	39	41	55	55	41	39	52	46	45	44	34	47	54	41	41	48	35	56	63	56	..	..	..	49.7
	Minimum	25	25	33	29	27	29	47	40	30	11	11	34	36	19	19	25	33	33	33	29	29	29	40	37	35	29	28	37	..	..	..	29.7
Farmington	Maximum	54	63	68	59	59	54	52	44	37	39	50	53	48	33	51	42	44	42	40	46	54	54	47	46	58	54	62	53	..	..	..	50.2
	Minimum	23	29	36	29	24	43	40	37	29	16	23	37	31	18	20	34	39	34	32	32	24	36	39	36	31	29	29	33	..	..	..	30.8
Koshkonong	Maximum	56	64	68	61	61	53	67	58	47	41	51	54	48	41	47	44	45	49	49	..	44	47	57	55	60	59	61	54	..	..	..	[a]53.4
	Minimum	31	40	43	35	33	48	51	38	30	19	26	38	38	22	22	35	41	34	33	..	29	40	40	40	35	34	34	40	..	..	..	[a]35.1
Lebanon§§	Maximum	59	64	65	52	64	57	66	44	42	41	53	55	44	42	52	42	44	53	43	52	55	46	45	46	56	56	61	55	..	..	..	51.9
	Minimum	29	37	38	24	23	31	48	39	25	11	14	33	33	16	16	18	33	29	29	24	28	30	38	36	29	24	31	36	..	..	..	28.6
Mountain Grove§§	Maximum	58	66	65	56	60	53	63	42	44	41	50	53	42	44	48	40	43	52	46	53	53	44	57	44	60	57	59	54	..	..	..	51.7
	Minimum	32	32	41	29	29	32	47	41	28	15	15	28	37	18	18	23	34	30	30	24	27	28	39	37	32	29	30	36	..	..	..	30.0
Neosho	Maximum	64	64	64	63	66	63	62	59	45	47	53	56	51	45	50	46	48	57	56	59	59	55	56	50	55	62	63	60	..	..	..	56.4
	Minimum	28	29	30	30	25	46	50	43	26	15	33	43	36	17	22	36	39	26	33	29	35	40	43	40	33	27	40	38	..	..	..	33.3
Rolla	Maximum	54	63	65	62	60	58	58	54	43	37	52	57	54	36	50	47	44	44	45	45	52	51	47	47	54	53	61	57	..	..	..	51.8
	Minimum	25	35	40	30	29	47	50	41	28	16	30	41	34	19	24	35	38	33	34	29	28	38	40	37	34	31	34	35	..	..	..	33.4
Springfield	Maximum	58	63	63	53	61	61	58	50	40	40	54	53	48	41	48	42	44	53	45	52	53	47	47	46	54	55	59	55	..	..	..	51.5
	Minimum	35	45	44	32	36	50	50	35	25	18	33	39	27	20	28	34	31	30	34	31	34	39	42	39	35	34	40	39	..	..	..	35.0
Southwest Plain																																	
Appleton City	Maximum	59	68	69	60	65	60	57	45	41	41	55	53	49	41	48	44	44	50	48	52	57	49	48	49	55	56	62	55	..	..	..	52.9
	Minimum	30	30	35	27	28	51	40	37	28	16	33	37	33	19	25	35	33	30	31	29	32	41	39	36	36	30	40	36	..	..	..	32.8
Clinton	Maximum	52	58	60	55	53	68	68	44	42	45	50	50	50	34	45	45	42	43	44	45	51	52	46	46	49	48	55	55	..	..	..	49.8
	Minimum	28	37	37	26	26	42	44	38	28	32	35	35	33	21	24	35	32	32	32	30	32	35	40	36	35	30	38	38	..	..	..	33.2
Harrisonville§§	Maximum	58	69	69	54	65	60	53	47	38	40	58	48	39	41	51	40	40	46	44	47	55	47	44	50	56	53	64	50	..	..	..	50.9
	Minimum	31	32	38	25	28	30	48	36	25	13	15	35	32	15	15	25	34	26	27	27	29	34	37	34	33	30	30	37	..	..	..	29.3
Lamar§§	Maximum	66	70	70	55	70	67	61	49	45	48	60	61	45	48	50	45	48	57	46	56	59	58	47	49	56	61	66	61	..	..	..	56.2
	Minimum	30	31	35	30	28	32	48	44	28	19	18	39	36	21	21	30	37	26	26	29	30	36	42	41	33	31	32	39	..	..	..	31.9
Lamonte	Maximum	57	65	68	51	64	63	52	45	39	39	55	51	48	40	51	44	42	42	42	45	55	48	47	49	53	54	63	51	..	..	..	50.8
	Minimum	27	34	34	24	29	50	41	36	26	14	35	38	38	18	25	36	33	32	31	27	32	41	33	34	35	31	37	31	..	..	..	32.2
Marshall	Maximum	57	66	68	67	64	64	59	46	43	38	56	52	47	38	44	48	42	39	43	46	53	52	51	49	54	52	63	60	..	..	..	52.2
	Minimum	28	33	35	32	27	45	39	36	22	14	30	38	30	16	27	29	34	31	29	28	30	33	37	31	34	29	37	38	..	..	..	31.1
Nevada	Maximum	63	67	69	57	66	61	59	47	43	42	56	56	51	41	49	44	45	52	48	54	58	51	50	48	55	58	64	57	..	..	..	54.0
	Minimum	29	35	40	27	27	51	40	40	27	16	31	37	31	19	28	35	32	26	31	28	36	41	40	34	34	29	40	36	..	..	..	32.9
Warrensburg	Maximum	58	66	68	53	64	63	49	45	41	39	55	50	48	48	50	44	41	42	45	48	56	48	50	48	55	56	65	55	..	..	..	51.8
	Minimum	25	40	37	25	30	48	39	34	25	14	29	37	29	16	26	35	31	30	30	27	29	39	37	33	33	27	38	37	..	..	..	31.4
Warsaw	Maximum	62	68	67	66	66	65	61	47	45	41	57	56	53	43	51	48	45	48	48	51	59	55	48	48	55	56	63	58	..	..	..	54.6
	Minimum	23	34	33	23	20	51	45	39	28	13	32	38	33	18	19	36	34	32	33	26	31	41	41	38	32	25	37	34	..	..	..	31.8
Northwest Plateau																																	
Chillicothe§§	Maximum	57	66	66	53	65	59	51	47	37	41	59	53	42	47	51	55	36	37	45	50	52	48	45	55	57	55	65	41	..	..	..	51.2
	Minimum	36	19	26	22	22	27	34	34	23	6	8	34	22	22	31	41	32	29	25	23	24	28	41	38	26	24	26	28	..	..	..	26.8
Grant City	Maximum	53	63	55	48	58	51	52	48	40	37	58	49	52	46	52	49	39	33	42	41	52	48	42	54	51	51	62	56	..	..	..	49.4
	Minimum	23	32	35	23	28	39	33	32	23	6	27	26	33	8	22	33	23	29	28	26	29	36	33	31	32	26	33	33	..	..	..	27.9
Kansas City	Maximum	58	66	66	50	63	60	51	46	36	39	56	49	43	42	52	42	40	39	44	48	53	48	41	51	54	53	63	54	..	..	..	50.2
	Minimum	34	46	40	31	39	46	35	35	20	17	38	43	25	18	32	36	32	30	30	32	35	40	37	34	38	35	45	35	..	..	..	34.2
Kidder§§	Maximum	53	63	58	47	61	57	47	45	33	38	56	51	34	39	52	40	33	30	43	45	51	41	40	49	51	50	61	42	..	..	..	46.8
	Minimum	23	26	30	21	22	27	29	30	22	6	14	36	21	8	9	28	29	26	24	23	23	26	34	26	30	24	27	32	..	..	..	24.1
Lexington	Maximum	58	68	68	51	63	61	50	47	41	39	56	49	47	41	52	45	40	41	43	51	55	49	43	53	57	55	63	55	..	..	..	51.5
	Minimum	27	38	38	27	30	39	38	36	27	13	32	40	28	15	27	36	33	31	30	28	31	40	38	32	35	30	39	36	..	..	..	31.9
Maryville	Maximum	55	61	54	48	59	53	51	46	42	36	59	51	46	40	57	43	40	34	43	47	53	49	43	52	51	51	63	58	..	..	..	49.5
	Minimum	24	27	28	20	28	37	29	29	22	7	25	33	24	10	24	34	25	20	15	25	29	37	35	27	31	27	36	34	..	..	..	26.5
Oregon	Maximum	60	68	57	52	63	59	55	49	42	39	61	57	47	45	60	49	40	39	47	54	57	49	43	57	55	56	65	57	..	..	..	52.9
	Minimum	27	36	35	22	34	39	28	34	23	11	33	37	24	12	30	36	26	23	21	27	30	39	37	30	32	28	41	35	..	..	..	29.6
St. Joseph	Maximum	56	64	57	49	60	55	48	48	34	37	58	55	37	42	56	41	39	35	44	49	54	45	42	51	54	52	63	49	..	..	..	49.1
	Minimum	29	37	35	27	36	37	29	33	19	15	36	37	23	16	31	37	28	25	26	30	32	40	38	33	35	31	41	34	..	..	..	31.1
Trenton	Maximum	53	63	60	48	60	51	50	48	38	38	57	52	48	41	54	45	41	35	44	46	53	47	42	52	54	53	64	56	..	..	..	49.8
	Minimum	21	27	31	25	26	42	36	34	24	7	29	34	22	11	21	34	30	31	30	25	29	40	37	29	33	25	34	36	..	..	..	28.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 3-25-31—955.

551.05
UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., MARCH, 1931 NO. 3

GENERAL SUMMARY

March, 1931, was mainly cooler than normal in all Missouri, and averaged cooler than the preceding month of February and only about 3° warmer than January. This does not stress the point so much that March was a very cold month but that both February and January were unusually mild for winter months. March was quite free of the harsh, blustry weather so often associated with this month; there were no sudden drops in temperature, no strong shifting winds, no thunderstorms, and little sleet.

The precipitation was generally sufficient for immediate needs and no more. Over the northeastern plain running southward over the southeastern lowlands the monthly totals slightly exceeded the normal amounts, but the remainder of the State received not more than 90 per cent to 92 per cent of the normal. The precipitation occurred at quite well spaced intervals with favorable spells in between for outdoor work.

Heavy general snow on the 6th and 7th and over the northern counties on the 27th added greatly to the soaking quality of the month's precipitation although most of the rains were of the steady gentle kind. Beginning late of the 5th rain turned to snow and snow continued for 30 to 40 consecutive hours. Being driven by a brisk wind, drifts piled up 3 to 4 feet deep and brought about a two or three days blockade of traffic in western, central and most northern counties. This was about as heavy a fall in a single storm as that of January 8, and 9, 1930; and has not been equaled or exceeded in March or any other month more than two or three times in 60 years.

At the end of March, ground water had penetrated the ground some 20 to 30 inches, with growth of wheat good to excellent. Plowing and preparing land was well ahead of the average season but no planting outside of a few early vegetables. Oats were coming up well. Fruits were uninjured and normally advanced.

TEMPERATURE

The monthly mean temperature for March for the State, 68 stations reporting, was 39.5°, or 4.4° colder than normal, and 3.7° cooler than March, 1930. The subnormal values were fairly constant and uniform, averaging about 4° in the northwest plateau to about 5° in the southeastern lowlands. The highest local local monthly mean was 45.0° at Doniphan; and the lowest local monthly mean was 33.4° at Kidder. The highest reported temperature was 70° at five stations, all in the southern half of the State; the lowest reported was 10°, at Unionville on the 4th. The greatest daily range was 45°, at Lamar on the 17th. As an average, temperatures fell to 32° or lower on 21 days, 4 more than in February.

PRECIPITATION

The average precipitation for the State, 109 stations reporting, was 3.02 inches, or practically normal as compared with the 60 years' average, and the moisture was fairly well distributed geographically and timely periods. The largest local monthly amount was 6.03 inches, at Poplar Bluff, Butler County, while the least amount, 1.23 inches, occurred at Edgerton, Platte County. The greatest amount in any 24 consecutive hours was 2.90 inches, at Poplar Bluff on the 7th.

The snowfall was the heaviest of any March since 1924, averaging 8.8 inches for the State as a whole, and from 11 to 14 inches for most of the State outside of the southeast section and southern Ozark slope; most of the snow fell in one storm of the 6-7th, blocking highway traffic for a few days; a second snowstorm occurred on the 27th, confined mostly to the northern border counties. The largest monthly total was 22 inches, at Lexington, Lafayette County.

(Continued on Page 14)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.01	80	62	61	190	51	6,521	8.8	29	nw.	24
Hannibal	30.01	80	60	..	...	..	6,474	8.7	28	ne.	7
Kansas City	30.04	78	59	62	232	62	8,571	11.5	40	w.	24
St. Joseph	30.04	79	56	60	191	51	7,148	9.6	38	nw.	24
St. Louis	29.99	77	60	61	170	46	8,682	11.7	40	nw.	24
Springfield	30.00	77	59	60	203	55	8,037	10.8	31	w.	24
Cairo, Ill.	29.99	76	58	58	...	..	7,121	9.6	38	sw.	7
Keokuk, Iowa	30.04	80	60	61	200	54	5,681	7.6	27	nw.	24

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR MARCH

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**43.9**	.....	**86**	**2**	**3.02**	.....	**3.59**	**3.1**	**8**	**13**	**8**	**10**
1888	38.5	−5.4	90	1	4.02	+1.00	....	....	10	..	..	..
1889	44.3	+0.4	84	13	1.98	−1.04	....	....	5	..	..	..
1890	37.3	−6.6	76	−11	2.61	−0.41	....	5.7	8	..	..	..
1891	36.6	−7.3	78	−11	3.01	−0.01	....	7.1	10	..	..	..
1892	38.9	−5.0	87	5	3.11	+0.09	....	....	8	8	10	13
1893	40.5	−3.4	86	1	2.86	−0.16	2.15	3.2	7	11	10	10
1894	47.7	+3.8	89	2	2.93	−0.09	3.20	0.2	6	15	9	7
1895	42.4	−1.5	98	0	2.14	−0.88	3.00	4.4	9	14	7	10
1896	39.2	−4.7	82	2	2.05	−0.97	4.47	5.2	8	11	9	11
1897	44.2	+0.3	93	− 5	6.07	+3.05	4.10	1.0	2	9	9	13
1898	44.7	+0.8	83	9	7.09	+4.07	3.87	0.6	11	11	7	13
1899	37.4	−6.5	78	− 8	2.93	−0.09	4.30	8.9	16	9	11	11
1900	40.4	−3.5	88	− 4	1.48	−1.54	3.41	0.2	6	15	9	7
1901	42.7	−1.2	85	− 1	3.74	+0.72	3.21	1.8	8	11	8	12
1902	45.3	+1.4	85	1	3.49	+0.47	5.60	0.8	9	10	10	11
1903	46.8	+2.9	81	9	3.35	+0.33	6.19	1.1	8	13	7	11
1904	44.8	+0.9	87	8	4.14	+1.12	7.50	1.2	9	11	9	11
1905	50.3	+6.4	88	10	2.99	−0.03	2.67	T.	8	11	8	12
1906	34.6	−9.3	75	− 5	3.93	+0.91	3.00	8.6	11	6	7	18
1907	53.9	+10.0	95	16	2.82	−0.20	3.08	1.0	7	14	7	10
1908	50.1	+6.2	89	14	2.58	−0.44	2.55	1.0	7	14	7	10
1909	44.5	+0.6	81	9	3.07	+0.05	3.30	0.6	6	13	9	9
1910	55.8	+11.9	96	15	0.66	−2.36	2.25	0.1	2	20	7	4
1911	46.8	+2.9	91	5	1.85	−1.17	2.00	1.4	6	16	8	7
1912	35.2	−8.7	89	− 4	4.62	+1.60	2.85	16.5	11	12	6	13
1913	40.6	−3.3	84	−12	4.36	+1.34	7.97	5.0	9	12	8	11
1914	43.2	−0.7	87	− 2	2.75	−0.27	3.01	4.7	8	13	7	11
1915	36.4	−7.5	70	6	1.50	−1.52	1.85	7.9	6	7	8	16
1916	47.0	+3.1	95	− 2	2.53	−0.49	4.25	3.1	7	14	8	9
1917	45.2	+1.3	86	− 7	2.91	−0.11	4.08	1.5	7	15	7	9
1918	50.9	+7.0	95	8	0.94	−2.08	2.25	0.1	4	18	6	7
1919	46.3	+2.4	90	− 2	2.40	−0.62	5.37	0.7	6	15	8	8
1920	44.6	+0.7	86	− 6	5.01	+1.99	6.00	1.4	8	15	6	10
1921	51.9	+8.0	90	11	4.69	+1.67	2.88	0.5	10	13	9	9
1922	45.6	+1.7	80	3	6.46	+3.44	4.00	2.2	12	11	6	14
1923	40.4	−3.5	83	−11	4.12	+1.10	2.84	2.3	8	14	6	11
1924	38.4	−5.5	80	8	2.55	−0.47	2.38	9.4	8	8	8	15
1925	47.7	+3.8	86	− 5	1.95	−1.07	2.55	0.8	5	17	8	6
1926	39.6	−4.3	83	8	2.89	−0.13	1.77	7.0	8	13	6	12
1927	45.9	+2.0	80	0	5.87	+2.85	4.90	3.7	11	12	8	11
1928	46.3	+2.4	89	10	1.54	−1.48	1.60	2.4	5	15	9	7
1929	48.6	+4.7	97	11	3.30	+0.28	3.30	T.	8	12	8	11
1930	43.2	−0.7	88	6	1.37	−1.65	2.63	1.4	4	18	6	7
1931	39.5	− 4.4	70	10	3.02	0.00	2.90	8.8	8	11	7	13
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for March, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	40.0	− 1.9	68	23	19	10	40	2.35	−0.21	0.90	17.5	8	17	0	14	nw.	O. K. Benecke
Clifton Hill	Randolph	731	32	37.3	− 4.9	63	24	16	4	37	2.45	−0.20	0.90	17.6	11	12	6	13	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	38.4	− 4.2	61	17	19	10	32	2.97	+0.03	1.07	11.5	11	7	5	19	nw.	U. S. Weather Bureau
Downing	Schuyler	876	10	35.6	− 6.0	56	13†	17	4	32	2.38	+0.02	0.65	18.5	9	8	13	10	n.	James Taylor
Elsberry	Lincoln	449	0	38.6	.....	67	13	17	10	39	3.00	.....	1.05	7.0	5	9	11	11	n.	Ray E. Mills
Fayette	Howard	661	51	38.0	− 4.1	63	13†	16	10	37	2.48	−0.33	0.87	11.4	12	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	37.6	− 6.8	64	14	14	10	31	3.29	+0.25	0.81	12.2	10	11	6	14	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	2.40	−0.06	0.65	19.0	8	9	6	16	nw.	J. W. Pulliam
Hannibal	Marion	534	39	37.6	− 3.4	61	13	23	10	30	2.36	−0.24	0.83	10.8	12	7	7	17	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	38.2	− 5.0	67	14	17	10	38	4.13	+1.31	1.05	11.0	9	9	9	13	e.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	36.5	− 3.0	59	13	19	4†	31	2.92	+0.15	0.87	19.8	9	10	5	16	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	38.9	− 4.4	60	13	19	11	35	3.32	+0.42	0.82	10.9	10	18	3	10	s.	Stark Bros. Nurseries
Macon	Macon	875	32	36.6	− 6.0	62	13	18	4	35	2.86	+0.17	0.95	15.9	8	15	4	12	nw.	W. C. Brown
Mexico	Audrain	800	42	37.0	− 5.0	66	13	19	10	39	3.56	+0.77	1.05	12.8	12	18	0	13	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	2.87	+0.15	0.82	12.5	8	10	8	13	sw.	J. S. Conway
St. Charles	St. Charles	456	43	40.4	− 4.0	68	13	23	4†	34	2.47	−0.62	0.90	3.0	9	7	8	16	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	40.6	− 3.5	68	13	26	8	28	2.39	−0.99	0.69	2.7	9	7	10	14	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	39.8	− 3.8	68	13	26	4†	29	2.17	−0.78	0.86	2.1	10	9	6	16	nw.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	2.93	+0.08	0.70	16.1	10	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	33	37.2	− 5.2	62	13	19	10	30	3.20	+0.29	1.00	13.5	6	10	10	11	e.	Frank Hall
Unionville	Putnam	1,062	38	36.2	− 2.4	62	13	10	4	34	2.95	+0.56	1.70	19.0	7	11	5	15	n.	Geo. W. Davis
Warrenton	Warren	816	49	39.8	− 2.4	69	13	22	4†	34	3.23	−0.14	0.90	10.0	9	5	13	13	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	36.7	− 2.2	58	22	21	4	26	2.18	−0.20	0.62	15.9	9	8	7	16	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	38.0	− 4.1	69	13	10	4	40	2.82	+0.02	1.70	12.6	9	10	7	14	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	43.3	.....	69	13	22	3	37	3.83	.....	1.12	0.3	9	13	6	12	n.	Jeff. King
Caruthersville	Pemiscot	265	35	44.8	− 6.4	70	14	27	10†	30	3.81	−0.19	0.90	0.2	9	12	7	12	se.	Sam Smith
Doniphan	Ripley	344	27	45.0	− 4.4	70	13	21	10	38	5.36	+1.77	1.85	0.2	5	13	8	10	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	40.6	− 6.6	65	13	20	10	36	3.88	−0.46	1.60	T.	7	7	5	19	n.	John G. Putz
Marble Hill	Bollinger	470	36	42.6[c]	− 4.8	66	13†	20	3	34	3.22	−0.96	0.96	T.	4	7[c]	7[c]	14[c]	n.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	....	..	..	..	..	..	4.55	−0.01	1.41	0.2	10	13	6	12	n.	John A. Spence
Poplar Bluff	Butler	329	27	44.1	− 4.7	69	14	23	10	33	6.03	+1.51	2.90	0.3	8	13	5	13	w.	J. H. Wolpers
Sikeston	Scott.	318	30	44.1	− 4.3	67	14	25	3	29	4.36	−0.14	2.02	0.4	9	12	1	18	n.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill.	358	56	43.4	− 3.8	66	13	27	10	25	4.20	+0.45	2.01	0.5	8	5	6	20	n.	U. S. Weather Bureau
Section means and	extremes	....	..	43.5	− 5.0	70	13†	20	3†	38	4.36	+0.25	2.90	0.2	8	11	6	14	n.	
Ozark Plateau																				
Arcadia	Iron	926	49	38.3	− 6.5	66	13	20	3	42	3.32	−0.75	1.97	0.5	7	18	1	12	nw.	Arcadia College
Aurora	Lawrence	1,370	39	41.6	− 4.0	65	13	23	9†	33	2.25	−1.43	0.50	2.4	6	13	7	11	nw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	42.5	− 4.9	66	13	21	10	31	5.68	+1.43	1.64	1.0	10	15	7	9	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	41.4[g]	.....	63	14	21	9	39	2.70	.....	0.66	7.4	12	11[g]	7[g]	6[c]	nw.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	2.64	.....	0.80	8.0	6	13	10	8	n.	J. M. Atkinson
Dean II	McDonald	1,000	32	41.2	− 7.7	69	13	18	4	38	3.45	+0.10	0.68	6.0	6	11	7	13	nw.	H. E. Dean
Eldon	Miller	934	35	38.2	− 5.3	67	13	18	11	37	3.87	+1.04	1.00	10.6	9	6	16	9	nw.	E. H. Shepherd
Farmington	St. Francois	918	20	40.6	− 6.3	70	13	24	3†	33	3.51	+0.24	1.42	0.5	9	9	9	13	ne.	Robert Forsyth
Goodland	Iron	1,000	37	40.8	− 4.1	67	13	18	10	37	1.51	−2.74	1.25	4.5	3	11	10	10	n.	F. M. Adams
Greenville	Wayne	381	7	....	.....	..	..	..	..	..	.....	.....	.....	.....	..	..	..	..	.....	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	3.74	.....	1.38	2.0	7	10	4	17	e.	A. W. Madison
Koshkonong	Oregon	958	30	43.4	− 6.2	66	13	27	4†	25	5.42	+1.61	1.80	T.	11	13	3	15	nw.	R. M. Hitt
Lebanon	Laclede	1,265	44	37.6[a]	− 7.8	64	13	19	9†	34	3.50	+0.05	0.96	8.5	9	10	8	13	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	43.4	− 4.5	69	18	24	4†	40	2.78	+0.32	0.65	6.5	7	14	4	13	nw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	30	39.6	− 6.4	65	13	23	8†	35	4.15	−0.19	1.50	7.0	11	11	8	12	nw	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	43.2	− 5.0	68	12	20	16	37	2.12	−1.35	0.60	4.0	9	16	4	11	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	40.7	− 4.3	66	13	22	9†	31	2.82	−0.77	0.62	7.0	9	5	9	17	nw.	F. H. Lane
Salem(near)	Dent	1,173	27	40.3	− 6.6	66	13	22	8†	31	3.17	−0.13	1.32	5.1	10	8	9	14	nw	A. C. Leech
Seligman	Barry	1,542	29	42.6[a]	− 3.6	67	13	21	4†	34	3.54	−0.40	1.05	5.5	8	10[a]	8[a]	12[a]	w.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	40.4	− 4.8	64	13	20	8	32	3.26	−0.80	0.83	7.1	10	14	5	12	nw.	Ira H. Hailey
Springfield	Greene	1,324	43	40.8	− 4.4	62	17	23	9	28	2.54	−0.85	0.85	6.7	11	17	5	9	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	40.9	− 5.4	70	13	18	4†	42	3.30	−0.27	1.97	5.0	8	12	7	12	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	40.3	− 4.3	68	17	22	9	37	2.62	−0.45	0.75	9.0	10	8	12	11	nw.	W. G. Bigelow
Clinton	Henry	765	38	38.6	− 5.7	60	18	20	9	24	2.81	−0.05	0.70	9.1	12	10	12	9	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	38.2	− 2.7	70	17	19	9	41	2.17	−0.52	....	11.0	9	4	8	19	n.	John H. Patterson
Lamar	Barton	980	44	41.6	− 4.6	70	17	23	5	45	2.55	−0.35	0.90	4.0	7	13	6	12	ne.	Jesse A. Mann
Lamonte	Pettis	867	31	38.7	− 5.0	65	17	18	10	36	3.09	+0.49	1.15	15.9	9	17	12	2	se.	J. E. Wheeler
Marshall	Saline	779	43	39.2[a]	− 3.3	63	17	19	9†	35	2.74	+0.03	1.24	16.0	8	13	9	9	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	41.7	− 2.6	69	17	22	9	36	2.61	−0.38	0.66	6.0	7	15	2	14	nw.	George A. Kaupp
Warrensburg	Johnson	878	44	38.8	− 4.8	67	17	20	9†	38	2.60	+0.06	1.00	16.5	10	10	7	14	ne.	E. A. Markey
Warsaw	Benton	687	30	41.2	− 5.7	67	17	17	10	41	3.53	+0.30	1.25	13.5	10	13	4	14	w.	Everett Martin
Section means and	extremes	.....	..	39.8	− 4.3	70	17	17	10	45	2.75	−0.10	1.25	11.2	9	11	8	12	ne.	
Northwest Plateau																				
Bethany	Harrison	916	38	36.5	− 3.5	61	13	17	10†	32	1.44	−0.86	0.62	12.2	7	17	6	8	nw.	A. S. Cumming
Chillicothe	Livingston	779	21	36.0	− 5.6	60	18†	15	10	35	2.53	−0.25	0.96	17.0	7	16	8	7	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	42	36.6	− 2.9	63	17	16	4	36	1.81	+0 06	0.80	11.0	7	8	9	14	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	37.5[c]	− 5.7	66	17	17	16	36	1.23	−1.52	0.51	6.0	9	15	2	14	e.	Fred L. Stiff
Grant City	Worth	1,134	27	36.6	− 4.7	60	13	16	4	30	1.64	−0.47	0.47	13.0	8	8	16	7	ne.	W. P. Spillman
Kansas City	Jackson	963	42	39.2	− 3.5	66	17	23	9	32	2.35	−0.18	0.94	14.1	11	10	7	14	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	33.4	− 7.8	62	17	15	9†	40	1.66	−0.64	0.60	12.5	8	13	6	12	nw.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	2.62	.....	1.05	15.7	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	39.6	− 3.3	65	17	20	9	35	4.19	+1.82	1.25	22.2	11	9	12	10	n.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	36.2	− 1.0	59	17	15	9	34	2.20	+0.32	0.85	17.5	9	10	8	13	n.	J. R. Brink
Oregon	Holt	1,048	75	39.0	− 0.3	64	17	17	9	34	1.77	−0.25	0.85	13.0	6	11	9	11	nw.	Mina Wright
St. Joseph	Buchanan	987	23	38.0	− 4.7	65	17	20	9	33	2.44	+0.13	1.11	12.5	10	13	4	14	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	36.4	− 4.2	58	13†	16	9	34	1.72	+0.02	0.70	14.0	6	6	9	16	nw.	Albert Volker
Trenton	Grundy	822	35	37.7	− 3.5	62	13	18	10	32	2.14	−0.30	0.68	10.5	10	11	5	15	n.	W. H. Estes
Section means and	extremes	.....	..	37.1	− 3.9	66	17	15	9†	40	2.12	−0.16	1.25	13.7	8	11	8	12	nw.	
State means and	extremes	.....	..	39.5	− 4.4	70	13†	10	4	45	3.02	0.00	2.90	8.8	8	11	7	13	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for March, 1931

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri	T.	T.				.14	.25	.70													.18	.16		.02			.58	.50			.08	2.61
Bowling Green	Mississippi				.21	.10	.10	.16													.14	.11		.03	.08		.75	.78					2.46
Brunswick	Grand	.03					.15	.90	.22													.22						.38	.30			.15	2.35
Clifton Hill	Chariton	.06				T.	.10	.90	.20													.20		.02	.02		.01	.58	.26			.10	2.45
Columbia***	Missouri	.04		T.		.06	.18	.95	.01		T								T.		.06	.30		T.	.03		.46	.82	T.		T	.06	2.97
Downing	Mississippi					.50	.65	.23	.04													.02		.02	.03			.45	.44				2.38
Edina	do					T.	.50	.75													T.			T.	T.			.45	1.07				2.77
Elsberry	do	T.				T.	.10	1.05											T.			T.	T.		T.	.50		.55	.80				3.00
Eolia	do																																
Fayette	Missouri	.02	.02				.12	.87	.02													.16	.15	T.	.05	.02		.50	.46			.09	2.48
Fulton	do	.01				.05	.72	.54													.28	.10			.03		.81	.72			.03		3.29
Gorin	Mississippi					.25	.65	.24	.04													.03			.01		**	1.18					2.40
Hannibal***	do	.06				.21	.23	.45	.06					T.							.06	.11		.04	.08		.19	.82	.05				2.36
Hermann	Missouri	T.					.03	.12	.80										.01			.08	.40		.01	.02		.63	.66			.02	2.78
Jefferson City	do	T.	T.				.10	.20	.90													.32	.72	.09				1.05	.70			.05	4.13
Kahoka	Mississippi	T.					.75		.60																			.65	.92				2.92
Kirksville	do	.03				T.	.40	.03	.80													.06		.02	.13			.58	.87				2.92
Knox City	do																								.05			.42	1.14				
Laddonia	do						.12	.16	.60	.04												.20	.15					.77	.88				2.92
LaGrange	do					.10	.32	1.12													.11		.10	.11			.42	.12	.57				2.97
Lewistown	do																																
Louisiana	do	.05				.18	.22	.40	.12													.57		.18	.08		.70	.82					3.32
Lucerne	Grand	T.					.60	.40	.40																.09	.11		.34	.42			T.	2.36
Macon	Chariton	.03					.40	.45	.34													.20				.12		.37	.95				2.86
McCune	Mississippi																																
Memphis	do					T.	.70	.12	.35																T	T.		.48	.84				2.49
Mexico	do	.05		T.			.25	**	.90	.05												.28	.11		.05	.05		.70	1.65			.07	3.56
Milan	Grand						.71	.11	.22																.12		.15		.55				1.86
Monroe City	Mississippi	.03					.10	.71	.02													.21			.26			.72	.82				2.87
New London	do		.08				.17	.15	.85													.11	.04		T.	.25		.40	.69				2.74
Pacific	Meramec	.04					T.	.42	.55	T.									.10				.74			.10		.31	.40				2.66
Palmyra	Mississippi	.06					.40	.45	.06													.16			.14			.72	.56				2.55
Paris	do					T.	.10	.40	.10													.15				.16		.50	.81				2.22
Perry	do	T.					.18	.16	.99													.19		T.	.02		.06		1.15				2.75
Philadelphia	do	T.					.20	.40	.25										.18						.05			.48	.87				2.43
Plevna	do																																
St. Charles	Missouri	T				T.	.01	.22	.10										.90			.34	.25		.10			.23	.32				2.47
St. Louis (1)***	Mississippi	T.				.03	.51	.49	.03					T.					.08		T.	.69		T.	.03		.23	.30	T.			T.	2.39
St. Louis (2)*	do	T.				T.	.50	.36	.04					T.					.15		.01	.58	.02	T.	.04		.22	.25	T.				2.17
Shelbina	do	.06					.20	.60	.40													.21	.10		.07	.06		.53	.70				2.93
Steffenville	do	T.				T.	.25	.80														.10		T.	.25			.80	1.00				3.20
Troy	do																								.54	.74							
Union	Meramec						.09	.33	.76										.09				.63			.05	.50	.60						3.05
Unionville	Chariton	T.				.10	.60	1.10	T.															.10	.15			.50	.40				2.95
Valley Park	Meramec	T.				T.	T.	.46	.46	T.				T.					T.	T.			.60			T.		.29	.25			T.	2.06
Warrenton	Mississippi	T.				.02	.20	.85	.20										T.			.33	.17		T.	.06		.90	.50				3.23
West Ely	do					.32	.30	.86													.12	.14		T.	.09		.53	1.01				3.37
Winfield	do																											.51	.58				
Keokuk, Ia.***	do	T.				.30	.14	.53	.08										T.			.01		T.	.06		.20	.60	.26				2.18
Southeast Lowlands																																	
Campbell	St. Francis		.04	T.			.28	1.12	.03						T.						.05	.84	.08				.40	.94			.10	3.83
Cape Girardeau	Mississippi	.35					.10	2.80	.26													.18						.37	.25				4.36
Caruthersville	do	.50	.05					.90	.02													.28	.55		.02			.72	.77				3.81
Dexter	St. Francis							1.83	.02											.03	.02	.48	.53					.54	.34			T	3.79
Doniphan	Black			T.			1.85	.80														1.42					.55	.50				.24	5.36
Fisk	St. Francis	.20			T.			2.55	.02											.13		.15	.30					.48	.23			T.	4.06
Jackson	Mississippi	.10					.77	1.60	T.										.11			.25						.98	.07				3.88
Marble Hill	do						.90	.94	T.													.42							.96				3.22
Morehouse	do	.09					.80	1.41	T										.04			1.13	.06				.03	.94	.03			.02	4.55
New Madrid	do	.40						1.00	.29	.01												.36	.84					.78	.58			.03	4.29
Parma	St. Francis	.37						1.43	.12													.43	.62					.88	.40			.02	4.27
Poplar Bluff	Black	.34		T.				2.90	.02													.79	.50					1.25	.19			.04	6.03
Sikeston	Mississippi	.22		T.			**	2.02	.05										.03			.88			.75	.30						.11	4.36
Cairo, Ill.***	do	.01		T.		T.	1.21	.98	.01					T					T.		T.	.25	T.	T.			.41	1.28				.05	4.20
Ozark Plateau																																	
Arcadia	St. Francis	T	T.		T.		.03	1.97	.18	T.										T		.05	.35					.46	.28			T.	3.32
Aurora	Neosho	.17		T.			.39	.30													T.	.50					.49	.40			T.	T.	2.25
Birchtree (near)	Black	.21		.04			1.18	1.64											.36			.93	.17					.40	.60			.15	5.68
Buffalo	Osage			.01		.05	.24	.66											.07		.09	.33						.64	.54	.03		.01	.03	2.70
Caplinger Mills	do	T.	T.					.80													.02	.50						.60	.50	.22				2.64
Chaonia	St. Francis	.27					.05	2.79	.14										.03	.06		.32	.42						.63	.17			.02	4.90
Dean	Neosho	T.					.62	.60	T.												.55	.48					.68	.52	T.		T.	T.	3.45
Eldon	Missouri		.03				.06	.33	.71													.59	.51					1.00	.56			.08	3.87
Farmington	St. Francis	T.					.72	1.42	.04										.17		T	.28	.15				.17	.53	.03				3.51
Fredericktown	do	.37						2.06	.27											.10			.27					.47					3.54
Galena	White		.09				.02	1.22														.88	.09					.59	.79				3.68
Goodland	Black							1.25	.10																			.16					1.51
Greenville	St. Francis																																
Hailey	White						1.38	.25														.32	.53					.41	.53			.32		3.74
Koshkonong	Black		.12	.08			1.03	1.80														.05	.86	.16				.45	.45				.20	5.42
Lebanon	Osage				.05		T.	.60	.52	.03												.12		.36					.96		.60	.26		3.50
Leeper	Black	.11	.02	T.	T.		.11	2.01	T.										T.	.31		.37	.52					.59	.38			.02	4.44
Lockwood	Osage	.12	T.	T.			T	.59													.14	.53					.65	.62				.13	2.78
Mountain Grove	White	T.	.05	.20	T.		.15	1.50	.30												T.	.57	.49					.45	.22			.06	4.15
Neosho	Neosho	.05					.08	.20														.25	.45					.60	.44	T.		.03	.02	2.12
Owensville	Gasconade																																
Ozark Beach	White																																
Rolla	Meramec	T.	.02	T.			.02	.52	.62										.07			.23	.32					.52	.50				2.82
Salem (near)	do		T.	.04			.52	.90	.07										.11		.03	.63	.10				.23	.54					3.17
Seligman	Neosho		.25				1.05	.45	.10												.37	.31					.67	.34					3.54
Seymour (near)	White	T.	.06				.83	.48											.12		.06	.64	.13				.41	.48	T.		T.	.05	3.26
Springfield***	do	.08		.01		.05	.23	.68											.05		.15	.45		T.			.38	.44	T.		T.	.02	2.54
Steelville	Meramec	T.						.65	.56										.08			.38	.46					.42	.45					3.00
Stover	Missouri	T.		.02				.54	.18													.38	.07					.75	.42		.09			2.45
Tuscumbia	Osage		.08	.02			.10	.50	.86													.27	.50					.86	.44			T.		3.63
Williamsville	Black	.16			.03		.05	2.53	.05												.02	.09	.27	.77					.56	.33			.05		4.91
Willow Sprgs. (near)	White		.10	.09			.21	1.77	.38													.25		.82	.59				.57	.25			.02		5.05

Continued on next page

Daily Precipitation for March, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage	T.	T.	T	....	T.	.04	.75	.02	....	....	....	....	....	....	....	....	....	....	....	.10	.45	T.	....	....	....	.40	.60	.06	....	.14	.06	2.62
Clinton	do	.05	....	.08	.01	....	.11	.40	.30	....	....	....	....	....	....	....	....	....	....	....	.04	.52	....	....	....	....	.20	.67	.25	....	T	.18	2.81
Concordia‖	Missouri	....	....	....	....	....	....	.35	.40	....	....	....	....	....	....	....	....	....	....	....	.34	.05	....	....	....	....	.50	.35	....	....	.10	....	2.09
Harrisonville‖	Osage	.05	....	....	....	....	**	**	1.08	....	....	....	....	....	....	....	....	....	....	....	....	.21	.02	....	....	....	....	.33	.25	....	....	.23	2.17
Joplin‖	Neosho	.01	....	....	....	T.	.10	.44	....	....	....	....	....	....	....	....	....	....	....	....	.42	.22	....	....	....	....	.70	.50	....	....	.06	....	2.45
Lamar‖	do	....	.05	....	....	....	T.	.32	.17	....	....	....	....	....	....	....	....	....	....	....	....	.50	.03	....	....	....	....	.90	.58	....	....	....	2.55
Lamonte	Missouri	....	....	....	....	....	.12	1.15	.25	....	....	....	....	....	....	....	....	....	....	....	....	.35	....	....	....	....	.60	.45	.05	....	.04	.08	3.09
Marshall	do	.03	....	....	....	....	.10	1.24	T.	....	....	....	....	....	....	....	....	....	....	....	T.	.27	....	.02	....	....	....	.68	.30	....	....	.10	2.74
Nevada	Osage	T.	....	....	....	T.	.03	.60	....	....	....	....	....	....	....	....	....	....	....	....	.44	....	....	....	....	....	.66	.65	....	....	.13	.10	2.61
Osceola‖	do	....	.03	.03	....	....	.05	.50	.24	....	....	....	....	....	....	....	....	....	....	....	....	.47	.17	....	....	....	....	.84	.58	....	.15	.11	3.17
Warrensburg	Missouri	T.	....	T.	....	T.	.03	1.00	.16	....	....	....	....	....	....	....	....	....	....	....	....	.10	.10	....	....	.03	.12	.73	....	....	.16	.17	2.60
Warsaw	Osage	.05	....	.05	....	T.	.03	1.25	....	....	....	....	....	....	....	....	....	....	....	....	T.	.45	....	....	....	....	.45	.82	.25	....	.08	.10	3.53
Waverly ‖	Misouri	.04	....	.02	....	....	.13	.43	.21	....	....	....	....	....	....	....	....	....	....	....	....	.26	.07	....	.01	....	T.	.55	.58	....	....	.19	2.49
Northwest Plateau																																	
Albany‖	Grand	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	T.	....	.10	....	....	T.	.27	.35	....	....	.10	1.44
Bethany	do	.02	....	....	....	T.	.40	.20	....	....	....	....	....	....	....	....	....	....	....	....	....	.12	....	.09	....	....	T.	.57	.52	....	....	.15	2.53
Chillicothe ‖	do	T.	....	....	....	T.	.12	.96	....	....	....	....	....	....	....	....	....	....	....	....	T.	.06	....	.17	T.	....	T	.37	....	....	....	.18	1.81
Conception	Missouri	....	....	T.	.03	T.	.20	.80	....	....	....	....	....	....	....	....	....	....	....	....	.07	.07	....	....	....	....	.02	.51	.02	....	.02	.20	1.23
Edgerton	do	T.	....	....	....	T.	.04	.28	....	....	....	....	....	....	....	....	....	....	....	....	....	.07	....	....	T.	....	....	.41	.42	....	....	.11	2.43
Gallatin ‖	Grand	....	....	....	....	....	.52	.49	.41	....	....	....	....	....	....	....	....	....	....	....	T.	.03	....	.27	.02	....	.03	.32	.10	....	....	....	1.64
Grant City	do	....	....	....	....	T.	.47	.40	....	....	....	....	....	....	....	....	....	....	....	....	.09	.07	....	.01	....	....	.42	.37	....	T.	.12	.11	2.35
Kansas City***	Missouri	.04	T.	T.	....	.08	.30	.74	....	....	....	....	....	....	....	....	....	....	....	....	....	.10	....	T.	T.	....	.15	.20	.10	....	....	.05	1.66
Kidder ‖	Grand	T.	....	....	....	....	.16	.60	.30	....	....	....	....	....	....	....	....	....	....	....	T.	.04	....	.06	....	....	.03	.50	.24	....	....	.14	2.62
King City	Missouri	....	....	T.	....	....	.56	1.05	....	....	....	....	....	....	....	....	....	....	....	....	....	.25	....	.08	....	....	.04	.61	.47	....	....	.32	4.19
Lexington	do	.08	....	.04	....	....	.20	1.25	.85	....	....	....	....	....	....	....	....	....	....	....	....	.02	...	.14	.05	....	T.	.24	.20	....	....	.05	2.20
Maryville ‖	do	....	....	....	....	T	.20	.85	.45	....	....	....	....	....	....	....	....	....	....	....	T.	.07	....	.12	....	....	T.	.39	T	....	T.	.10	1.77
Oregon	do	....	....	....	....	T.	.24	.85	....	....	....	....	....	....	....	....	....	....	T.	....	.08	.02	....	.06	T.	....	.26	.38	T.	....	.02	.12	2.44
St. Joseph***	do	T.	T.	....	....	.22	.49	.79	....	....	....	....	....	....	....	....	....	....	....	....	.10	....	....	.25	....	....	....	.25	.10	....	....	T.	1.72
Tarkio	do	....	....	....	....	....	.32	.70	....	....	....	....	....	....	....	....	....	....	....	....	....	.09	....	.14	.06	....	T.	.68	.48	....	....	.09	2.14
Trenton	Grand	.01	....	....	....	T.	.29	.24	.06	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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MISCELLANEOUS PHENOMENA

Fogs, dense.—3d, 17th, and 27th.

Halos, lunar.—1st, 2d, 8th, and 29th.

Holos, solar.—8th, 10th, 11th, 13th, 14th, 19th, 23d, 29th, 30th, and 31st.

Sleet.—light and of little importance, 5th, 6th, 20th, and 27th.

Thunderstorms.—None reported, none apparently occurred, which is rather unusual for March.

Winds.—38 to 40 miles an hour on the 24th were the highest winds reported; there was no damage.

Daily Temperatures for March, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	38	49	49	51	45	39	36	36	41	47	54	56	64	58	50	52	66	65	54	55	51	62	68	52	64	51	43	34	43	51	49	50.7
	Minimum	31	26	27	23	29	31	28	25	20	19	21	28	36	35	27	22	26	34	31	32	35	33	38	40	28	35	34	26	23	31	34	29.3
Columbia	Maximum	37	43	42	44	42	36	31	33	36	40	45	51	60	54	39	45	61	59	44	42	42	56	57	47	53	46	44	34	44	46	47	45.2
	Minimum	30	28	31	24	36	30	25	25	22	19	28	32	41	35	28	25	29	39	34	33	37	33	42	37	31	38	34	28	31	35	36	31.5
Fayette	Maximum	34	47	46	46	42	42	34	37	41	43	52	51	63	52	43	50	62	63	46	46	44	60	57	44	58	47	41	40	47	49	50	47.6
	Minimum	30	26	28	21	24	32	28	25	21	16	22	27	33	33	26	23	25	27	31	32	36	31	33	41	28	31	35	28	28	29	35	28.5
Hannibal	Maximum	35	42	42	42	40	32	30	37	38	38	45	47	61	50	40	35	56	56	42	46	44	57	55	47	53	46	43	34	42	50	46	44.2
	Minimum	31	26	28	23	32	29	26	25	25	23	25	26	41	36	28	27	26	42	36	30	39	34	37	36	33	37	34	29	30	32	36	31.0
Jefferson City§§	Maximum	35	45	44	46	44	36	33	33	36	40	49	54	66	67	39	48	63	63	49	45	41	57	59	47	56	48	46	33	47	48	47	47.2
	Minimum	31	28	29	24	24	32	30	25	21	17	20	27	31	35	29	24	25	30	32	32	32	32	33	42	29	33	38	30	28	32	34	29.3
Kirksville	Maximum	40	45	42	44	40	32	31	37	39	37	48	45	59	55	44	37	54	57	50	42	51	57	52	50	54	49	48	34	41	45	46	45.3
	Minimum	28	21	25	19	30	26	23	23	20	19	22	30	34	31	32	20	23	34	33	27	35	31	37	33	29	36	32	24	22	29	31	27.7
Louisiana	Maximum	40	36	36	40	37	31	33	35	40	40	45	47	60	58	46	39	57	58	54	45	49	55	54	47	50	48	47	42	45	50	50	45.6
	Minimum	25	25	24	23	31	30	30	25	25	20	19	22	40	35	28	27	22	45	34	30	38	30	33	36	33	37	40	30	30	33	36	30.2
Macon§§	Maximum	38	45	43	45	46	31	29	29	39	43	51	49	62	53	41	51	58	60	44	47	49	59	54	40	59	48	37	33	41	49	51	45.9
	Minimum	28	23	26	18	26	29	27	24	20	21	24	30	36	28	24	20	23	25	32	29	32	29	37	36	27	35	32	25	23	30	31	27.4
Mexico§§	Maximum	34	45	45	45	40	34	35	35	39	40	47	50	66	55	42	47	60	61	46	44	42	59	54	43	55	47	44	33	42	48	48	46.0
	Minimum	29	25	26	22	23	31	28	24	20	19	22	27	27	28	27	24	24	30	34	30	31	30	34	39	29	31	37	28	27	29	34	28.0
St. Louis(1)	Maximum	36	45	46	42	46	36	35	35	40	45	48	50	68	58	42	47	56	60	47	46	42	55	55	53	53	49	52	40	47	50	46	47.4
	Minimum	31	29	33	27	32	32	27	26	27	29	32	33	40	42	34	31	31	40	35	31	39	38	40	38	35	38	40	32	33	33	37	33.7
Unionville	Maximum	46	47	43	44	40	36	35	37	40	42	50	48	62	55	42	47	56	54	50	46	54	56	54	50	55	50	48	44	35	40	42	45	46.6
	Minimum	28	16	22	10	30	25	24	20	20	22	20	30	31	30	20	17	24	30	32	28	34	30	35	32	28	30	30	24	20	24	30	25.7
Warrenton	Maximum	51	42	43	41	44	40	32	32	36	39	46	50	69	67	52	45	59	60	60	47	45	58	56	54	52	52	47	47	45	48	48	48.6
	Minimum	30	27	29	22	32	30	26	24	22	23	25	28	40	36	30	27	25	43	34	28	35	34	36	40	30	36	40	29	29	31	37	30.9
Southeast Lowlands																																	
Campbell	Maximum	47	46	43	49	60	53	47	42	47	55	55	58	69	68	57	51	60	62	57	45	43	60	66	61	60	52	56	53	55	55	50	54.3
	Minimum	35	30	22	26	25	42	26	26	29	25	32	28	34	46	29	31	23	33	34	31	36	38	29	42	36	37	41	32	32	35	36	32.3
Caruthersville	Maximum	49	41	49	45	57	58	61	47	42	48	55	58	57	70	67	57	48	58	60	58	48	45	60	65	63	60	53	57	40	50	57	54.3
	Minimum	40	34	32	28	29	35	43	31	30	27	27	34	34	44	37	35	30	32	39	35	36	40	39	40	38	37	42	39	35	35	40	35.4
Doniphan	Maximum	45	48	54	50	61	55	50	45	48	56	57	56	70	69	63	55	58	60	55	60	65	60	65	60	63	50	54	53	58	55	58	56.6
	Minimum	38	24	31	24	31	40	29	28	30	21	35	31	35	44	35	32	30	32	35	29	27	30	32	42	36	39	44	35	34	40	40	33.3
Jackson	Maximum	45	44	46	43	54	52	42	33	42	50	52	52	65	64	59	48	56	57	55	47	45	57	62	58	55	52	54	55	51	52	45	51.4
	Minimum	32	26	21	25	26	35	29	24	25	20	25	22	36	43	35	27	21	21	32	27	36	36	27	41	33	33	32	32	30	32	36	29.7
Poplar Bluff	Maximum	47	48	43	50	59	51	49	41	41	53	56	56	66	69	61	52	57	61	55	44	45	61	64	61	62	52	55	55	57	54	50	54.0
	Minimum	34	31	24	27	28	40	32	29	30	23	34	30	37	46	33	32	24	40	32	34	39	38	31	45	37	40	44	35	34	39	39	34.2
Sikeston	Maximum	47	43	47	47	57	57	48	37	46	52	55	55	65	67	61	48	56	59	59	51	40	58	64	63	60	55	55	54	53	54	52	53.7
	Minimum	32	32	25	27	29	41	34	29	28	26	32	29	37	47	38	32	27	38	35	31	35	34	36	44	36	38	45	38	35	38	40	34.5
Cairo, Ill	Maximum	46	43	44	42	55	50	49	34	43	51	52	52	66	63	47	45	53	57	48	46	45	58	63	59	54	53	56	49	50	51	46	50.6
	Minimum	37	31	30	32	32	41	28	28	32	27	33	31	41	43	37	35	33	43	37	32	40	42	38	45	39	39	45	35	35	38	39	36.1
Ozark Plateau																																	
Arcadia§§	Maximum	37	48	42	46	53	41	35	32	40	51	55	51	66	62	44	52	55	62	51	40	40	59	60	53	58	47	51	33	51	51	45	48.7
	Minimum	29	26	20	24	25	30	30	23	23	24	21	24	37	33	28	22	27	28	27	28	34	27	29	30	31	37	30	29	31	34	27	27.9
Aurora	Maximum	42	43	41	48	61	54	37	35	41	58	56	60	65	60	55	52	64	62	61	55	39	56	61	56	54	48	42	33	48	47	46	51.0
	Minimum	32	29	31	24	35	37	25	24	23	26	28	35	41	38	31	24	31	44	35	37	34	36	41	37	32	33	33	23	27	35	35	32.1
Birchtree	Maximum	46	47	46	48	57	53	48	40	43	49	56	55	66	63	57	56	57	57	49	48	42	57	61	57	57	54	50	47	54	52	50	52.3
	Minimum	33	29	25	25	33	42	27	25	25	21	32	30	43	43	31	25	30	38	31	30	35	35	33	44	43	36	36	30	30	36	37	32.7
Eldon§§	Maximum	32	45	43	48	49	36	32	35	37	43	48	55	67	57	40	48	63	61	51	44	40	57	57	50	55	48	46	30	48	47	46	47.0
	Minimum	32	30	30	26	25	35	31	25	21	19	18	27	30	36	30	26	26	26	31	31	33	33	36	38	30	30	36	30	28	30	35	29.5
Farmington	Maximum	37	52	43	44	49	46	37	31	39	51	52	52	70	61	50	48	58	60	56	42	40	58	62	54	53	48	51	51	49	50	45	49.6
	Minimum	32	25	24	25	29	36	30	25	24	26	27	25	37	41	34	31	26	38	33	28	37	36	31	43	31	33	40	30	30	32	37	31.5
Koshkonong	Maximum	48	42	42	47	58	50	47	39	43	51	55	55	66	63	55	52	57	64	60	50	40	56	60	60	58	51	50	48	53	53	48	52.3
	Minimum	34	30	29	27	33	46	28	27	27	27	35	31	44	47	34	30	32	39	37	35	35	36	37	42	35	37	39	30	31	39	38	34.5
Lebanon§§	Maximum	37	45	41	47	57	43	30	34	36	55	54	53	64	48	44	51	61	60	54	39	39	57	59	55	55	44	45	31	49	..	48	[a]47.8
	Minimum	31	27	27	21	21	31	27	21	19	19	24	28	33	34	27	20	21	30	26	30	32	29	33	37	28	31	31	25	24	27	31	27.3
Mountain Grove§§	Maximum	37	46	43	48	59	45	29	34	39	54	59	54	65	61	47	52	58	60	59	37	39	60	60	52	58	43	47	32	53	51	43	49.2
	Minimum	35	27	27	24	24	37	28	23	23	23	30	32	32	39	29	23	25	30	32	34	32	32	35	38	30	31	33	28	26	31	34	29.9
Neosho	Maximum	60	47	48	54	59	59	41	38	44	61	62	68	66	67	60	52	65	65	64	62	43	58	63	61	56	54	39	38	50	47	45	54.7
	Minimum	35	31	29	21	34	37	27	27	25	25	25	32	45	36	32	20	27	38	32	39	34	32	41	39	27	34	34	23	29	38	36	31.7
Rolla	Maximum	53	43	41	42	55	53	38	32	35	45	49	53	66	64	54	47	59	60	57	45	39	55	59	57	53	52	47	46	48	48	48	49.8
	Minimum	33	27	28	25	36	36	25	24	22	22	30	30	44	37	30	26	28	33	34	32	34	35	32	42	30	38	38	29	30	33	38	31.6
Springfield	Maximum	39	43	40	44	60	52	38	34	39	56	58	57	62	58	43	48	62	60	57	44	39	53	59	54	52	46	43	31	47	48	41	48.6
	Minimum	30	29	31	25	37	38	25	23	23	30	33	38	46	39	32	27	34	44	38	36	33	36	42	37	33	32	31	23	29	34	36	33.0
Southwest Plain																																	
Appleton City	Maximum	42	47	40	48	53	42	31	39	41	56	53	58	63	58	50	51	68	63	55	50	43	57	65	58	51	49	38	32	47	43	39	49.4
	Minimum	32	30	31	23	37	31	25	24	22	26	27	34	41	35	29	26	31	38	35	36	32	33	40	37	31	32	32	25	26	31	34	31.2
Clinton	Maximum	43	42	38	42	43	42	32	34	35	40	44	51	57	57	47	42	50	60	50	50	42	50	58	59	50	50	34	33	45	45	40	45.3
	Minimum	32	32	32	34	35	32	26	23	20	22	28	32	42	35	32	25	39	40	35	37	33	32	34	40	32	34	32	27	26	32	35	31.9
Harrisonville§§	Maximum	34	49	45	48	48	33	30	38	40	43	50	57	62	59	49	52	70	64	52	40	44	59	65	58	54	45	35	33	49	40	38	47.8
	Minimum	30	26	29	21	24	31	26	22	19	22	25	28	34	33	26	23	29	34	34	34	33	34	39	39	27	31	31	24	24	24	31	28.6
Lamar§§	Maximum	41	49	46	54	56	43	34	43	48	61	62	66	66	65	52	55	70	66	64	45	44	61	66	63	61	50	39	34	49	44	40	52.8
	Minimum	35	31	31	24	23	38	28	26	24	24	28	28	37	37	31	24	25	35	38	38	32	29	32	39	30	30	33	25	24	32	36	30.5
Lamonte	Maximum	51	45	42	48	46	38	35	34	37	41	46	53	59	53	44	48	65	58	50	41	42	57	61	53	55	47	40	33	45	45	45	47.0
	Minimum	31	28	31	23	37	30	20	24	19	18	23	31	41	35	28	23	29	45	31	34	33	31	37	40	29	32	32	26	32	33	36	30.4
Marshall	Maximum	..	44	44	46	43	37	35	34	36	40	46	49	52	56	53	50	63	61	57	50	48	56	59	58	56	55	45	34	44	45	46	[b]48.1
	Minimum	..	26	31	23	35	29	26	24	19	19	23	35	35	34	28	23	28	37	30	32	34	32	42	42	36	28	32	27	25	35	35	[b]30.2
Nevada	Maximum	45	47	43	49	53	51	54	37	41	58	57	61	63	60	49	52	69	64	60	54	55	60	66	59	56	47	38	33	46	43	40	51.9
	Minimum	33	30	31	23	37	32	25	24	22	29	27	37	44	35	30	24	33	39	34	32	32	32	42	38	30	32	31	23	28	32	34	31.5
Warrensburg	Maximum	42	48	42	48	49	48	33	36	43	46	50	55	59	59	49	54	67	62	54	44	42	65	62	57	48	46	37	33	48	44	42	48.8
	Minimum	30	27	31	21	35	28	24	22	20	21	20	24	32	32	27	24	29	38	30	34	32	30	44	29	35	35	32	25	22	32	32	28.9
Warsaw	Maximum	49	46	46	48	54	46	40	40	40	50	53	57	65	59	51	50	67	62	57	52	42	57	63	61	56	50	45	36	48	47	46	51.1
	Minimum	32	36	30	25	39	34	27	24	21	17	27	33	45	36	30	19	26	42	31	37	34	30	37	40	30	31	32	27	30	32	37	31.3
Northwest Plateau																																	
Chillicothe§§	Maximum	37	48	45	47	38	36	30	29	37	40	51	45	49	54	54	49	60	59	46	43	46	59	60	44	58	47	35	33	43	47	47	45.7
	Minimum	28	19	24	18	20	27	27	29	18	15	17	23	32	35	24	18	25	31	29	30	31	35	35	36	25	33	31	23	21	25	29	26.2
Grant City	Maximum	38	44	41	43	40	33	32	37	44	44	48	48	60	54	42	48	56	56	48	43	53	52	54	48	54	49	43	39	41	45	42	45.8
	Minimum	29	20	25	16	31	26	26	22	18	23	25	32	33	31	23	18	28	33	29	31	29	33	40	33	26	37	29	22	21	31	30	27.4
Kansas City	Maximum	36	47	42	47	44	34	31	35	40	43	48	56	60	55	47	50	66	59	50	42	46	57	62	53	53	46	35	35	45	39	39	46.5
	Minimum	30	28	31	27	34	28	25	25	23	30	28	37	45	37	29	29	34	39	34	35	34	36	43	41	33	32	30	25	27	32	30	32.0
Kidder§§	Maximum	34	43	42	45	40	30	29	33	33	37	44	42	57	50	44	45	62	55	48	41	48	54	57	40	53	42	33	33	40	44	40	43.2
	Minimum	26	19	23	16	20	25	23	18	15	15	17	20	29	29	22	18	22	26	26	30	29	30	36	34	24	25	29	21	18	23	27	23.7
Lexington	Maximum	40	48	45	47	47	36	31	37	39	43	48	50	61	55	48	51	65	61	54	46	45	57	62	56	58	50	42	33	47	44	43	48.0
	Minimum	30	25	31	22	36	31	27	25	20	21	25	32	40	34	27	24	30	39	31	34	35	34	40	41	42	40	33	24	25	33	32	31.1
Maryville	Maximum	37	45	42	42	41	34	31	35	35	41	47	49	57	53	44	50	59	58	51	45	50	52	57	48	55	52	44	33	40	45	43	45.6
	Minimum	28	16	25	16	32	25	23	22	15	23	23	31	30	30	23	16	28	32	24	32	34	37	40	37	24	38	28	21	19	31	29	26.8
Oregon	Maximum	36	50	45	47	42	35	32	37	40	48	54	54	61	54	48	55	64	59	60	48	49	58	58	51	63	53	45	36	42	48	40	48.8
	Minimum	30	21	25	18	33	27	24	23	17	26	23	32	33	32	25	21	31	34	30	34	20	39	42	37	43	41	30	23	20	37	32	29.1
St. Joseph	Maximum	35	48	42	44	40	30	32	36	37	41	47	50	59	51	47	52	65	57	53	42	49	56	59	50	56	50	35	35	42	44	38	45.9
	Minimum	31	24	29	22	30	28	25	25	20	25	26	34	35	34	26	22	32	36	33	34	36	38	42	39	30	33	29	24	24	32	32	30.0
Trenton	Maximum	39	47	44	46	40	34	30	37	36	40	49	48	62	55	47	49	59	58	54	44	52	57	57	58	55	50	41	34	42	47	45	47.0
	Minimum	30	21	25	19	34	28	24	24	20	18	23	30	36	33	25	20	27	35	30	31	35	32	38	36	28	34	32	25	23	33	31	28.4

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-17-31—955.

537.03
UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., APRIL, 1931 NO. 4

GENERAL SUMMARY

The month of April was quite ordinary as to temperature, alternating cool and warm spells following each other in the usual order, but the month was mainly less rainy over most of the State. Although rather scanty, outside of most of the northwestern plateau, the rains were timely and well distributed geographically, and were mostly of the gentle, steady type, soaking into the soil with minimum runoff. In fact there was nearly a total absence of the usual "dashing April showers," severe thunderstorms, and hail. At the close of the month most of the central and east-central counties were a little dry, having received not much more than one-half the usual rainfall since October, 1930.

The first week was mainly cool, then followed rather a pleasant spell of 10 to 12 days beginning on the 7th. This in turn was followed by a 10-day cool spell, attended by the usual three or four frosty nights, damaging some early truck crops, but fruit escaped with little or no injury.

The month was mainly favorable for outdoor work; preparing for and planting corn made good progress. Wheat, oats, and all grass crops did well. Bloom on all kinds of fruit was the heaviest in years. Some little damage was done to early grape and strawberry bloom in the southwest. Bluegrass was hard hit by drought, but is gradually recovering.

TEMPERATURE

The mean temperature for the State, as determined from reports of 68 stations, was 54.8°, or nearly normal, and more than 4° cooler than last April. The highest local monthly mean was 60.3° at Caruthersville; and the lowest local monthly mean was 52.0°, at Bethany and at Kidder. The highest reported temperature was 90°, at Caruthersville on the 17th; and the lowest reported was 22°, at Dean, McDonald County, on the 5th. There was heavy and general frost on the 22d, 27th, and 28th. Days with minimum of 32° ranged from 3 to 6, the average for the State being 4. The warmest period prevailed from about the 11th to the 19th.

PRECIPITATION

The average precipitation, 102 stations reporting, was 3.07 inches, or 0.74 inch less than the 60 years' average. There was a small excess over the usual in most of the northwestern plateau, but deficiencies in all other divisions. The northeastern plain received about 72 per cent of the normal, the southeastern lowlands, 75 per cent, the Ozark Plateau, 80 per cent, and the southwestern plain 63 per cent of the normal. This April, however, averaged more than one inch wetter than April, 1930. The greatest local monthly amount was 6.23 inches, at Downing, Schuyler County; several stations including Columbia and Jefferson City thence east and northeast received less than 1.50 inches of rain. The greatest amount that fell in any twenty-four consecutive hours was 2.40 inches, at Kirksville, Adair County, on the 20th. Snow flurries occurred on the 21st, confined mostly to the northwestern and extreme northern counties.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Locally on the 3d, and 17th.

Frosts.—Light on the 5th, 6th, 22d, 23d, 26th, and 28th. Heavy.—4th, 6th, 7th, 8th, 14th, 22d, 23d, 27th, and 28th. Killing.—1st, 4th, 5th, 22d, 23d, and 27th.

(Continued on Page 19)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.07	78	51	54	249	63	4,708	6.5	21	sw.	13
Hannibal	30.08	77	55	..	...	..	5,025	7.0	24	sw.	12
Kansas City	30.08	75	53	54	258	65	5,842	8.1	32	n.	20
St. Joseph	30.07	77	52	53	244	61	5,173	7.2	25	nw.	20
St. Louis	30.06	71	49	53	265	67	6,889	9.6	28	nw.	21
Springfield	30.09	76	53	57	258	65	5,814	8.1	30	nw.	20
Cairo, Ill.	30.07	82	56	57	...	..	5,248	7.3	27	nw.	21
Keokuk, Iowa	30.06	72	52	57	237	59	4,345	6.0	22	sw.	12

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR APRIL

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**55.1**	.....	**92**	**19**	**3.81**	.....	**3.60**	**0.7**	**9**	**12**	**8**	**10**
1888	57.9	+ 2.8	91	20	1 83	−1.98	....	....	5	..	..	..
1889	55.7	+ 0.6	90	26	2.52	−1.29	....	....	8	..	..	..
1890	56.2	+ 1.1	93	24	3.17	−0.64	....	....	8	..	..	..
1891	56.8	+ 1.7	93	15	3.90	+0.09	....	....	9	..	..	..
1892	53.1	− 2.0	88	26	5.66	+1.85	4.25	....	11	9	8	13
1893	53.9	− 1.2	95	19	7.84	+4.03	5.50	....	12	8	9	13
1894	56.1	+ 1.0	93	20	3.17	−0.64	2.49	T.	8	12	10	8
1895	57.9	+ 2.8	100	24	1.95	−1.86	2.88	T.	7	14	8	8
1896	61.9	+ 6.8	92	17	3.51	−0.30	3.00	0.0	9	11	12	7
1897	54 4	− 0.7	88	21	4.55	+0.74	3.50	T.	10	10	11	9
1898	52.5	− 2.6	90	14	3.65	−0.16	3.25	T.	10	12	9	9
1899	54.0	− 1.1	96	6	3.70	−0.11	3.76	3.8	8	12	9	9
1900	56.7	+ 1.6	89	21	3.36	−0.45	3.82	0.7	9	11	10	9
1901	53.3	− 1.8	94	24	2.85	−0.96	2.23	1.8	8	14	7	9
1902	53.9	− 1.2	95	19	2.66	−1.15	4.35	T.	11	13	11	6
1903	55.9	+ 0.8	91	26	3.54	−0.27	4.06	1.2	9	11	10	9
1904	49 0	− 6.1	84	19	5.75	+1.94	6.10	2.7	9	15	6	9
1905	54.9	− 0.2	92	20	3.19	−0.38	4.00	0.3	6	14	8	8
1906	59.5	+ 4.1	93	22	2.24	−1.57	2.45	0.0	8	17	7	6
1907	48.7	− 6.4	89	16	3.43	−0.38	2.75	T.	8	11	8	11
1908	56.6	+ 1.5	90	18	5.30	+1.49	3.30	T.	11	11	8	11
1909	54.8	− 0.3	93	19	4.35	+0.54	3.80	T.	8	13	9	8
1910	54.8	− 0.3	95	21	3.51	−0.30	3.50	0.9	11	12	7	11
1911	53.5	− 1.6	89	20	4.99	+1.18	4.27	T.	10	12	8	10
1912	56.0	+ 0.9	97	24	5.98	+2.17	4.50	0.7	10	13	7	10
1913	56.2	+ 1.2	94	25	3.33	−0.48	3.90	T.	7	16	5	9
1914	55.2	+ 0.1	91	18	3.14	−0.67	3.00	T.	8	12	7	11
1915	61.9	+ 6.5	96	18	2.03	−1.78	2.08	T.	7	16	8	6
1916	53.5	− 1.6	93	21	3.23	−0.58	2.35	1.9	10	11	8	11
1917	53.2	− 1.9	89	19	5.97	+2.16	4.80	1.2	12	12	6	12
1918	50.8	− 4.3	93	19	5.10	+1 29	3.50	0.9	11	12	6	12
1919	55.3	+ 0.2	94	20	3.01	−0.80	3.25	T.	9	12	7	11
1920	50.2	− 4.9	89	4	3.95	+0.14	2.98	4.8	11	11	7	12
1921	56.0	+ 0.9	91	19	5.37	+1.56	4.20	1.1	10	13	7	10
1922	57.3	+ 2.2	91	24	6.21	+2.40	5.49	T.	11	13	6	11
1923	54.2	− 0.9	91	16	3.12	−0.69	2.50	0.4	8	14	8	8
1924	56.6	+ 1.5	95	11	2.07	−1.74	2.35	T.	6	14	8	8
1925	61.0	+ 5.9	92	24	4.11	+0.30	3.51	0.0	10	12	9	9
1926	49.9	− 5.2	91	11	2.46	−1.35	3.19	2.4	8	14	6	10
1927	57.7	+ 2.6	94	18	8.46	+4.65	4.85	T.	14	10	7	13
1928	51.6	− 3.5	88	16	4.79	+0.98	3.78	0.2	8	13	7	10
1929	57.4	+ 2.3	96	27	6.15	+2.34	4.35	0.0	12	11	8	11
1930	59.1	+ 4.0	96	23	2.03	−1.78	2.50	0.0	8	14	8	8
1931	54.8	− 0.3	90	22	3.07	−0.74	2.40	T.	9	14	6	10
.....	....	.....	..	..	....	.....	....	....	..	..	..	..

Climatological Data for April, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	55.7	+ 1.6	84	8†	29	1	47	2.61	−0.87	0.80	0	11	18	3	9	se.	O. K. Benecke
Clifton Hill	Randolph	731	32	53.0	− 0.5	84	8	25	1†	40	1.94	−2.42	0.80	0	13	13	6	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	54.7	− 0.2	83	8	30	5	34	1.42	−2.35	0.48	T.	6	11	8	11	w.	U. S. Weather Bureau
Downing	Schuyler	876	10	52.0	− 1.2	84	8	27	1	37	6.23	+2.48	1.90	T.	11	14	5	11	n.	James Taylor
Elsberry	Lincoln	449	0	55.4	.....	89	15	28	6	49	2.24	.....	0.80	0	7	12	2	16	nw.	Ray E. Mills
Fayette	Howard	661	51	53.4	− 0.9	85	8	27	1†	44	2.11	−1.43	0.98	0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	54.0	− 0.3	82	13	28	6	43	1.46	−2.87	0.48	0	8	14	6	10	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	3.62	−0.38	1.92	0	7	15	3	12	nw.	J. W. Pulliam
Hannibal	Marion	534	39	54.4	+ 1.0	81	8	33	1	36	2.18	−1.01	0.86	0	9	13	4	13	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	56.0	− 0.1	87	11†	29	1†	40	1.38	−2.16	0.52	0	6	11	4	15	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	52.4	+ 0.7	84	8	26	1	38	5.11	+1.47	2.40	0	9	16	2	12	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	53.4	− 0.2	83	14	28	6	40	1.58	−1.80	0.40	0	6	20	6	4	s.	Stark Bros. Nurseries
Macon	Macon	875	32	53.6	+ 0.5	83	9†	26	2	37	3.13	−0.06	1.25	0	8	19	0	11	w.	W. C. Brown
Mexico	Audrain	800	42	55.4	+ 1.7	85	8	29	1	40	1.41	−2.26	0.45	0	6	21	0	9	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	1.97	−1.74	0.83	0	6	14	6	10	e.	J. S. Conway
St. Charles	St. Charles	456	43	56.9	+ 1.5	86	8	32	5	44	3.46	−0.22	0.80	0	9	10	13	7	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	57.3	+ 1.2	84	15	35	1	36	3.23	−0.58	1.66	T.	12	13	11	6	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	56.4	− 1.2	84	8	34	5	36	2.56	−1.45	1.07	0	12	19	5	6	nw.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	2.28	−1.25	0.85	0	8	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	33	53.0	+ 0.1	83	15	29	1	41	3.35	−0.26	1.10	0	8	14	5	11	n.	Frank Hall
Unionville	Putnam	1,062	38	52.4	+ 1.7	84	8	25	1	40	4.52	+0.71	1.15	T.	12	16	3	11	n.	Geo. W. Davis
Warrenton	Warren	816	49	56.2	+ 1.7	84	8†	31	1†	41	1.77	−2.54	0.47	0	7	10	12	8	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	53.2	+ 0.9	81	8	31	1	32	3.27	+0.28	1.61	T.	11	12	5	13	n.	U. S. Weather Bureau
Section means and	extremes	.....	..	54.4	+ 0.4	89	15	25	1†	49	2.73	−1.08	2.40	T.	9	15	5	10	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	57.6	.....	89	16	30	2	44	2.69	.....	1.18	0	9	15	9	6	s.	Jeff. King
Caruthersville	Pemiscot	265	35	60.3	+ 0.1	90	17	37	23	38	2.65	−1.47	1.00	0	6	13	8	9	s.	Sam Smith
Doniphan	Ripley	344	27	56.2	− 1.8	..	..	..	..	..	3.32	−2.05	1.58	0	3	17	11	2	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	54.7	− 2.2	85	16	28	2	41	3.98	−0.49	1.40	0	11	9	6	15	n.	John G. Putz
Marble Hill	Bollinger	470	36	58.2	+ 1.5	86	16	31	22†	46	3.18	−1.26	1.02	0	7	16	2	12	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	4.08	−1.00	1.28	0	9	16	6	8	s.	John A. Spence
Poplar Bluff	Butler	339	27	58.0	− 1.2	87	16	32	2†	42	2.47	−2.00	0.91	0	6	16	5	9	sw.	J. H. Wolpers
Sikeston	Scott	318	30	59.4	+ 1.5	87	16†	34	22	40	3.32	−0.94	1.10	0	7	15	4	11	s.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	56	58.8	+ 0.7	85	16	38	22	28	4.00	+0.28	1.39	0	11	10	6	14	n.	U. S. Weather Bureau
Section means and	extremes	....	..	57.9	− 0.2	90	17	28	2	46	3.30	−1.17	1.58	0	8	14	6	10	s.	
Ozark Plateau																				
Arcadia	Iron	926	49	52.1	− 3.2	85	17	27	6†	47	2.83	−1.79	1.02	0	7	17	5	8	nw.	Arcadia College
Aurora	Lawrence	1,370	39	54.7	− 1.0	81	8	29	6	35	3.79	−0.56	0.85	0	12	10	9	11	nw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	55.6	− 1.2	84	16	30	6	42	3.99	−0.73	1.26		9	17	7	6	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	55.8	.....	82	16†	28	7	..	1.70	.....	1.54	0	7	24	5	1	sw.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	1.87	.....	0.50	0	9	12	7	11	s.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	53.6	− 3.7	80	19	22	5	41	4.96	+0.92	1.45	0	11	12	7	11	e.	H. E. Dean
Eldon	Miller	934	35	53.7	− 1.7	83	15	29	1†	45	1.64	−2.82	0.41	0	8	10	12	8	nw.	E. H. Shepherd
Farmington	St. Francois	918	20	56.0	− 0.9	85	16	32	2†	44	2.82	−1.14	0.72	0	14	12	11	7	sw.	Robert Forsyth
Goodland	Iron	1,000	37	53.5	− 1.1	84	16	28	6†	50	3.84	−1.25	0.97	0	8	14	6	10	n.	F. M. Adams
Greenville	Wayne	381	7	55.8	.....	86	16	29	2†	46	3.70	−1.29	1.50	0	4	14	12	4	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	3.43	.....	1.01	0	8	18	3	9	sw.	A. W. Madison
Koshkonong	Oregon	958	30	57.9[a]	+ 0.1	84	16	32	5	36	2.53	−2.44	0.87	0	9	16[a]	2[a]	11[a]	sw.	R. M. Hitt
Lebanon	Laclede	1,265	44	52.0	− 3.7	80	8†	27	1†	37	2.92	−1.26	0.84	0	6	14	3	13	w.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	55.9	− 0.1	85	15	30	22	40	2.45	−1.21	0.65	0	6	14	5	11	sw.	C. S. Crow
Mountain Grove(near)	Wright	1,463	30	55.4	− 1.2	81	15†	29	1	38	3.82	−0.96	0.94	0	7	9	16	5	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	55.0	− 3.0	80	15†	26	5†	37	5.15	+1.03	1.03	0	11	9	9	12	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	56.2	+ 1.2	83	8	30	1	44	2.54	−2.12	0.82	0	7	6	13	11	w.	F. H. Lane
Salem(near)	Dent	1,173	27	54.2	− 1.2	81	15†	27	6	43	3.17	−1.38	0.59	0	11	12	8	10	s.	A. C. Leech
Seligman	Barry	1,542	29	54.0	− 1.8	..	..	..	..	..	3.47	−0.46	....	....	..	..	..	..	..	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	53.6	− 1.8	78	8†	27	6	36	3.84	−0.12	0.71	0	11	14	5	11	nw.	Ira H. Hailey
Springfield	Greene	1,324	43	54.3	− 1.8	79	8	32	5	32	3.80	−0.06	1.70	T.	9	19	5	6	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	54.6	− 1.5	86	16	22	5	50	3.33	−0.98	1.70	T.	9	13	8	9	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	54.7	− 1.1	81	8†	27	5	36	2.79	−1.47	0.92	0	11	10	12	8	sw.	W. G. Bigelow
Clinton	Henry	765	38	54.6	− 1.1	83	18	29	5†	38	2.48	−1.56	0.60	0	12	13	8	9	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	53.1	− 0.7	84	8	27	5	42	2.66	−0.73	0.85	0	10	9	5	16	s.	John H. Patterson
Lamar	Barton	980	44	57.0	+ 0.4	84	15	30	5†	38	2.24	−1.91	0.65	0	8	16	5	9	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	54.1	− 1.0	82	8†	29	6	35	1.91	−1.86	0.80	0	7	15	8	7	sw.	J. E. Wheeler
Marshall	Saline	779	43	55.4	+ 1.0	84	8	27	1	35	2.15	−1.54	0.78	0	9	16	5	9	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	54.8	− 0.3	86	15	28	5	43	2.96	−0.83	0.69	0	7	14	3	13	s.	George A. Kaupp
Warrensburg	Johnson	878	44	54.2	− 1.9	84	8	27	5	47	2.58	−0.62	0.92	0	9	18	0	12	sw.	E. A. Markey
Warsaw	Benton	687	30	55.8	0.0	85	8	27	6	38	2.17	−2.05	0.74	0	6	11	7	12	s.	Everett Martin
Section means and	extremes	.....	..	54.9	− 0.5	86	15	27	1†	47	2.44	−1.40	0.92	0	9	13	6	11	sw	
Northwest Plateau																				
Bethany	Harrison	916	38	52 0	+ 0.8	85	8	24	1	42	2.71	−0.51	1.37	0	6	19	4	7	nw.	A. S. Cumming
Chillicothe	Livingston	779	21	52.7	− 0.6	88	9	24	1	45	4.67	+0.23	1.66	0	14	15	9	6	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	42	54.0	+ 2.1	87	8	28	1†	44	2.46	−0.35	1.04	T.	7	10	9	11	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	54.0	+ 0.2	85	8	26	5	37	3.63	+0.09	1.75	T.	12	19	2	9	s.	Fred L. Stiff
Grant City	Worth	1,134	27	52.4	+ 0.9	85	8	25	1	40	2.31	−0.75	1.06	T.	8	14	9	7	sw.	W. P. Spillman
Kansas City	Jackson	963	42	55.3	+ 0.5	83	8	32	5	30	2.62	−0.52	1.07	T.	11	13	6	11	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	52.0	− 0.4	84	9	24	1	41	4.98	+1.94	1.85	0	10	15	3	12	sw.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	4.74	.....	1.52	0	11	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	56.0	+ 1.9	85	8	29	5	36	4.18	+0.82	1.14	0	12	14	7	9	n.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	52.4	+ 2.3	87	8	25	5	42	2.19	−0.72	0.48	0	10	12	9	9	s.	J. R. Brink
Oregon	Holt	1,048	75	55.4	+ 1.5	87	8	27	5	41	3.29	0.00	1.23	0	10	15	5	10	sw.	Mina Wright
St. Joseph	Buchanan	967	23	54.2	+ 0.1	85	8	29	5	35	3.56	+0.37	1.81	T.	9	15	6	9	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	52.6	+ 0.4	88	8	25	1	48	3.36	+0.19	1.20	0	10	13	3	14	sw.	Albert Volker
Trenton	Grundy	822	35	53.8	+ 1.2	86	8	26	1	40	4.85	+1.58	2.29	T.	14	17	3	10	n.	W. H. Estes
Section means and	extremes	.....	..	53.6	+ 0.8	88	8	24	1	48	3.54	+0.18	2.29	T.	10	14	6	10	sw.	
State means and	extremes	.....	..	54.8	− 0.3	90	17	22	5	50	3.07	−0.74	2.40	T.	9	14	6	10	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for April, 1931

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri		T.								.38					.27		.05				.72			.12	.05	.43						2.02
Bowling Green	Mississippi									.20											.25			.12	.10	.34							1.01
Brunswick	Grand	.02		.22							.26						.06	.08		.26	.15	.80			.35	.14	.27						2.61
Clifton Hill	Chariton		.01	.07						.31					.01		.06			.01	.80	.10		.02	.19	.28	.07	.01					1.94
Columbia***	Missouri		T.	T.						.45				T.			.01		T.		.48	T.		.07	.09	.32					T.		1.42
Downing	Mississippi		.12	.37						.75						.97	1.08			.44	1.90	.10	.02		.19	.29							6.23
Edina	do		.30							.56							.30		.18	.55	1.40			.18	.09	.30							3.86
Elsberry	do		T.							.30	.20										.30	.80			.13	.42	.09						2.24
Eolia	do																																
Fayette	Missouri									.38					.08						.07	.98			.18	.04	.38						2.11
Fulton	do									.48				.10			.02					.29		.06	.09	.41					.01		1.46
Gorin	Mississippi		.28							.41							.13			.40	1.92				.17	.31							3.62
Hannibal***	do		.86	T.					.48					T.	T.	.03			.04	.29	.01		.01	.11	.35							2.18
Hermann	Missouri		T.	.01							.73				T.			.03				.41			.07	.08	.43						1.76
Jefferson City	do									.52							.08					.33			.10	.05					.30		1.38
Kahoka	Mississippi			.33							.50							.18		.50	.80	1.52			.15	.10	.23						4.31
Kirksville	do		.08	.18						.50							.89			.40	2.40	.10			.20	.36							5.11
Knox City	do			.34							.51							.10		.12	.48	1.11		T.	.14	.04	.28						3.12
Laddonia	do										.46											.22			.16	.10	.34						1.28
LaGrange	do			.57						.31							T.					.87	.27		.11	.07	.32						2.52
Lewistown	do																																
Louisiana	do		.15																			.40			.18	.10	.40						1.58
Lucerne	Grand		.11	.33							.36					.65	.92	.09		.25	.69	.97			.18	.19	.24						4.98
Macon	Chariton			.60							.45							.06			.15	1.25			.12	.08	.42						3.13
McCune	Mississippi																																
Memphis	do				.44						.50							.40	.33	.45	1.25	1.38	T.		.17	.12	.23						5.27
Mexico	do	.06									.45				T.					T.		.27			.20	.10	.33						1.41
Milan	Grand									.38						.12	1.33	.08		.61	1.30	1.02			.11	.15	.18						5.28
Monroe City	Mississippi			.83		T.				.27							.03				.24	.19		T.	T.	.41							1.97
New London	do			.07							.47							.05		.39		.28			.08	.05	.22						1.61
Pacific	Meramec		.02								.56					.12		.16				1.12			.05	.12	.40						2.55
Palmyra	Mississippi			.57							.24								.03		.59				.12		.40						1.95
Paris	do			.18							.33							.14				.46			.10	.03	.26						1.50
Perry	do			F.							.47							.03			T.	.03		T.	.16	.10	.27						1.06
Philadelphia	do				.44													.02			.06	.48				.04	.25						1.29
Plevna	do																																
St. Charles	Missouri		T.			T.				.34	.40				.53			.10		T.	.49	.80			.11	.47	.22						3.46
St. Louis (1)***	Mississippi		.04	.01		.02				.37	.21						T.	.23		T.	1.53	.13		T	.13	.54	.01				.01		3.23
St. Louis (2)*	do		.03	T.		.02				.28	.16			T.				.22		.17	.99	.08		.01	.11	.48	.01				T.		2.56
Shelbina	do				.45						.45							.02			.03	.85			.09	.16	.23						2.28
Steffenville	do		.30	.30						.70							.15				1.10	.15		T.	.15	.50							3.35
Troy	do			T.							.47											.64			.12	.13	.50						1.86
Union	Meramec						.02				.82				.02			.08				.76			.06	.09	.52						2.37
Unionville	Chariton		.10	.50						.40						.15	.85	.25		.20	1.10	.05		T	.22	.50	.20						4.52
Valley Park	Meramec		T.	T							.48				T.			.14			T	2.45			T.	T.	.43						3.50
Warrenton	Mississippi		T.	06						.36	.16							T.			T.	.47		T.	.11	.33	.28						1.77
West Ely	do			1.29							.37							.04	T.			.28			.07	.09	.30						2.44
Winfield	do									.66											.53				.12	.60							1.91
Keokuk, Ia.***	do		.39	.08						.38					.02	T.	.27			.18	1.53	.02		.02	.12	.26							3.27
Southeast Lowlands																																	
Campbell	St. Francis			.02	.11						.55									.08		1.18			.08	.02	.63				.02		2.69
Cape Girardeau	Mississippi	.04			.12		.05				1.20	.04										1.10			.12	.02	1.01						3.70
Caruthersville	do	.36			.12						.15				.02							1.00					1.00						2.65
Dexter	St. Francis	.02			T.						.88									T.		.62			.12		1.05				T.		2.69
Douglas	Black									.42														1.58			1.32				T.		3.32
Fisk	St. Francis	.12									.98	T.			T.					T.		.46			.05		1.11				.02		2.74
Jackson	Mississippi	.06		.56		.03					1.40				.04			.02			.03	.61			.13	.98					.12		3.98
Marble Hill	do			.48							1.02			.10								.92		.12	.42						.12		3.18
Morehouse	do			.12			.07				.61			.58								1.05			.08	.17	1.28				.12		4.08
New Madrid	do	.26			.35						.36	.11				.09						1.22			.13	.04	.77				.02		3.35
Parma	St. Francis	.11			.10						.80									.08		.82					.60						2.51
Poplar Bluff	Black	.08									.91									T.		.47			.11	.05	.85				T.		2.47
Sikeston	Mississippi			.08							.72			.10								.95				.09	1.10				.28		3.32
Cairo, Ill.***	do		T.	.16		T.				.08	.78			.01	.06			T.		T.	.36	1.03		.03	.01	1.37					.11		4.00
Ozark Plateau																																	
Arcadia	St. Francis	.04		.09				T.			.86				T.			T.				.60		.10		.12	1.02						2.83
Aurora	Neosho									.53	.45				.04			.12	.06		.56	.54		.25	.20	.85	.11				.08		3.79
Birchtree (near)	Black									.12	1.26							.31			.06	1.07		.12	.17	.76	.12						3.99
Buffalo	Osage									.40				.03								.54		.11	.09	.42	.11						1.70
Caplinger Mills	do			T.						.50				T.				.08			.15	.15		.12	.05	.40	.06				.36		1.87
Chaonia	St. Francis	.08		.01	.06						1.39	.02						.01	.19			1.06			.06	.05	1.16						4.09
Dean	Neosho									1.10	.20				.30				T.	.38	1.45	.50		.18	.30	.22	.28	T.			.05		4.96
Eldon	Missouri		.06								.41					.05				.26		.32			.16	.03	.35						1.64
Farmington	St. Francis	.06	.02	.12		.04				.07	.41					.05		.34				.72		.05	.15	.34	.43				.02		2.82
Fredericktown	do				.10						1.41	.04									.04	1.08			.11	.04	.84						3.66
Galena	White										.89					.30				.18			.10		.76	.53	.26	.25						3.27
Goodland	Black			.12							.52									.58		.32	.97			.51	.79				.03		3.84
Greenville	St. Francis			T.		T.				.55	1.50							T.						T.		1.37	.28						3.70
Hailey	White									1.01					.18					.11		.69	.08		.74	.31	.31				T.		3.43
Koshkonong	Black			.12						.29	.43											.87		.08	.12	.46					.04		2.53
Lebanon	Osage									.84							.35				.69			.30	.02	.72							2.92
Leeper	Black			.17	.19						1.38									.19		1.09			.16	.10	1.33						4.61
Lockwood	Osage									.40				T.							.65			.35	.18	.54					.33		2.45
Mountain Grove	White		T.	.07							.80			T.	T		T.	.83		T.		.71			.45		.94				.02		3.82
Neosho	Neosho			T.						.60	.15			.08						.90	.31	.60	1.03		.20	.23	.97				.08		5.15
Owensville	Gasconade										.38													.45	.10	.15	.45						1.53
Ozark Beach	White										.98					.48		.49				.51			.46								2.92
Rolla	Meramec										.82					.05		.18	.04			.82				.04	.59						2.54
Salem (near)	do			T.						.23	.27				.25			.59	.09		.26	.46		.12	.15	.57	.18				T.		3.17
Seligman	Neosho									1.00					.20				.10		.96	.42		.12	.33	.34					T.		3.47
Seymour (near)	White		T.							.71	.41				.70	T.		.11	T.	T.	.20	.50		.12	.24	.69	.12				.04		3.84
Springfield***	do		T.	T.	T.					1.68	.02				.13	T.		.05		T.	T.	.68	T.		.24	.12	.74				.14		3.80
Steelville	Meramec			.13							.95					T.			.60				.51			.25	.16	.64						3.24
Stover	Missouri										.42												.78			.19		.53						1.92
Tuscumbia	Osage		.02								.65								.06		.02		.43			.21	.03	.42						1.84
Williamsville	Black	.06		.02							1.30	.01									.01		.47			.09		1.09						3.05
Willow Sprgs. (near)	White	.03		.03							.90					.30	.15		.41	.07	.43		.45			.48		.78				.01		4.04

Continued on next page

Daily Precipitation for April, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																
Appleton City	Osage			.03						.29				T.	.33		.06			T.	.92	.03		.15	.07	.48	.09				.34		2.79
Clinton	do									.36					.17		.05	.05		.06	.60	.05		.20	.05	.45	.12				.32		2.48
Concordia‖	Missouri									.15	.23				.11		.27	.12			.51				.30	.50							2.19
Harrisonville‖	Osage	.03								.16						.25	.13	.64		.02		.85			.16	.07	.35						2.66
Joplin‖	Neosho									.91				.14	.30		.50		.21		.70			.15	.10	.40				.22		3.63
Lamar‖	do									.65				.10					T.		.45			.20	.10	.44			.25	.05		2.24
Lamonte	Missouri									.25					.15		.05				.80			.12		.45	.04			.05		1.91
Marshall	do									.25					.16		.05				.78	.13		.14	.13	.40	.11					2.15
Nevada	Osage									.50					T.		.04			.69	.66			.14		.53				.40		2.96
Osceola‖	do										.36							.07				.40		.04	.18	.08	.39					1.55
Warrensburg	Missouri		.08											T.	.58		.09			.03	.92	.07		.13		.52				.16		2.58
Warsaw	Osage										.46							.01		.25		.74	T.	T.	.20		.51					2.17
Waverly ‖	Misouri	.03	.02	.11	T.						.46						.07	.15		.21	.02	1.26			.20	.01	.44					2.98
Northwest Plateau																																
Albany‖	Grand																															
Bethany	do		T.							.24						T.	.56				1.37			.04	.19	.31						2.71
Chillicothe‖	do	.04		.06	T.					.08	.40				T.	.04	.58	.03		.13	1.66	.91	T.		.22	.14	.36		.02			4.67
Conception	Missouri		.06							.14						T.	.52				1.04			.05	.23	.42						2.40
Edgerton	do	.01	.09	.02						.36					.25		.50	.01		T.	1.75	T.		.05	.23	.33	.03	T.				3.63
Gallatin ‖	Grand									.02	.64					.15	.54	.04		.10	1.25	1.14			.18	.20	.24					4.56
Grant City	do		.10							.08						.14	.37			T.	1.06			.04	.19	.33						2.31
Kansas City***	Missouri		.04							.39					.04	.08	.24		.16	.02	1.07	T.		.13	.08	.37				T.	T.	2.61
Kidder ‖	Grand		T.							.13	.37						1.85	.03		.17	1.00	.90			.10	.15	.28					4.99
King City	Missouri		.12	.02					.23						.39	.23	1.32			.24	1.52			.02	.28	.37						4.77
Lexington	do			.07						.25	.30					.21	.85	.12		.13	.22	1.14				.31	.10	.48					4.11
Maryville ‖	do	.04	.04								.10				T.		.16			.25	.42	.48			.25	.21	.24					2.19
Oregon	do		.13	.01						.05					T.	.02	1.11			.03	1.23			.05	.27	.39						3.28
St. Joseph***	do	T.	.06	T.	T.					.41					T.	.06	.59			.18	1.65			.08	.25	.28						3.56
Tarkio	do		.04							.19					.03	1.20			.20	.06	.94			.10	.27	.33						3.33
Trenton	Grand		.02	.03						.45					.15	.30	.98	.03			2.29	.03		.04	.15	.33	.03		.02			4.84

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of obser vation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fal not recorded. * Precipitation is for 24-hour period midnight to midnight.

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Hail.—A little hail fell at Tarkio and Trenton on the 14th, or 15th.

Halos, lunar.—29th.

Halos, solar.—2d, 7th, 13th, 14th, 15th, and 30th.

Thunderstorms.—Local 2d, 10th, 14th, 15th, 17th, 18th, 21st, and 25th. Mostly general, 16th, 19th, and 20th.

Winds.—The highest winds reported were 30 to 32 miles an hour on the 20th at a few stations.

ERRATA

In report for February, 1931, page 7:
Clifton Hill, monthly mean temperature 39.6; departure plus 10.4.
Rolla, days .01 or more precipitation, 7.
Chillicothe, prevailing wind direction, SE; and at Morehouse S.

Daily Temperatures for April, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	53	56	56	49	58	67	82	84	73	72	80	79	80	84	77	78	78	83	75	78	58	55	58	51	54	54	59	76	79	75	..	68.7
	Minimum	29	41	40	35	38	31	35	41	46	43	45	52	48	56	53	59	48	31	46	37	36	34	37	40	45	36	44	37	48	50	..	42.0
Columbia	Maximum	50	67	48	41	54	61	76	83	66	69	77	78	79	77	82	72	74	80	77	67	42	54	46	51	50	49	57	70	76	61	..	64.5
	Minimum	30	42	41	34	30	33	45	54	46	44	51	54	53	58	57	58	55	52	60	42	38	34	36	43	45	37	35	36	51	52	..	44.9
Fayette	Maximum	55	63	44	44	58	65	77	85	58	74	81	80	82	80	84	74	73	83	78	65	58	57	48	52	52	52	61	74	87	61	..	66.8
	Minimum	27	29	42	33	28	27	33	41	51	41	43	44	42	49	51	52	52	43	47	55	36	30	36	39	41	36	32	34	39	51	..	40.1
Hannibal	Maximum	50	56	46	42	55	59	76	81	66	69	79	78	80	79	81	70	77	79	77	69	45	50	49	48	50	47	54	72	74	64	..	64.1
	Minimum	33	36	38	34	35	34	40	52	47	44	46	54	54	59	59	58	53	50	59	43	40	39	36	39	44	37	35	42	55	44	..	44.6
Jefferson City	Maximum	52	69	62	48	57	65	82	86	72	70	87	78	81	77	77	78	83	82	78	70	46	46	57	47	50	52	61	73	87	68	..	68.0
	Minimum	29	43	43	33	29	32	42	56	46	42	48	51	52	53	56	55	56	49	56	43	37	39	33	36	41	45	33	40	50	51	..	44.0
Kirksville	Maximum	51	50	45	44	56	63	74	84	78	71	78	77	79	79	82	70	77	78	75	73	43	49	47	42	47	48	57	72	75	65	..	64.3
	Minimum	26	33	37	30	32	32	38	48	44	40	40	51	48	55	53	56	48	49	55	42	36	33	34	34	39	32	31	39	39	42	..	40.5
Louisiana	Maximum	50	50	48	47	45	58	75	82	76	65	75	80	82	83	80	75	77	79	80	72	64	50	50	52	50	52	50	74	75	70	..	65.5
	Minimum	35	30	34	32	30	28	35	45	43	38	44	43	45	52	54	50	50	42	60	50	40	38	30	40	45	40	34	35	55	44	..	41.4
Macon	Maximum	51	53	55	47	41	57	62	75	83	76	72	80	79	80	80	83	72	79	81	77	76	51	55	47	47	50	50	58	73	79	..	65.6
	Minimum	35	26	38	39	31	30	32	38	50	44	41	44	54	51	56	55	56	49	48	56	42	36	33	34	37	42	33	31	36	48	..	41.5
Mexico	Maximum	54	65	59	45	58	63	79	85	70	71	81	79	83	79	83	78	76	81	77	72	46	56	49	51	50	51	60	73	80	67	..	67.4
	Minimum	29	35	41	32	30	29	39	51	54	41	49	51	47	55	59	55	54	47	59	55	37	33	33	41	44	36	35	39	50	46	..	43.5
St. Louis(1)	Maximum	53	63	56	55	56	59	79	83	74	68	79	76	82	77	84	79	74	77	80	71	52	54	50	50	53	50	59	72	78	62	..	66.8
	Minimum	35	40	41	39	36	38	43	59	48	47	52	58	59	60	61	59	58	56	62	44	41	40	40	43	46	42	40	44	56	47	..	47.8
Unionville	Maximum	52	50	44	45	56	62	72	84	75	72	80	76	80	80	82	72	78	80	77	72	45	47	46	42	46	47	57	75	75	70	..	64.6
	Minimum	25	33	35	30	32	30	40	47	43	40	40	50	48	55	55	55	45	47	55	40	35	32	33	32	40	30	30	40	50	42	..	40.3
Warrenton	Maximum	50	65	62	51	55	59	79	84	82	67	79	78	80	77	84	80	76	79	79	77	55	53	50	49	50	50	57	71	77	74	..	67.6
	Minimum	31	36	44	34	31	33	38	54	48	44	50	53	52	54	58	55	57	53	58	54	39	35	33	41	45	38	35	39	53	47	..	44.7
Southeast Lowlands																																	
Campbell	Maximum	55	69	68	56	59	65	75	79	74	67	78	81	81	84	87	89	73	86	83	79	72	65	62	63	60	65	64	72	84	72	..	72.2
	Minimum	36	30	51	38	35	35	31	43	50	46	39	40	45	50	47	47	57	49	51	58	42	32	37	41	49	45	34	35	47	53	..	43.1
Caruthersville	Maximum	44	52	78	71	55	60	62	77	79	74	71	76	78	82	83	87	90	80	85	83	88	73	63	63	59	64	65	64	72	83	..	72.0
	Minimum	39	38	40	52	45	38	40	44	53	56	50	45	48	58	58	54	55	59	55	57	63	46	37	42	47	53	50	42	43	50	..	48.6
Doniphan	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	72.7
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39.6
Jackson	Maximum	54	62	61	59	57	57	70	73	68	64	71	73	82	81	83	85	80	78	81	76	69	66	45	55	57	57	61	68	77	74	..	68.1
	Minimum	34	28	49	38	32	31	29	47	49	44	36	40	44	53	47	48	57	45	49	57	39	30	30	40	46	41	31	31	40	54	..	41.3
Poplar Bluff	Maximum	59	69	63	58	62	65	75	79	74	71	77	79	81	82	86	87	75	81	79	77	72	66	60	56	58	60	66	74	80	63	..	71.1
	Minimum	37	32	55	42	38	36	33	51	54	48	40	42	48	55	49	50	61	51	53	58	43	32	37	43	50	45	35	34	44	54	..	45.0
Sikeston	Maximum	56	67	66	56	60	61	77	81	79	75	78	79	81	82	85	87	84	81	87	83	77	59	61	60	60	62	62	70	81	77	..	72.5
	Minimum	38	38	54	43	38	35	37	49	50	48	42	43	50	60	55	57	60	52	59	56	44	34	37	43	50	40	38	38	47	58	..	46.4
Cairo, Ill	Maximum	52	66	67	55	55	58	73	78	72	64	75	76	80	82	83	85	70	78	80	74	62	56	54	58	60	59	61	67	77	66	..	68.1
	Minimum	39	40	49	43	39	40	45	54	58	50	48	50	61	63	57	57	62	56	59	62	42	38	42	45	50	43	40	45	50	58	..	49.5
Ozark Plateau																																	
Arcadia	Maximum	45	55	65	58	54	55	62	76	81	71	68	78	76	80	78	82	85	72	78	79	74	69	59	51	49	54	57	62	71	75	..	67.3
	Minimum	33	30	29	37	32	27	27	29	47	44	35	36	44	44	47	47	45	40	40	51	38	33	29	29	39	40	29	29	29	47	..	36.9
Aurora	Maximum	52	67	55	45	50	64	78	81	73	69	76	78	74	71	79	76	72	73	76	70	43	55	51	48	58	57	60	71	73	69	..	65.5
	Minimum	33	40	44	35	32	29	46	54	45	41	47	47	54	53	53	57	53	52	56	41	35	30	38	40	46	40	32	40	51	52	..	43.9
Birchtree	Maximum	52	67	61	57	58	61	75	79	73	67	76	75	78	76	82	84	76	77	76	77	71	57	55	51	58	60	62	62	78	68	..	68.3
	Minimum	31	36	51	39	32	30	33	45	50	45	39	45	49	49	54	52	55	51	54	45	39	32	39	40	46	42	32	33	42	54	..	42.8
Eldon§§	Maximum	51	71	46	54	55	64	77	82	64	70	77	77	79	70	83	76	75	80	77	70	43	58	47	51	53	54	61	72	79	55	..	65.7
	Minimum	29	29	39	35	37	30	32	37	53	44	44	46	47	50	52	55	56	46	49	58	37	32	32	37	41	39	35	37	40	53	..	41.7
Farmington	Maximum	53	67	58	56	53	59	78	82	71	67	76	78	80	77	81	85	72	77	82	77	67	57	50	49	54	54	62	69	81	69	..	68.0
	Minimum	34	32	49	38	33	32	34	54	52	45	43	46	52	53	51	51	56	45	53	60	40	33	32	41	45	41	32	36	50	53	..	43.9
Koshkonong	Maximum	55	65	64	54	59	62	78	79	70	67	..	77	78	74	83	84	78	80	79	76	59	59	58	52	57	61	62	76	78	67	..	°68.7
	Minimum	33	40	53	41	32	37	44	51	53	46	..	49	56	56	56	62	57	59	56	58	41	34	40	42	50	45	36	42	42	55	..	°47.1
Lebanon	Maximum	48	52	69	57	47	54	63	80	71	62	75	75	76	71	80	77	71	77	77	70	45	56	45	51	59	54	59	70	76	66	..	64.4
	Minimum	27	38	38	33	31	28	28	51	40	40	44	47	51	48	48	51	51	53	53	33	27	27	34	38	36	29	29	34	47	50	..	39.5
Mountain Grove	Maximum	54	66	61	52	57	64	76	79	71	70	76	74	76	71	81	81	75	76	76	72	50	61	53	49	56	59	63	73	75	59	..	66.9
	Minimum	29	38	49	36	32	30	41	50	52	43	47	50	54	51	55	56	52	53	55	48	36	30	38	39	46	39	31	35	48	53	..	43.9
Neosho	Maximum	53	66	66	48	56	65	77	79	77	69	75	78	76	76	80	80	73	77	75	77	47	57	55	52	62	61	61	73	74	72	..	67.9
	Minimum	32	38	46	36	26	26	40	51	46	42	39	44	46	54	47	51	49	51	57	46	37	27	36	42	48	43	32	36	45	54	..	42.2
Rolla	Maximum	52	68	61	51	54	62	78	83	79	68	77	77	80	75	81	79	75	79	78	75	52	56	55	50	57	55	60	72	77	72	..	67.9
	Minimum	30	38	46	36	32	31	34	57	47	44	47	52	55	54	55	52	60	47	59	52	38	33	36	40	45	40	32	38	47	54	..	44.4
Springfield	Maximum	50	66	53	42	51	59	75	79	63	65	72	74	70	69	76	75	69	73	74	70	41	53	47	49	56	53	57	67	73	63	..	62.8
	Minimum	34	43	42	36	32	34	47	54	44	43	48	54	56	55	59	58	54	57	57	38	36	33	41	41	45	39	35	44	52	54	..	45.5
Southwest Plain																																	
Appleton City	Maximum	53	62	54	45	56	63	77	81	72	72	76	77	75	76	81	72	72	80	77	67	44	57	52	52	53	53	63	71	76	69	..	65.9
	Minimum	33	40	42	36	27	33	41	50	45	42	44	47	47	55	53	57	54	52	57	54	35	30	38	40	41	37	32	39	49	54	..	43.5
Clinton	Maximum	50	56	56	57	50	60	70	74	74	73	75	66	77	54	70	73	68	83	70	70	42	52	52	50	50	57	75	76	81	70	..	64.4
	Minimum	35	44	44	44	29	32	40	52	44	53	50	46	53	43	54	55	53	52	57	40	35	29	45	45	46	37	37	45	47	56	..	44.7
Harrisonville§§	Maximum	54	52	51	40	58	65	80	84	53	73	79	78	78	77	81	68	73	82	76	60	44	57	44	51	50	53	65	74	79	62	..	64.7
	Minimum	32	33	39	33	27	30	37	43	52	41	43	48	48	51	53	54	50	50	54	58	33	30	30	38	41	36	32	32	46	51	..	41.5
Lamar	Maximum	54	70	62	51	58	66	78	83	77	73	75	81	77	82	84	75	74	83	81	78	45	58	58	57	60	58	61	73	78	74	..	69.5
	Minimum	33	42	45	36	30	31	44	54	46	41	46	49	50	56	53	58	53	52	59	40	36	30	43	41	48	40	33	39	49	55	..	44.4
Lamonte	Maximum	58	63	50	45	45	63	77	82	66	70	79	79	80	78	82	71	75	82	77	66	41	55	47	53	50	50	58	71	77	65	..	65.2
	Minimum	32	39	41	34	32	29	44	50	45	43	44	49	49	56	53	57	53	50	59	40	35	30	36	41	45	37	31	37	45	53	..	43.0
Marshall	Maximum	51	59	55	45	55	62	76	84	81	70	79	79	80	80	82	79	74	81	80	76	43	56	53	52	51	49	58	72	78	67	..	66.9
	Minimum	27	40	40	34	30	35	42	50	45	43	46	52	51	60	55	58	50	51	59	41	35	32	37	42	45	36	37	41	49	53	..	43.9
Nevada	Maximum	53	65	55	45	56	64	78	82	68	71	76	78	76	76	86	74	72	80	77	70	43	55	49	53	57	54	62	70	75	65	..	66.2
	Minimum	30	40	43	35	28	34	35	54	44	41	47	49	49	56	55	56	54	54	56	39	35	30	41	40	47	38	32	39	50	51	..	43.4
Warrensburg	Maximum	57	60	51	45	58	64	78	84	74	75	79	79	77	75	80	72	77	83	73	71	41	58	49	51	50	52	62	72	79	65	..	66.4
	Minimum	31	37	39	33	27	31	31	50	45	42	46	51	51	55	54	55	51	53	53	38	28	29	36	39	44	37	33	40	48	54	..	42.0
Warsaw	Maximum	53	69	62	50	56	65	77	85	75	71	78	78	78	77	84	78	76	80	78	75	46	58	49	51	55	54	62	72	79	72	..	68.1
	Minimum	29	40	45	36	29	27	39	53	47	42	45	51	46	55	51	53	52	49	58	60	36	33	39	41	46	38	31	35	45	56	..	43.6
Northwest Plateau																																	
Chillicothe	Maximum	47	54	55	48	42	59	67	80	88	72	73	82	80	83	82	84	66	77	83	80	70	53	57	47	44	49	47	61	72	82	..	66.1
	Minimum	24	34	36	31	26	30	34	35	46	40	39	47	44	54	51	55	43	48	58	49	33	30	33	35	38	32	30	36	42	47	..	39.3
Grant City	Maximum	51	51	45	46	56	64	78	85	77	73	81	78	79	78	79	65	72	77	74	68	42	52	45	42	44	48	58	72	78	72	..	64.3
	Minimum	25	37	36	29	30	33	39	49	42	41	41	51	49	50	53	51	46	55	56	37	34	30	34	33	33	31	32	38	51	48	..	40.5
Kansas City	Maximum	52	60	48	38	56	64	81	83	67	72	77	76	78	75	80	68	73	82	76	59	43	56	47	51	49	48	61	71	75	66	..	64.4
	Minimum	34	41	38	32	32	43	51	55	43	45	55	56	58	58	60	55	51	58	59	38	35	34	39	42	42	37	38	49	53	54	..	46.2
Kidder	Maximum	42	57	48	43	54	63	77	77	84	73	71	78	76	79	78	82	69	74	78	77	70	43	54	49	43	49	44	57	70	77	..	64.5
	Minimum	24	37	35	27	32	35	36	46	46	37	44	44	46	53	51	53	44	46	55	46	31	27	34	33	38	30	29	36	44	44	..	39.4
Lexington	Maximum	53	57	49	44	59	63	80	85	76	73	79	78	80	78	82	73	78	82	78	72	43	58	52	52	51	51	62	73	80	74	..	67.2
	Minimum	30	40	41	33	29	33	44	54	50	43	50	53	51	56	53	58	49	53	59	56	35	34	38	41	45	35	34	43	51	53	..	44.8
Maryville	Maximum	50	51	45	45	55	63	78	87	81	74	82	78	79	77	81	66	78	78	75	70	45	53	50	43	45	47	57	73	81	76	..	65.4
	Minimum	28	39	35	28	25	30	38	45	44	35	41	46	45	55	55	55	41	50	54	38	32	28	34	32	38	30	28	34	42	49	..	39.3
Oregon	Maximum	52	54	49	44	62	67	85	87	81	79	82	79	80	78	81	68	80	80	75	71	45	59	50	45	49	51	64	74	82	75	..	67.6
	Minimum	29	40	36	33	27	37	44	54	43	39	50	54	56	58	61	57	45	52	58	37	32	29	35	35	42	32	32	32	50	51	..	43.3
St. Joseph	Maximum	51	58	46	37	56	66	83	85	63	74	80	78	78	76	80	69	75	80	77	58	44	55	42	44	50	47	61	72	80	68	..	64.4
	Minimum	32	41	37	31	29	35	48	56	43	43	53	55	56	59	59	52	45	54	57	35	34	32	39	37	40	34	34	34	45	51	..	44.0
Trenton	Maximum	53	53	50	44	54	65	78	86	79	72	79	78	80	77	82	69	77	79	77	73	44	55	48	45	49	47	61	72	80	76	..	66.1
	Minimum	26	38	38	32	34	30	40	46	44	42	43	51	46	52	53	57	45	48	59	39	36	33	36	35	40	32	32	39	51	49	..	41.5

°, ᵇ, ᶜ, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO St. Louis, 5-15-31—955.

51.05
NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., MAY, 1931 No. 5

GENERAL SUMMARY

May, in general, was a cool month throughout the State of Missouri, and the coolest May since 1924, although the same month in 1929 was almost as cool. During the first half of the current month temperatures generally prevailed below the normal, the negative departures from the 6th to the 12th varying between 9° and 17° a day. Following the 15th there was a reaction to above normal warmth but most of the days were cooler than normal to the end of the month.

There was considerable frost with some thin ice in low lands on the 6th, and 7th. Injury was small and confined to early gardens and strawberry bloom.

The rainfall of May was unevenly distributed geographically but quite satisfactory as to timely periods. Most of the area of the northeast section received slightly more than normal rainfall while the remainder of the State got less than the normal, the driest part being the northwestern plateau. The first rain period prevailed from the 8th to the 13th, again on the 18-19th, and the heaviest falls of the month; there were also quite general rains on the 29-30th. Though somewhat less than normal rainfall it probably was the best watered month in a year or more, and the first real general break in the droughty conditions in east-central areas that have persisted since the spring of 1930.

There were no damaging wind or hail storms. While too cool for normal corn growth, the weather was generally favorable for all other crops, and for farming operations.

TEMPERATURE

The monthly mean temperature for the State, as based upon the reports of 68 stations, was 61.0°, or 3.4° below the normal; and the coolest May generally since 1924. The highest local monthly mean was 67.8°, at Caruthersville, Pemiscot County; and the lowest was 58.0° at Goodland, Iron County. The highest temperature reported was 96° at two stations, Lexington and Warrensburg, on the 16th. The lowest reported was 29°, at four stations, all in the northern part of the State. These extremes are not unusual in May, in fact may be expected in 50 per cent of the years. Temperatures reached 90° or higher at 47 stations on one day. There were 32° or lower at 25 stations on one day, the 7th. The greatest daily range was 49°, at Dean, McDonald County, on the 15th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 4.51 inches, or 0.16 inch less than the 60 years' average. There was a small excess in the northeastern plain but deficiencies in all other sections, the northwestern plateau receiving only about 73 per cent of the normal. The greatest local monthly amount was 8.05 inches at Mexico, and the least was 1.62 inches at Caruthersville. The greatest amount in any twenty-four consecutive hours was 4.70 inches, at Louisiana on the 19th.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Local on the 2d, and 23d,

Frost, light.—3d, 7th, 20th, 21st, and 23d.

Frost, heavy.—On the 7th, damaging to early gardens, and strawberry bloom. (Some thin ice formed in low places).

Hail.—At Fulton, and St. Charles on the 11th. Seymour, Lamonte, Edgerton, and Kansas City on the 25th, and at Springfield on the 27th; all small without damage. At Camden Point, 9 miles southwest of Edgerton, on the 25th, the hail was fairly large and caused a small amount of damage.

(Continued on Page 24)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	29.93	76	53	55	284	64	4,775	6.4	22	w.	29
Hannibal	29.92	76	57	..	...	..	5,368	7.2	26	sw.	24
Kansas City	29.93	74	54	55	305	69	6,595	8.9	29	sw.	29
St. Joseph	29.92	79	53	55	284	64	5,388	7.2	23	nw.	9
St. Louis	29.93	72	58	58	276	62	8,235	11.1	36	sw.	18
Springfield	29.96	76	55	58	294	67	6,826	9.2	30	w.	9
Cairo, Ill.	29.95	82	61	62	...	..	5,828	7.8	28	w.	9
Keokuk, Iowa	29.93	70	54	57	284	64	4,363	5.9	20	nw.	28

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**64.4**	.....	**96**	**30**	**4.67**	.....	**4.17**	**T.**	**9**	**13**	**10**	**8**
1888	62.1	− 2.3	93	30	5.35	+0.68	....	0	5	..	..	..
1889	63.5	− 0.9	96	28	6.56	+1.89	....	0	5	..	..	..
1890	62.8	− 1.6	96	32	3.47	−1.20	....	0	6	..	..	..
1891	61.5	− 2.9	97	28	4.26	−0.41	....	0	8	..	..	..
1892	60.7	− 3.7	91	28	7.80	+3.13	3.90	0	17	5	9	17
1893	66.8	+ 2.4	94	30	5.89	+1.22	5.83	0	10	11	11	9
1894	63.7	− 0.7	95	22	3.99	−0.68	4.20	0	8	13	11	7
1895	64.6	+ 0.2	103	28	4.08	−0.59	3.43	0	9	13	12	6
1896	70.1	+ 5.7	96	32	9.09	+4.42	4.66	0	12	12	12	7
1897	62.4	− 2.0	93	28	2.56	−2.11	3.82	0	7	16	11	4
1898	65.2	+ 0.8	97	31	7.90	+3.23	5.50	0	14	12	10	9
1899	66.9	+ 2.5	96	34	6.26	+1.59	5.28	0	2	10	13	8
1900	66.3	+ 1.9	97	29	3.69	−0.98	4.00	0	10	14	11	6
1901	63.8	− 0.6	98	30	1.47	−3.20	3.04	0	6	15	10	6
1902	69.4	+ 5.0	98	39	5.03	+0.36	4.35	0	11	13	11	7
1903	65.1	+ 0.7	92	23	7.10	+2.43	3.10	0	15	9	10	12
1904	63.1	− 1.3	95	32	5.03	+0.36	4.33	0	12	13	10	8
1905	64.9	+ 0.5	94	34	4.87	+0.20	4.55	0	10	12	11	8
1906	66.3	+ 1.9	98	27	2.16	−2.51	3.83	0	7	15	10	6
1907	59.5	− 4.9	91	17	5.56	+0.89	4.33	0	10	14	6	11
1908	66.1	+ 1.7	96	24	6.92	+2.25	5.65	0	12	12	10	9
1909	63.3	− 1.1	96	23	5.34	+0.67	5.26	0	9	15	9	7
1910	60.1	− 4.3	94	32	6.62	+1.95	4.30	0	13	11	8	12
1911	68.8	+ 4.4	101	27	1.55	−3.12	2.06	0	5	19	7	5
1912	67.6	+ 3.2	97	30	3.86	−0.81	4.90	0	7	18	8	5
1913	65.8	+ 1.4	101	33	3.05	−1.62	2.95	0	8	16	7	8
1914	66.6	+ 2.2	98	31	1.47	−3.20	3.00	0	5	17	9	5
1915	63.7	− 0.7	97	30	7.86	+3.19	7.10	0	12	12	7	12
1916	65.6	+ 1.2	96	33	5.61	+0.94	4.10	0	11	15	8	8
1917	58.7	− 5.7	91	30	4.33	−0.34	2.60	0	10	15	7	9
1918	68.3	+ 3.9	100	28	5.49	+0.82	5.25	0	10	16	8	7
1919	62.0	− 2.4	93	35	5.80	+1.13	4.50	0	13	10	10	11
1920	63.8	− 0.6	97	32	4.85	+0.18	3.70	0	12	9	9	13
1921	66.4	+ 2.0	102	28	3.69	−0.98	4.12	0	7	17	8	6
1922	67.2	+ 2.8	97	38	3.17	−1.50	2.50	0	10	14	10	7
1923	62.7	− 1.7	97	25	4.59	−0.08	3.48	T.	12	11	10	10
1924	58.6	− 5.8	96	31	4.67	0.00	3.90	0	10	13	8	10
1925	61.2	− 3.2	98	24	2.14	−2.53	2.86	0	7	14	9	8
1926	67.0	+ 2.6	100	32	2.73	+0.06	5.80	0	7	16	9	6
1927	64.6	+ 0.2	94	34	6.98	+2.31	4.62	0	12	11	10	10
1928	65.8	+ 1.4	95	29	2.84	−1.83	2.80	0	8	16	9	6
1929	61.7	− 2.7	95	28	7.52	+2.85	6.00	0.3	13	9	10	12
1930	64.7	+ 0.3	95	33	3.43	−1.24	2.88	0	9	16	8	7
1931	61.0	− 3.4	96	29	4.51	−0.16	4.70	0	10	15	6	10
.....	....	.....	..	..	....	.....	....	....	..	..	..	..

Climatological Data for May, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.						Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																			
Brunswick	Chariton	652	52	62.4	− 1.9	90	17†	32	7	44	3.77	−1.12	1.53	0	13	21	1	9	nw.	O. K. Benecke
Clifton Hill	Randolph	731	32	60.0	− 4.2	91	16	29	7	45	4.93	−0.21	1.15	0	12	16	7	8	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	60.4	− 3.9	89	17	33	7	35	6.45	+1.99	3.62	0	13	12	7	12	s.	U. S. Weather Bureau
Downing	Schuyler	876	10	58.7[a]	− 4.0	90	16	29	7	34	7.06	+2.65	1.96	0	13	14	9	8	n.	James Taylor
Elsberry	Lincoln	449	0	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	Ray E. Mills
Fayette	Howard	661	51	59.5	− 4.8	90	16†	29	7	40	4.23	−0.39	2.00	0	11	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	58.7	− 6.3	87	27	33	7	39	6.30	+1.53	2.41	0	12	17	3	11	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	4.57	−0.04	1.19	0	13	15	3	13	nw.	J. W. Pulliam
Hannibal	Marion	534	39	60.1	− 3.5	88	27	35	7	31	5.26	+0.91	2.41	0	14	8	11	12	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	62.0	− 2.9	89	16†	39	7	37	4.01	−0.54	0.97	0	12	15	7	9	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	59.2	− 3.3	87	27	30	7	34	4.87	−0.34	1.20	0	10	14	7	10	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	61.0	− 2.8	86	16†	30	7	40	7.36	+2.80	4.70	0	11	18	4	9	s.	Stark Bros. Nurseries
Macon	Macon	875	32	60.0	− 3.9	89	18	31	8	39	5.01	+0.44	2.05	0	12	14	5	12	sw.	W. C. Brown
Mexico	Audrain	800	42	60.2	− 4.1	90	16†	30	7	39	8.05	+3.29	3.60	0	13	20	0	11	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	4.17	+0.56	1.66	0	12	15	6	10	ne.	J. S. Conway
St. Charles	St. Charles	456	43	61.7	− 1.3	90	16†	36	7	33	3.40	−0.78	1.09	0	10	13	6	12	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	62.8	− 4.2	91	16	40	6	31	3.61	−0.73	0.90	0	12	13	11	7	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	61.9	− 4.2	91	16	38	6	31	2.96	−1.28	0.54	0	12	19	7	5	w.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	4.63	−0.35	1.80	0	13	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	33	59.1	− 5.0	87	27	32	7	36	6.25	+1.30	2.15	0	12	14	9	8	n.	Frank Hall
Unionville	Putnam	1,062	38	59.4	− 3.0	88	16†	30	7	35	4.73	−0.23	1.80	0	9	16	5	10	n.	Geo. W. Davis
Warrenton	Warren	816	49	61.8	− 3.2	89	16†	34	7	33	5.16	+0.37	2.66	0	10	8	12	11	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	59.4	− 4.4	88	16	32	7	32	4.27	+0.34	1.64	0	12	11	9	11	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	60.4	− 3.7	91	16	29	7	45	5.05	+0.46	4.70	0	12	15	6	10	sw.	
Southeast Lowlands																			
Campbell	Dunklin	314	5	63.1	.....	94	28	37	7	40	3.54	.....	1.37	0	12	17	9	5	s.	Jeff. King
Caruthersville	Pemiscot	265	35	67.8	− 1.7	94	18	43	8	33	1.62	−2.64	1.40	0	5	11	11	9	s.	Sam Smith
Doniphan	Ripley	344	27	63.4	− 3.5	92	16†	37	7	46	4.71	+0.55	1.50	0	7	14	9	8	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	60.2	− 5.6	87	17†	33	21	37	4.14	−0.22	2.13	0	8	6	7	18	s.	John G. Putz
Marble Hill	Bollinger	470	36	62.4	− 3.3	90	17†	36	23	38	5.59	+1.24	2.12	0	7	12	7	12	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	3.75	−1.07	1.26	0	9	18	7	6	sw.	John A. Spence
Poplar Bluff	Butler	339	27	62.8	− 5.2	90	16†	38	7	38	3.76	−1.27	0.90	0	9	20	3	8	s.	J. H. Wolpers
Sikeston	Scott	318	30	64.6[a]	− 4.0	95	28	40	7	37	3.67	−0.49	1.74	0	8	16	7	8	sw.	Glen R. Fisher
Cairo, Ill.	Alexander, Ill	358	56	64.0	− 4.4	91	28	43	7	29	2.99	−0.72	1.51	0	11	3	11	17	s.	U. S. Weather Bureau
Section means and	extremes	....	..	63.5	− 4.0	95	28	33	21	46	3.75	−0.58	2.13	0	8	13	8	10	s.	
Ozark Plateau																			
Arcadia	Iron	926	49	58.6	− 6.0	90	17	33	4†	37	5.07	+0.29	1.38	0	11	17	4	10	se.	Arcadia College
Aurora	Lawrence	1,370	39	60.9	− 5.0	91	18	35	7	32	3.27	−2.19	1.60	0	9	15	3	13	nw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	60.4	− 4.8	92	16	34	7	36	4.90	+0.59	1.75	0	11	15	4	12	s.	V. H. Kirkendall
Buffalo	Dallas	1,260	..	61.0	.....	89	29	35	7	39	5.13	.....	2.96	0	12	16	2	13	sw.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	4.44	.....	2.74	0	8	14	10	7	n.	J. M. Atkinson
Dean ††	McDonald	1,000	32	61.4[a]	− 4.4	93	16	30	7	49	3.15	−2.81	1.44	0	6	8	7	16	w.	H. E. Dean
Eldon	Miller	934	35	60.8[a]	− 3.7	91	16	35	7	41	6.79	+1.93	2.22	0	13	7	14	10	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	60.9	− 2.9	93	17	35	23	36	4.56	−0.94	1.28	0	12	15	7	9	sw.	Robert Forsyth
Goodland	Iron	1,000	37	58.0	− 6.5	91	16	32	23	42	2.91	−1.71	0.81	0	11	16	3	12	s.	F. M. Adams
Greenville	Wayne	381	7	60.4	.....	91	16	35	4†	48	3.54	−0.65	1.15	0	5	12	10	9	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	2.98	.....	1.20	0	5	21	7	3	sw.	A. W. Madison
Koshkonong	Oregon	958	30	63.0	− 3.8	91	16	39	7	31	3.87	−0.97	0.88	0	9	13	3	15	sw.	R. M. Hitt
Lebanon	Laclede	1,265	44	59.4	− 6.2	89	17	30	7	39	7.81	+2.20	1.92	0	10	18	3	10	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	62.0	− 2.6	92	16	35	7	34	5.78	+0.70	3.70	0	8	16	6	9	nw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	30	60.4	− 3.5	91	16	35	7	36	2.96	−1.89	0.64	0	13	14	3	14	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	62.8	− 3.4	92	16	32	7	41	3.28	−2.79	1.27	0	10	15	10	6	sw	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	60.8	− 3.7	89	16	35	7	34	5.50	+0.49	0.96	0	12	6	8	17	sw.	F. H. Lane
Salem(near)	Dent	1,173	27	59.6	− 5.7	90	16	31	7	40	3.93	−0.61	0.83	0	12	13	7	11	nw.	A. C. Leech
Seligman	Barry	1,542	29	60.6[d]	− 4.3	88	16	33	7	43	3.56	−2.03	1.11	0	10	15	7	9	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	59.4	− 4.7	89	16	31	7	36	2.99	−2.71	0.81	0	11	13	7	11	s.	Ira H. Hailey
Springfield	Greene	1,324	43	59.8	− 4.7	90	16	38	7	28	3.65	−1.54	1.71	0	13	18	8	5	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	60.5	− 4.5	93	16†	30	7	49	4.29	−0.81	3.70	0	10	14	6	11	sw.	
Southwest Plain																			
Appleton City	St. Clair	853	37	61.0	− 4.1	93	16	35	7	35	4.40	−1.14	2.25	0	10	13	9	9	sw.	W. G. Bigelow
Clinton	Henry	765	38	62.2	− 3.0	90	17†	36	7	40	4.44	−1.00	1.80	0	10	15	9	7	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	60.2	− 3.8	95	16	35	7	40	4.37	−0.44	2.00	0	12	6	5	20	s.	John H. Patterson
Lamar	Barton	980	44	63.1	− 2.8	95	16	36	7	35	5.67	+0.21	3.40	0	9	19	2	10	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	60.1	− 4.6	91	16	34	13	41	5.89	+0.94	1.85	0	12	18	4	9	se.	J. E. Wheeler
Marshall	Saline	779	43	62.2	− 1.9	91	16	34	7	36	4.23	−0.63	1.93	0	9	21	3	7	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	61.5	− 3.1	91	16	35	7	38	4.95	−0.77	3.02	0	6	16	4	11	s.	George A. Kaupp
Warrensburg	Johnson	878	44	61.6	− 3.7	96	16	34	6†	36	4.90	+0.24	1.62	0	13	16	5	10	nw.	E. A. Markey
Warsaw	Benton	687	30	62.4	− 3.4	91	16	34	7	40	5.66	+0.43	1.70	0	13	15	9	7	s.	Everett Martin
Section means and	extremes	.....	..	61.6	− 3.4	96	16	34	6†	41	4.95	−0.24	3.40	0	10	15	6	10	s.	
Northwest Plateau																			
Bethany	Harrison	916	38	59.0	− 3.6	88	24	31	7	39	2.41	−2.57	0.92	0	8	20	5	6	nw.	A. S. Cumming
Chillicothe	Livingston	779	21	60.2	− 6.9	95	17	31	7	41	3.59	−1.12	1.56	0	11	16	5	10	e.	Wm. J. Olenhouse
Conception	Nodaway	980	42	61.0	− 1.0	90	16	32	6†	47	2.68	−2.09	1.11	0	8	8	15	8	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	60.3	− 2.7	91	16	32	7	40	3.15	−2.30	0.92	0	13	22	0	9	s.	Fred L. Stiff
Grant City	Worth	1,134	27	60.0	− 2.1	88	17†	31	6	33	2.06	−2.67	0.84	0	8	15	9	7	w.	W. P. Spillman
Kansas City	Jackson	963	42	62.0	− 2.8	94	16	38	6	28	5.99	+1.34	2.77	0	13	15	6	10	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	58.3	− 4.8	89	17	29	7	35	3.81	−1.40	1.33	0	10	18	4	9	nw.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	3.71	.....	1.54	0	11	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	63.5	− 0.9	96	16	37	6	33	6.07	+1.01	2.31	0	13	17	6	8	n.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	60.0	− 1.1	92	24	30	7	45	3.13	−2.62	1.04	0	11	15	7	9	n.	J. R. Brink
Oregon	Holt	1,048	75	62.6	− 0.6	93	25	35	6	35	2.60	−2.26	0.84	0	11	20	2	9	sw.	Mina Wright
St. Joseph	Buchanan	967	23	60.8	− 3.2	91	16	36	6	34	4.13	+0.01	3.02	0	10	16	6	9	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	59.0	− 4.3	92	24	33	6†	42	2.21	−2.45	0.82	0	7	13	9	9	nw.	Albert Volker
Trenton	Grundy	822	35	61.0	− 2.8	90	16	31	7	37	5.00	−0.34	1.91	0	12	17	6	8	n.	W. H. Estes
Section means and	extremes	.....	..	60.6	− 2.8	96	16	29	7	47	3.61	−1.34	3.02	0	10	16	6	9	nw.	
State means and	extremes	.....	..	61.0	− 3.4	96	16	29	7	49	4.51	−0.16	4.70	0	10	15	6	10	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for May, 1931

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri						.08			.49	.18	.14	.08							1.88	.48		.93			.01					.63	.08	4.98
Bowling Green	Mississippi						.14		.03	.28		.53	.23	.24						3.43	1.06		.51			.19					.25		6.89
Brunswick	Grand						.10		.05	.10	.27	.12	.07	.04						1.53	.30		.62			.04					.47	.06	3.77
Clifton Hill	Chariton					.10			.02	.10	.16	.03	.04						1.15	1.15		T.	.60			.92					.40	.26	4.93
Columbia***	Missouri					.19			.55	.24	.11	.15	.01						2.30	1.37		.43	.69			.03					.27	.11	6.45
Downing	Mississippi					.04			.15	.32	.20	.22	.05	.01			T.		.48	1.12			.10							1.96	1.52	.89	7.06
Edina	do						.30	.35	.05	.15	.25	.15								1.38	.40		.27								.40	1.45	5.15
Elsberry	do																															
Eolia	do																															
Fayette	Missouri						.08			.22	.17	.11	.13	T.						2.00	.49		.70			.02					.25	.06	4.23
Fulton	do					.20			.10	.91	.19	.17	.25	.14						2.41	.61		.84			.35					.13		6.30
Gorin	Mississippi					.03		.01	.30	.24	.13	.35	.25						1.19	.31			.06						.08	.89	.73		4.57
Hannibal***	do					.34		.31	.10	.30	.16	.22	.03	.01					1.66	1.05		.20	.22							.37	.29		5.26
Hermann	Missouri						.10			.82	.25	.12	.25	.20						.88	1.73		.42	.03		.56					.04	.20	5.60
Jefferson City	do					.28		.03		.60	.17	.10	.34	.18					.10	.97		.73							.35	.16		4.01
Kahoka	Mississippi								.37	.31	.23	.20	.23							1.35	.49									1.87		5.05
Kirksville	do					.03		.07	.08	.20		.18							.52	1.02									1.20	.57	1.00		4.87
Knox City	do																															
Laddonia	do						.28			.20		.28	.15	.10						2.90	.96		.64			.45					.35		6.31
LaGrange	do						.16	.11	.37	.11	.07	.11	.22						.22	1.25	.42			.22							1.52	.42	5.20
Lewistown	do																															
Louisiana	do					.10		.08	.33	.20	.53	.08	.05							4.70			.60		.37						.40		7.44
Lucerne	Grand										.38	.13	.03							1.31										1.32	.48		3.65
Macon	Chariton						.03		.21	.10	.22	.15	.18							2.05	.45		.48			.80					.25	.09	5.01
McCune	Mississippi																															
Memphis	do						T.	.27		.20	T.	.10	.40	.30						1.24	.14		.18							.89	2.12		5.84
Mexico	do						.20		.06	.20	.07	.12	.33	.05						3.60	.65		.66			.95				1.02	.14		8.05
Milan	Grand						.08	.11		.22	.10	.25	.14							1.41	.12									1.87	1.20		5.50
Monroe City	Mississippi					.19	.07		.33	.16	.17	.22	.26				T.		.42	1.66			.39							.02	.28		4.17
New London	do						.38		.20	.14	.25	.19	.14	.09						2.35	.70		.56								1.49	.09	6.58
Pacific	Meramec	.15					.55			.85	.05	.10	.18	.14						.15	.70		.56			.20						.05	3.68
Palmyra	Mississippi						.20	.40			.45		.30	.16						1.69		.35		.81							.65	.36	4.87
Paris	do								.08	.12		.16	.41	.05						1.40	.26		.61			.52					.23		3.84
Perry	do						.20		T.	.24	.18	.15	.45						2.95	.55		T.	.90			.25					.70	.07	6.64
Philadelphia	do						.04		.07	.18	.08	.40	.30	.05						1.93	.53		.47									.70	4.75
Plevna	do																														.55	.07	
St. Charles	Missouri						.24		.39	.10	.19	.12	.22							1.09			.44			.56					.05		3.40
St. Louis (1)***	Mississippi					.45	.24		.43	.08	.18	.10	.01							.90		T.	.56			.62				.01	.03		3.61
St. Louis (2)*	do					.38	.20		.46	.09	.11	.14	.04							.48			.49			.54				.01	.02		2.96
Shelbina	do						.26		.17	.10	.16	.13	.43	.07						1.80	.55		.46			.01					.20	.29	4.63
Steffenville	do					.15	.10		.60	.10	.25	.25	.40						.45	2.15			.35							.20	1.25		6.25
Troy	do									.89	.20	.17	.05							1.30	1.19		.55			.19					.27		4.81
Union	Meramec	.16					.33			1.63	.12	.08	.10	.05						.19	1.02		.60			.31						.06	4.05
Unionville	Chariton					.20		.10	T.	.30	.18		T.						.50	.65									1.10	.70	1.90		4.73
Valley Park	Meramec	T.					.57			.79	.20	.13	.09	T						T.	.78		.57			.27					T.	T.	3.40
Warrenton	Mississippi					T.	.04		.71	.11	.46	.09		.03						2.66			.30			.47					.29		5.16
West Ely	do						.17		.27	.10	.28	.11	.09	.11						1.50	.56		.43								.49	.18	4.29
Winfield	do						.12			.88	.20	.13	.45							1.93			.55			.12					.24		4.62
Keokuk, Ia.***	do					.27		T.	.56	.10	.23	.23	.03				T.	T.	1.29	.54		.03	.03						T.	.40	.56		4.27
Southeast Lowlands																																	
Campbell	St. Francis	.40	.23				.20	.12			.01	.14								.04	1.37		.15			.12					.68	.08	3.54
Cape Girardeau	Mississippi	.04					2.70	.18				.04	.23	.19						.09	1.85		.12			.24	.26				.46	.02	6.42
Caruthersville	do	.05						.04												.02	1.40						T.					.11	1.62
Dexter	St. Francis	.28	.20				.88				.02		.12							1.33	.03		T.				.53				.18	.10	3.67
Doniphan	Black	.43				.40	.50			T.										1.50						.85				.33	.70		4.71
Fisk	St. Francis	.49					.84			T.			.01							T.	.86		.02			.36	.60				.99	T.	4.17
Jackson	Mississippi	.02					2.13					.09		.13						.88			.20			.45					.24		4.14
Marble Hill	do	.14					2.12					.12	.22							.90						1.52					.57		5.59
Morehouse	do	.43		.02			1.11			.02	T.	.04								1.26	.19									.04	.64		3.75
New Madrid	do	.12	.71				.06	.15												.03	1.31	.02	.13	.07		.02					.03	.11	3.13
Parma	St. Francis	.23	.30				.30	T.					.08							.03	.87	.03	.28				.25				.35	.05	2.77
Poplar Bluff	Black	.58	.03				.90	T.					.05								.68					.60	.31				.51	.10	3.76
Sikeston	Mississippi	.18					.46						.20							1.74			.09			.10	.24				.66		3.67
Cairo, Ill.***	do	.31	T.			.23	.03	.01	T.	T.	T.	.17	.04							1.49	.02		.12			.46					.11		2.99
Ozark Plateau																																	
Arcadia	St. Francis	T.					.97			T.	.14	.03	.06	T.						.02	1.38		.38			1.24	.15			.53	.17		5.07
Aurora	Neosho					.75	.02		.15			T.	.08							1.60		.05	.35			.11					.16		3.27
Birchtree (near)	Black	.23				.17	1.75						.10							.60	.07	.05	.50			.55				.77	.11		4.90
Buffalo	Osage	T.				.29			.57	.03	.06	.11	.03							2.96		.10	.51	.07		.03					.37		5.13
Caplinger Mills	do					.24			.37	T.		.05								2.74		.06	.40							.15	.43		4.44
Chaonia	St. Francis	.30	.08				.89	.18			.07	.02	.07	.02						.03	.61		.01			.62	.17				.45	.16	3.68
Dean	Neosho					.95			.08	T.									T.	1.44			.23			T.	.21			T.	.24		3.15
Eldon	Missouri	.45					.17			.59	.14	.10	.45	.04						2.22	.86		.56			.14					.80	.27	6.79
Farmington	St. Francis					.07	1.28		.08	.07	.06	.15	.09							1.22		T.	.52			.30				.56	.16		4.56
Fredericktown	do						1.25	.20					.18								1.26		.34				.64						3.87
Galena	White						.25													.65			1.19			.37					.17	1.15	3.78
Goodland	Black						.81		.15	.10	.05	.16	.06	.04									.42			.62				.43	.07		2.91
Greenville	St. Francis					.60	.78				T.	T.	T.							1.15						.64					.37		3.54
Hailey	White					.59													T.	1.20			.51			.30					.38		2.98
Koshkonong	Black	.03				.22	.88			T.		T								.87	.16	.16				.85				.30	.40		3.87
Lebanon	Osage									.72		.20	.52	.05						1.92	1.40		.82			.91					.32	.95	7.81
Leeper	Black	.25					1.45						.11							T.	.48		.11			.59					.30	.70	3.99
Lockwood	Osage					.36			.31	.10		T.								3.70		.18	.67							.10	.36		5.78
Mountain Grove	White	.09					.60			.28	.05		.22	.02						.23	.22		.37			.64	.10				.11	.03	2.96
Neosho	Neosho					.90	.03		.08	.02		.05							T.	1.27		.08	.21			T.	.89				.25		3.28
Owensville	Gasconade						.38			.21	.25	.45								1.15	1.30		.55	T.		1.40						.28	5.97
Ozark Beach	White						.78			.04										.31	.83		.33				1.42				.12	.15	3.98
Rolla	Meramec	.25					.46			.96	.05	.15	.49							.96	.90		.92			.28					.05	.03	5.50
Salem (near)	do	.08				.21	.51		.57	.07	.05	.23		T.						.57		.03	.57			.83				T.	.21		3.93
Seligman	Neosho					1.11			.02	T.		.08							.02	.89		.08	.12			.10	.67				.47		3.56
Seymour (near)	White	.02				.43	.06		.18	.07	T.	.11	T.	T.					T.	.81		.12	.63			.41				T.	.15		2.99
Springfield***	do	.01				.40	T.		.40	.09	.05	.15							.43	1.28		.36	.26			.03				.08	.11		3.65
Steelville	Meramec	.09					.64			.98	.10		.84	.07						.36	.54		.96			.42				T.		.32	5.32
Stover	Missouri	.35					.18		.15	.31	.03	.11		.01						1.83	.26		.70			.26					.60		4.79
Tuscumbia	Osage	.23					.16		.07	.30	.05	.15	.39	.03						1.69	.92		.68			.08					1.71	.26	6.72
Williamsville	Black	.25	.06				1.23	.07			.08	.03	.04	.02	.01					.03	.96		.02			.50	.23				.57	.14	4.24
Willow Sprgs. (near)	White	.52					1.32			.10	.07		.06							.12	.34		.37			.39	.43				.28	.14	4.14

Continued on next page

Daily Precipitation for May, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage					.15			.22	T.	.03	.01						T.	.18	2.25		.03	.58							.30	.65		4.40
Clinton	do					.22			.30	.08	.08	.11							1.80			.05	.85							.72	.23		4.44
Concordia‖	Missouri									.50	.05	.17						.30	.90	.50			.75								.78		3.95
Harrisonville‖	Osage	.21							.15	.30	.01	.03	.02						.37	2.00			.81							.03	.43	.01	4.37
Joplin‖	Neosho	.20				1.03			.30	.02		.05							.25	2.00		.42	.02							.10	.56		4.95
Lamar‖	do				.15	.60		T.	.10			.11							.45	1.85		.05	1.10			.71				.42	.22		5.67
Lamonte	Missouri					.15			.54	.18	.11	.20						8.40	.43	.25		.42								.38	.17		5.89
Marshall	do					.12				.12	.11	.12							.43	1.93			.56							.67	.17		4.23
Nevada	Osage					.31			.24	T.	.02	T.							T.	3.02		T.	.70								.66		4.95
Osceola‖	do	.32					.23		.19	.14	.03	.04	.01							2.60	.14		.63								.53	.21	5.07
Warrensburg	Missouri	.01				.08			.58	.14	.03	.14							.32	1.62		.12	.87			.16				.33	.50		4.90
Warsaw	Osage	.38					.28		.12	.31	.10	.27	.18							1.70	.40	T.	.67			.37					.56	.32	5.66
Waverly ‖	Missouri									.38	.11	.05	.12						T.	1.85	.05		.61			.07					.61	.05	3.90
Northwest Plateau																																	
Albany‖	Grand																		.92	.03		T.	.12							.90	.06		2.41
Bethany	do					T.		T.	T.	.22	.07	.09							.29	1.56			.44			T.				.58	.16		3.59
Chillicothe ‖	do						.01		.06	.12	.18	.13	.06						.54			T.	.19						1.11	.55			2.68
Conception	Missouri					.04			T.	.08	.11	.06							.92	.30		.16	.40			.65			.04	.24	.04		3.15
Edgerton	do					.04			.19	.09	.06	.02							.46	1.08			.35							.70	.60		3.68
Gallatin ‖	Grand								.04	.10	.25	.10							.28										.84	.39	.18		2.06
Grant City	do					.03		T.		.12	.11	.11	T.						2.77	.03		.84	.05			.61			.63	.52	.09		5.99
Kansas City***	Missouri					.05			.23	.09	.07	.01							.20	1.33			.34			T.				.84	.76		3.81
Kidder ‖	Grand								.03	.10	.06	.10	.05						1.54	.15		.01	.12						1.25	.11			3.71
King City	Missouri					.08			.09	.10	.14	.12							.25	2.31	.08		.83			.07				.97	.72		6.07
Lexington	do						.04		.16	.21	.31	.02	.10						.56	.16			.02						1.16	1.04	.57		3.13
Maryville ‖	do					.12				.11	.19	.16	.04						.19			.08	.16						.84	.19			2.60
Oregon	do				.60	.04			.05	.30	.12	.03	T.					T.	3.02			.37			.12				.27	.03	T.		4.13
St. Joseph***	do				T.	.12		.02	.03	.13	.02	T.							.32										.82	.45			2.21
Tarkio	do					.18				.30	.10	.04							1.91	.38		.04	.15						.93	.82	.11		5.00
Trenton	Grand					.02		.06	T	.15	.26	.17																					

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. T. Trace, or less than 0.01 inch. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. ** Precipitation in the next following measurement; separate dates of fall not recorded. *** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. * Precipitation is for 24-hour period midnight to midnight.

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Halos, lunar.—25th, 26th, and 27th.

Halos, solar.—4th, 6th, 15th, 16th, 19th, 21st, 24th, 25th, 26th, 28th, and 30th.

Thunderstorms.—General on the 18th, 25th, and 29th. Local on several other dates.

Winds.—There were no damaging winds.

ERRATA

In report for March, 1931, page 12:
Lamonte, 2 partly cloudy and 12 cloudy days.
Lexington, prevailing direction NE.
Louisiana, monthly mean temperature 37.9.

Daily Temperatures for May, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	75	75	73	72	76	57	76	72	61	57	65	70	73	80	79	86	90	84	65	68	62	63	70	83	90	86	88	82	87	75	76	74.7
	Minimum	44	51	40	45	49	38	32	49	44	46	47	46	47	47	51	62	57	58	55	41	43	43	42	54	55	60	66	66	62	60	49	50.0
Columbia	Maximum	71	69	68	76	64	50	68	58	50	54	57	62	70	76	82	88	89	79	61	58	61	61	69	84	86	83	88	88	81	66	71	70.6
	Minimum	50	48	45	45	45	38	33	48	43	45	48	45	47	46	53	63	62	61	51	44	41	45	41	56	63	57	67	66	62	53	48	50.3
Fayette	Maximum	76	71	71	73	67	53	70	55	50	50	59	64	76	82	84	90	90	73	64	61	65	65	70	82	88	86	88	88	85	69	75	72.3
	Minimum	45	47	38	41	46	38	29	33	42	42	42	44	46	42	46	50	58	60	55	40	37	44	37	46	58	54	57	63	63	60	46	46.7
Hannibal	Maximum	73	65	66	74	71	45	63	57	54	51	59	62	69	77	81	86	79	75	62	57	62	60	68	82	83	82	88	86	80	67	71	69.5
	Minimum	49	49	46	43	44	37	35	52	44	47	48	50	46	48	56	65	54	62	51	44	42	46	43	56	62	59	64	68	63	54	46	50.7
Jefferson City	Maximum	74	73	71	78	70	50	69	61	56	57	59	64	71	78	83	89	89	89	84	67	62	62	64	70	85	88	84	88	89	80	69	75	72.9
	Minimum	49	49	52	44	44	48	39	45	47	41	46	47	46	46	47	52	63	67	61	52	42	40	44	54	62	60	63	65	63	60	48	51.2
Kirksville	Maximum	73	66	66	75	69	51	62	57	50	51	59	65	72	79	83	85	85	83	63	61	59	62	70	82	83	84	87	85	78	64	71	70.3
	Minimum	42	51	41	43	44	34	30	44	41	44	45	44	47	51	55	62	51	58	53	38	38	43	41	51	53	56	62	65	61	58	47	48.2
Louisiana	Maximum	70	72	73	72	72	52	63	60	55	56	55	60	70	80	75	86	86	85	72	70	72	70	72	83	85	83	86	86	82	75	75	72.7
	Minimum	44	45	46	32	40	37	30	40	42	45	45	48	44	48	50	54	55	65	55	45	40	50	55	55	60	62	65	60	65	60	45	49.3
Macon	Maximum	70	74	66	71	78	69	54	70	56	54	49	58	65	72	79	84	88	89	72	66	59	63	62	70	82	85	83	88	86	85	68	71.5
	Minimum	44	43	51	43	42	48	36	31	47	41	44	45	44	45	47	52	61	53	52	53	38	39	44	42	53	60	57	62	66	63	60	48.6
Mexico	Maximum	74	69	70	78	70	51	70	64	55	51	59	69	72	73	83	90	90	78	64	60	64	61	70	86	83	83	89	80	81	67	72	71.8
	Minimum	44	53	40	39	48	37	30	49	42	44	46	45	43	45	56	58	58	58	54	41	39	44	39	52	60	54	59	64	65	60	44	48.7
St. Louis(1)	Maximum	71	74	65	73	77	50	66	60	56	56	60	62	68	77	82	91	88	82	71	63	63	61	66	78	84	81	88	90	80	73	72	71.9
	Minimum	54	55	47	48	50	40	41	51	46	47	48	49	51	55	59	64	57	68	53	50	49	46	47	51	63	59	64	68	68	60	54	53.6
Unionville	Maximum	76	70	70	76	74	50	65	58	55	55	58	65	74	80	82	88	85	80	65	63	65	65	64	84	88	86	88	80	70	70	75	71.7
	Minimum	42	50	40	42	43	33	30	40	40	45	45	43	45	50	53	60	50	55	52	37	33	40	44	54	54	54	63	65	60	54	45	47.1
Warrenton	Maximum	74	71	67	75	78	64	67	65	55	55	59	61	68	76	79	89	88	85	78	60	62	60	70	81	84	85	89	89	81	74	71	72.9
	Minimum	49	52	44	43	48	37	34	49	49	45	46	48	47	48	55	62	56	64	52	44	43	45	45	48	60	58	62	66	67	61	48	50.8
Southeast Lowlands																																	
Campbell	Maximum	73	72	73	79	80	66	67	76	69	68	67	65	70	76	83	92	93	86	74	73	74	61	69	80	78	89	93	94	89	82	76	77.0
	Minimum	53	47	47	42	45	46	37	42	43	47	47	42	42	44	45	54	62	60	57	50	44	47	40	40	59	50	58	57	63	59	56	49.2
Caruthersville	Maximum	77	77	82	82	78	75	75	68	75	71	72	68	67	75	81	84	93	94	85	81	72	74	76	72	79	77	90	93	93	91	83	79.4
	Minimum	59	55	52	54	49	57	49	43	48	51	51	51	46	48	49	55	60	69	67	65	55	52	57	57	50	64	59	67	65	71	66	56.2
Doniphan	Maximum	68	83	80	75	74	85	70	75	73	70	66	68	70	78	85	92	92	84	80	73	69	70	70	80	81	84	90	90	87	77	75	77.9
	Minimum	55	47	50	40	43	39	37	45	45	49	47	43	42	42	44	57	57	64	60	52	49	41	38	41	50	52	58	58	64	61	50	49.0
Jackson	Maximum	66	74	73	74	71	71	62	69	68	61	59	63	68	73	79	85	87	84	74	66	62	63	64	74	78	81	87	87	86	79	72	72.9
	Minimum	53	40	43	37	42	39	37	44	44	45	46	43	44	40	43	53	62	62	56	49	33	45	35	38	58	54	57	58	65	59	53	47.6
Poplar Bluff	Maximum	69	83	73	74	76	62	65	72	69	64	64	66	70	80	80	90	90	82	72	73	70	65	70	79	72	85	89	90	88	76	77	75.3
	Minimum	55	47	44	41	44	45	38	46	45	50	47	45	45	42	45	53	63	65	61	52	42	51	40	41	60	53	59	58	65	62	56	50.3
Sikeston	Maximum	69	78	82	75	75	74	65	73	72	65	64	63	70	77	83	..	92	85	82	70	72	69	67	79	80	86	93	95	93	85	75	[a]76.9
	Minimum	55	49	52	45	52	47	40	47	48	49	48	45	50	46	53	..	55	65	64	53	45	49	42	46	55	56	62	63	70	61	58	[a]52.3
Cairo, Ill	Maximum	66	79	65	73	69	64	62	71	66	62	60	63	69	74	80	90	90	82	75	68	67	57	64	76	77	82	89	91	88	78	72	73.2
	Minimum	56	51	49	47	56	44	43	53	51	51	50	47	49	51	55	61	69	68	56	55	48	49	47	48	61	60	64	70	70	62	59	54.8
Ozark Plateau																																	
Arcadia	Maximum	68	65	78	66	73	74	60	65	67	63	56	57	60	66	74	80	90	86	79	72	65	63	58	65	75	78	79	85	85	74	73	70.9
	Minimum	52	42	41	33	40	39	36	44	41	45	45	44	41	37	42	56	55	58	60	48	35	45	33	40	58	52	55	58	61	55	45	46.3
Aurora	Maximum	67	76	72	75	71	54	67	66	55	59	56	62	68	72	81	90	86	91	68	60	59	58	68	82	76	79	84	82	78	67	69	70.9
	Minimum	53	54	45	49	50	38	35	48	43	45	46	45	43	45	52	66	65	65	53	45	43	43	40	54	66	55	62	63	63	58	47	50.9
Birchtree	Maximum	69	78	72	75	74	63	65	71	62	60	58	62	68	75	80	92	87	79	72	68	65	60	70	78	75	81	85	85	75	75	70	72.5
	Minimum	52	45	47	45	44	40	34	45	40	48	45	45	45	41	44	58	60	58	54	48	38	46	36	43	59	50	58	59	62	58	50	48.3
Eldon§§	Maximum	73	74	74	79	65	52	69	..	57	55	57	63	72	80	83	91	89	82	64	61	61	63	61	85	88	85	88	87	80	66	72	[a]72.5
	Minimum	50	51	41	42	46	40	35	37	57	37	47	44	46	46	50	53	65	62	58	43	40	40	40	44	59	58	62	63	63	61	46	49.2
Farmington	Maximum	72	75	66	73	77	69	67	68	64	56	57	65	67	76	83	90	93	81	72	67	59	62	68	77	86	82	88	90	78	72	71	73.3
	Minimum	51	49	41	37	42	38	37	44	42	45	47	46	46	43	46	59	61	68	49	48	36	45	35	44	60	56	58	62	62	59	49	48.5
Koshkonong	Maximum	69	79	77	75	73	62	66	71	64	63	66	62	68	70	81	91	88	80	71	68	66	61	71	78	74	78	88	85	84	79	76	73.7
	Minimum	54	53	49	44	52	43	39	46	45	49	47	47	48	51	50	58	64	63	56	50	44	49	45	58	61	55	63	65	64	58	51	52.3
Lebanon	Maximum	66	68	76	70	77	70	53	65	59	56	67	54	59	78	75	80	89	87	82	59	60	58	59	70	81	78	84	86	84	81	67	70.9
	Minimum	52	46	42	57	54	38	30	47	38	47	41	43	41	39	48	58	51	58	56	40	35	42	36	50	58	52	62	61	63	58	41	47.9
Mountain Grove	Maximum	71	82	71	78	68	61	66	68	61	57	56	63	71	78	79	91	87	76	69	66	62	61	69	82	78	78	84	82	75	72	74	72.1
	Minimum	52	47	43	45	50	39	35	46	41	45	44	44	43	42	51	57	64	61	52	45	38	45	37	47	57	51	61	60	65	59	47	48.8
Neosho	Maximum	67	77	78	89	82	56	68	68	58	63	62	65	70	75	83	92	91	83	71	65	63	61	77	86	85	89	86	84	83	80	72	75.1
	Minimum	55	44	44	49	54	41	32	49	44	46	48	46	37	39	44	66	59	66	55	46	42	45	36	54	68	59	61	67	62	60	45	50.4
Rolla	Maximum	68	75	69	75	72	60	66	64	56	55	53	59	67	73	80	89	87	84	74	59	60	56	66	80	81	82	86	86	78	71	70	71.0
	Minimum	51	50	45	41	42	39	35	49	41	46	47	47	45	46	49	63	68	64	52	46	40	45	40	52	61	57	61	66	67	61	49	50.5
Springfield	Maximum	65	74	70	74	60	50	64	61	52	56	53	60	67	72	81	90	85	79	63	60	55	58	68	81	71	78	85	81	77	66	69	68.5
	Minimum	52	51	47	49	46	39	38	45	44	46	45	44	45	50	53	62	66	63	51	46	46	44	44	54	61	57	65	66	62	54	49	51.1
Southwest Plain																																	
Appleton City	Maximum	71	72	71	78	71	58	68	62	53	57	57	63	72	77	83	93	89	79	66	62	57	63	70	83	86	84	86	83	80	68	73	72.1
	Minimum	49	49	44	45	50	37	35	45	40	45	46	44	44	48	48	63	60	62	53	41	42	41	41	53	65	58	65	65	62	59	49	49.9
Clinton	Maximum	75	75	75	68	68	50	70	62	51	52	52	60	65	85	85	89	90	86	70	72	60	69	72	84	90	89	80	84	85	68	78	72.9
	Minimum	50	48	47	54	50	39	36	48	41	46	48	44	44	45	48	66	72	62	52	42	40	48	58	55	59	55	54	63	63	62	58	51.5
Harrisonville§§	Maximum	74	71	69	76	60	61	72	56	51	54	56	65	74	79	84	95	89	71	67	63	56	65	69	85	85	83	85	80	81	66	77	71.6
	Minimum	48	51	44	46	46	36	35	40	40	41	46	45	42	49	52	54	65	60	54	39	41	40	40	46	56	60	63	65	68	60	47	48.8
Lamar	Maximum	70	80	75	82	72	56	70	65	56	61	59	66	71	78	83	95	92	81	75	64	59	63	70	84	87	86	86	87	88	72	74	74.3
	Minimum	53	49	45	51	51	41	36	49	44	46	48	45	42	43	49	68	66	67	54	45	45	43	41	55	69	59	67	67	63	60	48	51.9
Lamonte	Maximum	73	69	70	79	62	55	70	56	51	55	55	63	70	77	80	91	89	71	63	59	61	62	71	81	88	85	86	84	83	66	74	70.9
	Minimum	47	48	42	45	47	39	35	46	39	46	47	45	34	47	50	50	62	57	53	41	41	42	41	56	65	62	66	66	64	57	47	49.3
Marshall	Maximum	72	71	73	76	75	55	70	68	55	53	57	64	72	77	84	91	91	82	67	63	63	63	71	83	87	85	88	88	83	69	73	73.2
	Minimum	45	54	48	42	50	39	34	49	43	45	47	42	46	50	54	65	61	61	54	40	43	44	44	55	67	60	65	66	64	60	49	51.2
Nevada	Maximum	69	72	72	77	67	58	73	66	55	59	56	65	71	77	83	91	87	79	67	62	58	62	70	84	86	82	85	81	81	95	72	72.0
	Minimum	52	51	42	51	49	40	35	46	42	47	47	46	43	44	52	67	62	64	53	43	43	42	40	55	66	58	65	66	61	60	48	51.0
Warrensburg	Maximum	75	69	73	81	74	66	69	63	52	53	54	61	73	82	85	96	88	78	65	62	59	65	76	85	93	90	90	85	72	67	76	73.6
	Minimum	45	51	43	45	47	34	34	49	39	39	46	44	44	48	53	62	62	60	53	39	43	40	40	55	66	62	65	65	61	60	47	49.7
Warsaw	Maximum	74	74	73	81	79	55	71	67	57	56	56	63	72	79	84	91	90	87	76	65	60	62	72	85	88	85	88	88	86	69	76	74.5
	Minimum	50	46	39	45	51	40	34	50	42	47	47	45	44	40	44	65	65	65	56	42	39	43	36	55	67	58	64	67	64	61	46	50.2
Northwest Plateau																																	
Chillicothe	Maximum	70	76	68	72	79	77	57	71	65	51	49	58	68	75	82	86	95	91	76	68	62	63	67	72	86	88	88	90	81	82	69	73.6
	Minimum	38	38	39	41	52	36	31	42	41	42	45	44	42	43	51	59	55	59	52	37	35	39	39	51	56	57	63	64	61	58	42	46.8
Grant City	Maximum	76	68	70	75	68	55	71	59	52	51	53	61	71	78	85	87	88	80	67	58	60	67	70	88	86	86	87	78	76	72	73	71.5
	Minimum	44	50	42	46	43	31	41	41	39	44	46	47	48	53	52	59	57	53	53	35	36	39	44	55	58	60	64	61	60	51	47	48.4
Kansas City	Maximum	73	67	69	76	65	57	70	60	51	52	54	63	71	77	84	94	88	73	66	60	59	63	71	86	86	84	87	77	78	68	76	71.1
	Minimum	49	55	49	51	44	38	45	44	42	47	47	49	49	56	61	67	72	54	51	42	45	43	51	58	60	64	68	67	61	59	54	53.0
Kidder	Maximum	67	72	62	69	71	66	61	71	54	50	49	53	62	71	78	83	89	88	77	65	59	61	62	70	86	87	87	87	79	80	67	70.4
	Minimum	39	47	38	42	50	31	29	41	37	41	43	41	42	46	48	58	55	58	50	34	36	38	40	51	58	57	60	62	60	55	45	46.2
Lexington	Maximum	75	71	74	80	73	59	71	66	53	54	56	65	75	79	84	96	91	86	68	65	63	66	72	86	91	88	88	83	83	70	78	74.5
	Minimum	46	52	45	48	58	37	38	53	43	46	48	45	47	50	56	66	64	61	55	40	45	41	44	58	67	63	66	67	65	62	50	52.5
Maryville	Maximum	77	75	73	76	63	57	75	74	51	50	54	63	74	80	87	88	89	75	68	63	61	68	73	92	89	89	89	81	71	71	80	73.4
	Minimum	39	49	37	45	43	31	30	41	38	43	45	43	43	42	51	58	58	54	52	34	32	36	39	52	59	61	64	62	60	54	45	46.5
Oregon	Maximum	79	72	76	78	62	60	73	72	50	49	53	66	75	81	87	92	90	83	70	64	62	70	74	90	93	88	88	83	74	73	80	74.4
	Minimum	45	52	51	51	41	35	38	45	40	43	45	44	44	50	59	63	63	59	59	40	40	39	51	58	60	63	68	63	63	56	50	50.9
St. Joseph	Maximum	75	69	71	75	64	57	72	57	51	50	53	63	72	78	85	91	85	74	66	59	59	66	71	88	88	85	87	75	74	70	78	71.2
	Minimum	43	51	41	50	41	36	38	45	40	46	47	47	43	48	58	66	64	54	47	38	43	43	47	58	64	63	67	67	63	55	49	50.4
Trenton	Maximum	76	73	68	76	70	52	68	63	56	51	59	67	74	81	85	90	88	80	69	61	62	67	71	85	86	85	88	80	79	68	79	72.8
	Minimum	42	52	41	45	49	37	31	44	42	45	46	44	47	49	53	58	61	55	54	38	37	42	42	52	59	58	62	66	64	58	48	49.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO St. Louis, 6-18-31—970.

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UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., JUNE, 1931 No. 6

GENERAL SUMMARY

June, 1931, was abnormally warm in all parts of Missouri. It was the warmest June since 1918, and only four other Junes have been as warm or warmer than the present month since the beginning of records in 1888. Not more than half-a-dozen days during the entire month were normal or lower. The 13 days from the 18th to the 30th made up one of the hottest continuous spells of any month on record, the daily excess ranging from 7° to 14°.

It was the driest June since 1922, and for practically all the Ozarks and southwestern plain the driest June since 1911, there being less than two inches over about 50 counties, or something less than one-half the usual June rainfall. Six stations located in the northeastern plain and two in the northwest plateau received more than normal rainfall. The northeastern plain as a whole received about 84 per cent of the normal rainfall. The rains were timely and well distributed, some generous amounts falling in localities that were beginning to suffer helped greatly to mitigate otherwise grave conditions.

During the last week of the month late sown oats, pastures, gardens, fruits, and corn on thin lands, were everywhere, save in the northeastern plain, showing the general effects of the dry, hot weather.

TEMPERATURE

The monthly mean temperature for the State based upon the reports of 68 stations, was 77.1°, or 3.9° warmer than the normal and the largest excess for any June since 1918. The highest local monthly mean was 82.5°, at Caruthersville, and the lowest local monthly mean was 73.4°, at Arcadia. The highest temperature reported was 107°, at Marble Hill on the 29th, and the lowest was 40°, at Lebanon on the 1st, and Elsberry on the 8th. The greatest daily range was 44° at Buffalo on the 10th. Day temperatures reached 90° or higher on 13 to 20 days, and 100° or higher on 2 days in the Ozarks and 4 to 5 days in all other sections.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 2.94 inches; 1.93 inches less than the 60 years' average and 0.89 inch drier than last June. The Ozark Plateau and southwestern plain were perhaps the driest sections, receiving something less than half the usual amount of rain, while the northeastern plain was the best watered, getting about 84 per cent of the normal. The largest local monthly amount was 9.14 inches, at Philadelphia, and the least local monthly amount was 0.56 inch, at Osceola. The greatest amount that fell in any twenty-four consecutive hours was 4.90 inches, at Paris, Monroe County, on the 12th.

MISCELLANEOUS PHENOMENA

Hail.—On the 6th, 7th, 15th, 21st, and 30th. Light, except damaging locally extreme northwest on the 6th. See special article further along.

Halos, lunar.—On the 23d.

Halos, solar.—1st, 2d, 3d, 5th, 9th, 11th, 12th, 15th, and 20th.

Thunderstorms.—Local, 1st, 2d, 7th, 9th, 10th, 19th, 21st, 22d, 23d, 24th, 26th, and 30th. More general on the 4th, 5th, 6th, 11th, 12th, 14th, 15th, and 20th.

Winds.—Thunderstorm squalls with excessive rains locally in Davies, Macon, Knox, Clark, Lewis, and Monroe counties on the 5th and 6th. Not much damage by wind but considerable by erosion of hill sides and flooded creeks. And some small damage by wind at Skidmore, Nodaway County the evening of the 20th.

(Continued on Page 29)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	29.95	77	51	56	351	79	4,011	5.6	23	nw.	7
Hannibal	29.97	76	52	..	...	..	4,575	6.4	26	nw.	11
Kansas City	29.91	68	49	49	401	90	4,963	6.9	35	sw.	5
St. Joseph	29.90	75	53	52	373	83	4,961	6.9	38	nw.	20
St. Louis	29.97	67	53	52	348	78	7,061	9.8	39	n.	4
Springfield	29.98	73	48	52	394	90	5,931	8.2	26	se.	11
Cairo, Ill.	29.98	74	49	54	...	..	3,903	5.4	34	n.	7
Keokuk, Iowa	29.96	74	54	60	353	79	3,911	5.4	24	nw.	7

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JUNE

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**73.2**	.....	**102**	**41**	**4.87**	.....	**4.63**	**0**	**9**	**14**	**10**	**6**
1888	72.6	− 0.6	103	37	6.20	+1.33	....	0	7	..	..	..
1889	70.7	− 2.5	100	38	4.66	−0.21	....	0	6	..	..	..
1890	77.2	+ 4.0	105	50	2.59	−2.28	....	0	6	..	..	..
1891	73.3	+ 0.1	103	46	6.94	+2.07	....	0	13	..	..	..
1892	74.5	+ 1.3	100	38	3.18	−1.69	4.25	0	7	15	9	6
1893	72.6	− 0.6	98	42	4.61	−0.26	3.60	0	9	12	12	6
1894	74.5	+ 1.3	105	30	3.92	−0.95	3.48	0	7	16	11	3
1895	73.2	0.0	100	42	5.77	+0.90	3.85	0	10	12	11	7
1896	72.5	− 0.7	101	45	8.32	+3.45	5.60	0	9	12	11	7
1897	73.6	+ 0.4	102	38	6.18	+1.31	6.40	0	12	9	14	7
1898	75.3	+ 2.1	100	42	5.88	+1.01	6.05	0	9	13	12	5
1899	74.3	+ 1.1	101	42	3.87	−1.00	4.48	0	9	15	10	5
1900	73.3	+ 0.1	103	44	4.79	−0.08	5.06	0	10	12	12	6
1901	77.9	+ 4.7	110	40	2.13	−2.74	2.99	0	6	18	10	2
1902	70.9	− 2.3	100	37	6.57	+1.70	6.08	0	12	11	10	9
1903	67.3	− 5.9	95	36	3.25	−1.62	4.90	0	9	15	9	6
1904	70.5	− 2.7	93	45	6.42	+1.55	5.41	0	11	12	12	6
1905	75.2	+ 2.0	103	42	3.09	−1.78	4.80	0	7	15	10	5
1906	72.7	− 0.5	101	40	4.95	+0.08	4.07	0	10	15	9	6
1907	71.2	− 2.0	97	40	5.84	+0.97	3.90	0	11	14	10	6
1908	72.3	− 0.9	98	43	6.30	+1.43	5.30	0	11	13	10	7
1909	73.9	+ 0.7	98	49	5.21	+0.34	4.12	0	11	11	13	6
1910	70.4	− 2.8	99	38	3.92	−0.95	3.70	0	8	16	7	7
1911	78.9	+ 5.7	112	43	1.78	−3.09	2.07	0	6	18	8	4
1912	69.5	− 3.7	100	42	4.78	−0.09	5.60	0	9	14	8	8
1913	75.4	+ 2.2	107	33	2.57	−2.30	3.05	0	6	18	8	4
1914	79.3	+ 6.1	106	43	2.37	−2.50	3.50	0	5	18	7	5
1915	70.8	− 2.4	98	38	6.51	+1.64	4.86	0	12	11	10	9
1916	70.0	− 3.2	100	42	6.99	+2.12	6.75	0	10	14	9	7
1917	71.0	− 2.2	103	35	3.78	−1.09	4.19	0	8	19	7	4
1918	77.2	+ 4.0	110	48	3.15	−1.72	4.28	0	7	17	8	5
1919	75.0	+ 1.8	104	44	5.59	+0.72	4.21	0	11	14	10	6
1920	72.7	− 0.5	104	41	2.35	−2.52	3.74	0	6	18	7	5
1921	76.6	+ 3.4	105	44	5.71	+0.84	4.14	0	12	12	10	8
1922	76.5	+ 3.3	108	43	1.66	−3.21	2.30	0	5	19	8	3
1923	73.5	+ 0.3	103	45	5.48	+0.61	4.42	0	11	14	9	7
1924	72.5	− 0.7	101	38	7.39	+2.52	4.39	0	14	12	12	6
1925	76.5	+ 3.3	103	46	6.10	+1.23	8.14	0	9	15	10	5
1926	70.9	− 2.3	101	37	3.62	−1.25	2.94	0	8	15	9	6
1927	70.3	− 2.9	99	41	5.77	+0.90	5.23	0	10	15	7	8
1928	67.7	− 5.5	91	40	11.17	+6.30	7.34	0	15	8	11	11
1929	71.3	− 1.9	99	39	5.77	+0.90	6.25	0	10	16	8	6
1930	72.4	− 0.8	109	36	3.83	−1.04	5.20	0	7	18	8	4
1931	77.1	+ 3.9	107	40	2.94	−1.93	4.90	0	6	19	8	3
.....	....	.....	..	..	....	.....	....	..	..	..	..	..

Climatological Data for June, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	79.4	+ 6.2	105	25	52	1†	31	2.74	−2.75	1.85	0	8	21	2	7	se.	O. K. Benecke
Clifton Hill	Randolph	731	32	76.6	+ 3.6	102	30	45	8	36	0.97	−3.92	0.34	0	6	15	9	6	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	78.0	+ 5.2	101	30	49	8	29	1.30	−3.46	1.02	0	7	15	9	6	s.	U. S. Weather Bureau
Downing	Schuyler	876	10	75.4	+ 4.0	100	28†	46	8	28	6.00	+0.54	1.68	0	9	19	8	3	s.	James Taylor
Elsberry	Lincoln	449	0	76.6	.....	103	29†	40	8	37	0 83	.....	0.73	..	3	17	1	12	s.	Ray E. Mills
Fayette	Howard	661	51	76.6	+ 3.3	101	30	46	8	37	2.41	−2.38	2.18	0	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	76.2	+ 2.6	101	29†	46	1	30	1.11	−3.56	0.34	0	8	21	9	0	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	7.60	+3.31	2.36	0	8	18	5	7	sw.	J. W. Pulliam
Hannibal	Marion	534	39	77.6	+ 5.1	102	30	49	8	28	5.72	+1.82	2.97	0	8	13	11	6	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	77.8	+ 3.8	103	30	50	1	30	1.14	−2.88	0.53	0	7	21	5	4	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	75.6	+ 2.8	101	30	48	8	28	5.48	+1.21	2.90	0	7	21	2	7	sw.	Prof. J S. Stokes
Louisiana	Pike	469	37	76.7	+ 4.6	103	27	44	8	31	4.60	+0.65	2.85	0	6	22	7	1	s.	Stark Bros. Nurseries
Macon	Macon	875	32	76.2	+ 3.2	100	29	45	1	29	3.21	−1.20	1.35	0	9	19	4	7	se.	W. C. Brown
Mexico	Audrain	800	42	77.7	+ 4.0	104	30	48	8	30	1.05	−3.73	0.50	0	7	26	0	4	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	6.74	+1.67	4.51	0	7	21	3	6	ne.	J. S. Conway
St. Charles	St. Charles	456	43	78.3	+ 4.1	106	30	47	8	32	2.26	−1.70	0.93	0	5	15	14	1	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	79.6	+ 4.6	102	29	54	1	26	1.98	−1.84	1.13	0	6	16	13	1	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	78.8	+ 3.9	102	29	52	8	25	2.17	−1.59	1.38	0	6	23	7	0	w.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	4.01	−0.70	2.95	0	9	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	33	75.6	+ 2.4	102	30	45	8	30	7.38	+3.28	2.35	0	7	18	10	2	s.	Frank Hall
Unionville	Putnam	1,062	38	76.0	+ 4.2	102	24†	46	8	32	4.24	−0.44	1.60	0	8	22	4	4	s.	Geo. W. Davis
Warrenton	Warren	816	49	78.0	+ 4.4	103	30	50	1†	30	2.68	−1.28	2.32	0	3	11	18	1	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	76.5	+ 4.0	102	30	48	8	24	6.56	+2.43	2.22	0	10	13	8	9	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	77.1	+ 4.0	106	30	40	8	37	3.57	−0.75	4.90	0	7	18	7	5	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	78.5	.....	106	30	46	8	40	0.83	.....	0.37	0	6	24	6	0	s.	Jeff. King
Caruthersville	Pemiscot	265	35	82.5	+ 4.7	105	29†	53	9	29	1.01	−2.97	0.54	0	5	18	10	2	w.	Sam Smith
Doniphan	Ripley	344	27	78.2	+ 3.4	103	30	46	1	36	2.10	−2.28	1.05	0	3	21	9	0	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	75.1	+ 1.0	99	30	42	8	35	0.97	−3.32	0 60	0	4	4	13	13	s.	John G. Putz
Marble Hill	Bollinger	470	36	77.9	+ 4.0	107	29	43	8	42	2.34	−1.83	1.50	0	4	13	11	6	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	3.82	−1.21	2.07	0	6	22	7	1	sw.	John A. Spence
Poplar Bluff	Butler	339	27	77.3	+ 1.9	103	29	48	1†	35	1.48	−3.54	1.00	0	4	25	2	3	s.	J. H. Wolpers
Sikeston	Scott	318	30	79.6	+ 5.1	102	29	49	8	36	3.24	−0.99	1.47	0	5	28	2	0	s.	John A. LaFont
Cairo, Ill	Alexander, Ill	358	56	79.2	+ 2.9	100	29	54	1	25	3.13	−0.70	1.49	0	8	7	13	10	s.	U. S. Weather Bureau
Section means and	extremes	....	..	78.5	+ 3.8	107	29	42	8	42	2.10	−2.10	3.06	0	5	18	8	4	s.	
Ozark Plateau																				
Arcadia	Iron	926	49	73.4	+ 1.4	98	29	41	1	33	2.26	−2.32	1.12	0	6	25	1	4	w.	Arcadia College
Aurora	Lawrence	1,370	39	76.0	+ 2.2	96	30	45	1	29	2.28	−2.70	2.01	0	4	26	1	3	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	75.4	+ 2.7	100	30	45	1†	36	3.35	−1.18	1.63	0	6	25	4	1	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	74.6	.....	101	30	43	8†	44	2.74	.....	1.27	0	4	26	3	1	s.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	0.62	.....	0.30	0	4	23	5	2	sw.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	H. E. Dean
Eldon	Miller	934	35	77.6	+ 4.4	102	28†	50	1	30	1.35	−2.96	0.74	0	5	8	20	2	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	76.6	+ 4.0	103	29	45	1	36	1.22	−3.41	0.64	0	4	14	15	1	sw.	Robert Forsyth
Goodland	Iron	1,000	37	73.5	+ 1.4	101	29†	42	8	37	1.95	−2.15	0.73	0	7	23	4	3	s.	F. M. Adams
Greenville	Wayne	381	7	75.4	.....	105	29	41	1	40	1.80	−2.98	1.53	0	2	20	10	0	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	2.78	.....	1.02	0	5	23	6	1	sw.	A. W. Madison
Koshkonong	Oregon	958	30	77.5[a]	+ 3.2	100	30	53	8	28	1.12	−3.36	0.66	0	3	20	8	2	se.	R. M. Hitt
Lebanon	Laclede	1,265	44	75.0	+ 1.9	103	30	40	1	38	0.78	−4.15	0.29	0	4	22	5	3	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	78.1	+ 4.1	100	27†	48	1	31	0.57	−4.23	0.20	0	5	22	7	1	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	30	75.6	+ 4.0	99	29	43	1	38	2.23	−2.33	1.05	0	6	20	7	3	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	76.5	+ 2.6	100	29	42	1	36	1.93	−3.50	0.88	0	6	27	2	1	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	76.2	+ 3.4	98	30	45	1	29	2.98	−1.15	1.45	0	8	3	20	7	s.	F. H. Lane
Salem(near)	Dent	1,173	27	75.1	+ 2.3	100	30	41	1	32	1.62	−2.68	0.90	0	3	24	5	1	sw.	A. C. Leech
Seligman	Barry	1,542	29	75.7°	+ 3.2	95	27†	45	1	30	1.00	−2.53	0.31	0	4	23	5	2	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	74.3	+ 2.3	97	30	45	8	36	2.24	−2.39	0.77	0	5	25	4	1	s.	Ira H. Hailey
Springfield	Greene	1,324	43	76.4	+ 3.9	97	30	52	1	28	0.84	−3.84	0.30	0	5	27	3	0	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	75.7	+ 2.9	105	29	40	1	44	1.73	−2.83	2.30	0	5	21	7	2	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	77.1	+ 2.3	101	26†	49	1	32	0.96	−4.03	0.44	0	5	13	16	1	sw.	W. G. Bigelow
Clinton	Henry	765	38	79.5	+ 6.1	106	24†	50	7	35	1.76	−2.97	0.42	0	8	20	10	0	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	77.2	+ 3.8	101	29†	50	1	31	0.92	−3.54	0.37	0	5	11	8	11	s.	John H. Patterson
Lamar	Barton	980	44	78.8	+ 4.4	104	27	49	1	34	1.28	−3.68	1.12	0	2	24	4	2	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	77.6	+ 3.3	103	30	51	8	33	1.83	−2.66	1.05	0	6	26	1	3	s.	J. E. Wheeler
Marshall	Saline	779	43	78.8	+ 4.9	100	23†	50	8	33	0.92	−3.40	0.52	0	5	23	4	3	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	77.5	+ 3.9	100	27†	53	8	31	0.93	−4.18	0.52	0	5	20	8	2	sw.	George A. Kaupp
Warrensburg	Johnson	878	44	78.2	+ 4.0	105	26†	50	2†	38	2.84	−1.92	0.91	0	7	19	8	3	sw.	E. A. Markey
Warsaw	Benton	687	30	78.6	+ 4.9	103	28†	49	8	38	4.50	−0.67	3.15	0	7	20	6	4	s.	Everett Martin
Section means and	extremes	.....	..	78.1	+ 4.2	106	24†	49	1†	38	1.77	−3.01	3.15	0	6	20	7	3	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	76.0	+ 3.6	99	28†	48	8	30	2.93	−1.55	1.10	0	7	23	5	2	se.	A. S. Cumming
Chillicothe	Livingston	779	21	76.8	+ 2.6	105	30	47	2	34	4.66	−0.41	1.53	0	9	22	7	1	e.	Wm. J. Olenhouse
Conception	Nodaway	980	42	77.2	+ 5.6	101	27†	51	7	30	3.32	−1.23	1.35	0	8	11	15	4	s.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	77.1	+ 5.2	100	25†	49	8	35	0.74	−4.37	0.28	0	7	26	2	2	s.	Fred L. Stiff
Grant City	Worth	1,134	27	76.4	+ 5.1	100	26†	51	7†	29	2.52	−2.03	0.72	0	7	13	16	1	sw.	W. P. Spillman
Kansas City	Jackson	963	42	79.7	+ 6.1	101	27	57	7	25	1.50	−3.49	1 05	0	4	19	9	2	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	75.2	+ 2.8	101	26	45	1	35	1.41	−2.95	0.41	0	6	21	5	4	s.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	2.61	.....	0.98	0	9	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	79.6	+ 6.8	102	27†	54	8	29	2.21	−2.56	1.55	0	7	21	7	2	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	76.6	+ 7.0	101	30	50	7†	36	2.70	−1.93	0.84	0	8	18	10	2	s.	J. R. Brink
Oregon	Holt	1,048	75	79.2	+ 6.9	102	28	52	7	33	4.30	−0.43	1.91	0	7	24	4	2	sw.	Mina Wright
St. Joseph	Buchanan	967	23	78.7	+ 5.2	100	30	53	8	33	2.42	−2.68	0.93	0	6	19	8	3	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	76.4	+ 3.7	99	28	52	5†	35	6.53	+1.72	3.10	0	10	14	11	5	se.	Albert Volker
Trenton	Grundy	822	35	77.0	+ 4.4	102	27†	48	8	30	4.67	+0.37	1.97	0	9	21	7	2	s.	W. H. Estes
Section means and	extremes	.....	..	77.4	+ 5.0	105	30	45	1	36	3.04	−1.66	3.10	0	7	19	8	3	s.	
State means and	extremes	.....	..	77.1	+ 3.9	107	29	40	1†	44	2.94	−1.93	4.90	0	6	19	8	3	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for June, 1931

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri	....	.02	.05	....	.04	.01	.22	....	....	T.	....	2.18	....	....	....	....	....	....	T.	....	....	....	....	....	....	.05	....	....	....	....	....	2.57
Bowling Green	Mississippi	....	.03	.10	.28	....	....	....	.18	....	....	1.25	.14	1.35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.33
Brunswick	Grand	....	.10	.05	....	....	.06	.25	....	....	.05	....	1.85	.30	....	....	....	....	....	....	....	.08	....	....	....	....	....	....	....	....	....	....	2.74
Clifton Hill	Chariton	T.	.12	....	.05	....	.24	....	....	....	T.	.34	.07	....	.15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.97
Columbia***	Missouri	T.	.03	....	.01	T.	.20	....	....	.01	....	.77	.25	....	....	....	....	....	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	1.30
Downing	Mississippi	....	.18	....	....	1.08	1.68	.03	....	....	.43	.14	.69	....	....	....	....	....	....	....	.10	1.67	....	....	....	....	....	....	....	....	....	....	6.00
Edina	do	.18	....	T.	1.50	2.90	....	....	....	.52	.30	.80	.10	....	....	....	....	....	....	T.	....	T.	....	....	....	....	....	....	....	....	....	....	6.30
Elsberry	do	....	....	....	T.	.07	....	.03	....	....	.73	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.83
Eolia	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fayette	Missouri	....	....	.03	....	....	....	.10	....	....	.06	2.18	.04	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.41
Fulton	do	....	.04	....	....	.04	....	.13	....	....	.34	.06	.32	.09	....	....	....	....	....	....	....	.09	....	....	....	....	....	....	....	....	....	....	1.11
Gorin	Mississippi	....	.19	....	....	.96	2.04	....	....	....	2.36	1.00	....	.08	....	....	....	....	....	....	.08	.89	....	....	....	....	....	....	....	....	....	....	7.60
Hannibal***	do	....	.04	....	.26	1.22	.03	....	....	....	1.08	2.77	.31	....	....	....	....	....	....	....	....	.01	T.	T.	....	....	....	....	....	T.	....	....	5.72
Hermann	Missouri	....	....	....	T.	....	....	.40	....	....	1.70	.08	.03	.15	....	....	....	....	....	....	....	.11	....	....	....	....	....	....	....	....	....	....	2.47
Jefferson City	do	.03	....	....	.05	.12	.53	....	....	....	.10	.14	.17	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.14
Kahoka	Mississippi	....	....	....	....	.49	2.15	.17	....	....	.20	1.20	1.32	....	....	....	....	....	....	....	....	....	1.72	....	....	....	....	....	....	....	....	....	7.25
Kirksville	do	....	.35	....	.63	.70	2.90	....	....	....	.17	.23	.50	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5.48
Knox City	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Laddonia	do	....	....	....	.55	....	....	....	....	....	.74	....	.10	....	....	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	1.39
LaGrange	do	....	.10	....	1.00	.82	....	....	....	....	1.75	4.25	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7.92
Lewistown	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Louisiana	do	....	.07	....	.10	.93	.15	....	....	....	2.85	....	.50	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.60
Lucerne	Grand	....	.26	....	....	.38	.42	.15	....	....	....	....	.73	.08	....	....	....	....	....	....	.60	.31	....	....	....	....	....	....	....	....	....	....	2.93
Macon	Chariton	....	.05	.25	.12	.05	1.35	....	....	....	.05	....	1.10	.04	....	....	....	....	....	....	....	.20	....	....	....	....	....	....	....	....	....	....	3.21
McCune	Mississippi	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Memphis	do	....	.14	.15	....	.57	2.08	T.	....	T.	.40	....	.95	....	....	....	....	....	....	....	....	T.	2.07	....	....	....	....	....	....	....	....	....	6.36
Mexico	do	....	T.	.05	....	.03	....	....	....	....	.17	....	.50	.01	.12	....	....	....	....	....	....	....	....	....	....	.17	....	....	....	....	....	....	1.05
Milan	Grand	....	.08	.38	....	.15	2.60	....	....	....	.07	....	.75	.24	....	....	....	....	....	....	1.02	.46	....	....	....	....	....	....	....	....	....	....	5.75
Monroe City	Mississippi	....	.11	....	.06	.67	.02	....	....	....	.28	1.09	4.51	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6.74
New London	do	....	.14	.22	.09	.28	.34	.03	....	....	.61	....	1.49	.06	....	....	....	....	....	....	.10	....	....	....	....	....	....	....	....	....	....	....	3.36
Pacific	Meramec	....	....	....	....	....	....	....	....	....	1.70	....	.07	.10	....	....	....	....	....	....	....	....	....	....	....	.12	....	....	....	....	....	....	1.99
Palmyra	Mississippi	....	.05	....	.08	....	2.00	....	....	....	2.00	....	3.70	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7.83
Paris	do	....	....	.19	....	....	.10	....	....	....	.50	....	4.90	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5.69
Perry	do	....	....	T.	....	.04	....	....	....	.38	....	....	1.66	.02	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.10
Philadelphia	do	....	....	.10	....	.80	2.72	....	....	1.52	....	....	4.00	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9.14
Plevna	do	....	.16	T.	....	.99	1.96	....	....	....	1.00	....	1.99	.11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6.21
St. Charles	Missouri	....	....	....	....	.49	....	.48	....	....	.93	T.	.33	....	....	....	....	....	....	....	....	....	....	....	....	....	.03	....	....	....	....	....	2.26
St. Louis (1)***	Mississippi	....	....	....	.16	T.	.19	.03	....	....	1.13	T.	T.	....	....	....	....	....	....	....	....	....	....	....	.46	....	....	....	....	.01	....	....	1.98
St. Louis (2)*	do	....	....	....	.22	....	.22	.06	....	....	1.38	T.	....	....	....	....	....	....	....	....	....	....	....	....	.23	....	....	....	....	.06	....	....	2.17
Shelbina	do	....	....	.16	.18	.17	.11	.03	....	....	.33	....	2.95	.04	....	....	....	....	....	....	....	.04	....	....	....	....	....	....	....	....	....	....	4.01
Steffenville	do	....	10	....	T	1.45	1.30	....	....	....	1.90	.18	2.35	....	....	....	....	....	....	....	....	.10	....	....	....	....	....	....	....	....	....	....	7.38
Troy	do	....	....	....	....	.35	....	.32	....	....	1.45	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.12
Union	Meramec	....	....	....	....	....	....	.59	....	....	2.09	....	.11	.05	....	....	....	....	....	....	....	....	....	....	....	.04	....	....	....	....	....	....	2.88
Unionville	Chariton	....	.30	....	T.	.30	1.25	.05	....	....	....	.04	.70	....	....	....	....	....	....	....	1.45	.15	....	....	....	....	....	....	....	....	....	....	4.24
Valley Park	Meramec	....	....	....	.41	T.	.17	....	....	....	1.11	T.	....	T.	....	....	....	....	....	....	....	....	....	....	T.	T.	....	T.	....	....	....	....	1.69
Warrenton	Mississippi	....	T.	....	....	....	....	.17	....	....	2.32	....	.19	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.68
West Ely	do	....	....	.51	.73	.46	T.	....	....	.38	3.50	.10	....	....	....	....	....	....	....	....	....	T	....	....	....	T	....	....	....	....	....	....	5.68
Winfield	do	....	....	....	.10	....	.30	....	....	....	1.05	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.45
Keokuk, Ia.***	do	....	.08	....	.07	2.11	.29	.02	....	....	.62	1.74	.27	....	....	....	....	....	....	....	.04	1.32	....	....	....	....	....	....	....	....	....	....	6.56
Southeast Lowlands																																	
Campbell	St. Francis	....	....	....	....	....	....	.37	....	....	....	....	....	.08	....	....	.01	....	....	....	....	....	....	.01	.30	.06	....	....	....	....	....	....	0.83
Cape Girardeau	Mississippi	....	....	....	....	....	.01	.60	....	....	....	....	....	.12	....	.31	....	....	....	....	....	....	....	....	.09	....	.02	....	....	....	....	....	1.15
Caruthersville	do	....	....	....	....	....	....	.12	....	....	....	....	....	.06	....	....	....	....	....	....	.13	....	....	.16	.54	....	....	....	....	....	....	....	1.01
Dexter	St. Francis	....	....	....	....	....	....	1.79	....	....	....	....	....	.21	....	....	.09	....	....	....	....	....	....	.04	3.06	....	....	....	....	....	....	....	5.19
Douiphan	Black	....	....	....	....	....	....	.95	....	....	....	....	....	....	....	.10	....	....	....	....	....	....	....	....	1.05	....	....	....	....	....	....	....	2.10
Fisk	St. Francis	....	....	....	....	....	....	....	1.19	....	....	....	T.	.34	....	....	1.65	....	....	....	....	....	....	....	.85	1.90	....	....	....	....	....	....	5.93
Jackson	Mississippi	....	....	....	....	....	....	.60	....	....	....	....	.02	....	.10	....	....	....	....	....	....	....	....	.25	....	....	....	....	....	....	....	....	0.97
Marble Hill	do	....	....	....	....	....	....	.62	....	....	....	....	1.50	....	....	....	....	....	....	....	....	....	....	.10	....	....	....	....	....	.12	....	....	2.34
Morehouse	do	....	....	....	....	....	....	1.61	....	....	....	....	.02	.05	....	T.	....	....	....	....	.06	....	....	.01	2.07	....	....	....	....	....	....	....	3.82
New Madrid	do	....	....	....	....	....	....	.87	....	....	....	....	....	.03	....	....	....	....	....	....	T.	....	....	....	1.07	.08	....	....	....	....	....	....	2.05
Parma	St. Francis	....	....	....	....	....	....	1.11	....	....	....	....	....	.08	....	....	....	....	....	....	....	....	....	....	.84	....	....	....	....	....	....	....	2.03
Poplar Bluff	Black	....	....	....	....	....	....	1.00	....	....	....	....	....	....	....	....	.15	....	....	T.	....	....	....	....	.07	.26	....	....	....	....	....	....	1.48
Sikeston	Mississippi	....	....	....	....	....	.20	....	....	....	....	....	....	.01	....	1.32	....	....	....	....	....	....	....	....	T.	1.47	....	....	....	....	.24	....	....	3.24
Cairo, Ill.***	do	....	....	....	T.	T.	.28	.81	....	....	....	T.	.03	....	.01	T.	....	....	....	....	....	.49	.02	.58	.91	....	T.	....	....	....	....	....	3.13
Ozark Plateau																																	
Arcadia	St. Francis	....	....	....	....	....	1.12	....	....	....	.18	T.	T.	.30	....	.02	....	....	....	....	....	....	.44	....	....	....	.20	....	....	....	....	....	2.26
Aurora	Neosho	....	....	....	....	....	....	....	....	.07	....	.14	.06	....	T.	2.01	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.28
Birchtree (near)	Black	....	....	....	....	....	....	.55	....	....	.15	.08	.72	....	....	.22	....	....	....	....	....	....	....	....	1.63	....	....	....	....	....	....	....	3.35
Buffalo	Osage	....	....	....	....	....	.31	....	.09	....	....	....	1.27	....	....	1.07	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.74
Caplinger Mills	do	....	....	....	....	....	.05	....	....	.07	....	.30	.20	....	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.62
Chaonia	St. Francis	....	....	....	....	....	....	1.64	....	....	....	....	....	.74	....	.02	1.10	....	....	....	....	....	....	....	....	.17	....	....	....	....	....	....	3.67
Dean	Neosho	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Missouri	....	....	....	....	.12	....	.14	....	....	.10	....	.25	....	....	.74	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.35
Farmington	St. Francis	....	....	....	T.	....	....	.64	....	T.	.38	....	....	.02	....	....	.18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.22
Fredericktown	do	....	....	....	....	....	....	1.08	....	....	....	....	....	....	....	.28	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.36
Galena	White	....	....	....	....	....	....	....	....	....	....	.05	.42	....	....	.52	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.02
Goodland	Black	....	....	....	....	....	....	.73	....	....	.12	....	.55	....	.31	.03	....	....	....	....	....	....	.20	....	....	....	....	....	....	....	.01	....	1.95
Greenville	St. Francis	....	....	....	....	....	....	1.53	....	....	....	....	.27	....	T.	T.	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	1.80
Hailey	White	....	....	....	....	....	....	....	....	.20	....	.60	.81	....	.15	1.02	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.78
Koshkonong	Black	....	....	....	....	....	....	.66	....	....	....	....	.15	....	....	.31	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.12
Lebanon	Osage	....	....	....	....	....	....	....	....	.28	.05	.16	....	....	T.	....	....	....	....	....	....	....	....	....	.29	....	....	....	....	....	....	....	0.78
Leeper	Black	....	....	....	....	....	....	.63	....	....	T.	....	.06	.36	.11	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.16
Lockwood	Osage	....	....	....	....	....	.20	T.	....	.20	....	.09	.04	....	....	.04	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.57
Mountain Grove	White	....	....	....	T.	....	....	.37	....	....	.07	.11	1.05	....	T.	.57	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.06	....	2.23
Neosho	Neosho	....	....	....	....	....	....	.02	T.	.58	T.	.05	.88	....	.06	.34	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	1.93
Owensville	Gasconade	....	....	....	....	....	....	.70	....	....	1.40	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.10
Ozark Beach	White	....	....	....	....	....	....	....	....	.19	.12	.96	....	....	....	.36	.13	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.76
Rolla	Meramec	....	....	....	....	.25	....	.61	....	....	1.45	....	.27	.04	....	.03	....	....	....	....	....	....	.05	....	....	.28	....	....	....	....	....	....	2.98
Salem (near)	do	....	....	....	....	....	....	.64	....	T.	....	....	.90	....	....	.08	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.62
Seligman	Neosho	....	....	T.	....	....	....	....	....	.31	T.	.11	.27	....	....	.31	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.00
Seymour (near)	White	....	....	....	T.	....	T.	.21	....	T.	....	.74	.31	....	.21	.77	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.24
Springfield	do	....	....	....	T.	....	.10	....	....	.30	T.	.29	....	....	.06	.09	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T	....	0.84
Steelville	Meramec	....	....	....	....	....	....	2.25	....	....	1.76	....	.36	.17	....	....	....	....	....	....	....	....	....	....	....	.15	....	....	....	....	....	....	4.69
Stover	Missouri	....	....	....	.03	.50	....	....	.22	....	....	.08	1.51	.30	....	2.30	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.94
Tuscumbia	Osage	....	....	....	.24	.02	T.	.27	....	....	....	T.	.37	....	....	.86	T.	....	....	....	....	....	....	....	....	.11	....	....	....	....	....	....	1.87
Williamsville	Black	....	....	....	....	....	....	1.00	....	....	....	....	....	.82	....	....	.98	....	....	....	....	....	....	....	....	.13	....	....	....	....	....	....	2.93
Willow Sprgs. (near)	White	....	....	....	....	....	....	.58	....	....	....	....	1.59	....	....	.07	.50	....	....	....	....	....	....	....	....	.01	....	....	....	....	....	....	2.75

Continued on next page

Daily Precipitation for June, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																
Appleton City	Osage				T.	.04	.03	T.		T		.35	.10			.44																0.96
Clinton	do					.11	.16	.42		.35		.30	.17			.20			.05													1.76
Concordia‖	Missouri										.10	.05	1.10																			1.25
Harrisonville‖	Osage						.05	.37			.13	.21	.16																			0.92
Joplin‖	Neosho									.85		.72				.86																2.43
Lamar‖	do										1.12	.16			T.		T.															1.28
Lamonte	Missouri						.55	.05		.10		1.05	.04			.04																1.83
Marshall	do	.02	.10					.21			.07		.52																			0.92
Nevada	Osage						.12			.03		.52	.16			.10																0.93
Osceola‖	do						.08	.03				.16	.15			.14																0.56
Warrensburg	Missouri		T.		.02	T.	.03	.31		.52		.64	.41			.91																2.84
Warsaw	Osage				.25		.08	.30		T.		.02	.68	.02		3.15																4.50
Waverly ‖	Missouri							.20					2.20	.04																		2.44
Northwest Plateau																																
Albany‖	Grand																															
Bethany	do	T.	.77			1.05	.05					.09	.11								.07	.79										2.93
Chillicothe ‖	do		.38	.01		.02	1.53	.29					1.25	.13			.69					.36										4.66
Conception	Missouri	.15	.19			1.35	.12	.43				.12	.24									.72										3.32
Edgerton	do	T.	T.		T.	.05	.02	.28		T.	T.	.20	.01			.08						.10										0.74
Gallatin ‖	Grand		.74				1.75	.22					.41								.30											3.42
Grant City	do	T.	.52		T.	.72	.12	.04				.30	.11									.71										2.52
Kansas City***	Missouri	T.	T.		T.	.14	.28			T.	T.	1.05	T.		T.	T.					.03									T.		1.50
Kidder ‖	Grand		.16				.41	.31				T.	.40	.05								.08										1.41
King City	Missouri	.11	.15			.98	.04	.25				.26	.12		.02							.68										2.61
Lexington	do		.05		.02		.12	.29				.12	1.55	.06																		2.21
Maryville ‖	do		.12				.80	.34				.02	.56		.01	.01						.84										2.70
Oregon	do	.05				.76		.36			T.	.32	.40	T.		1.91						.50										4.30
St. Joseph***	do	.01	T		.01	.45	.17			T.	T.	.85	T.	T.		T.					.93	T.										2.42
Tarkio	do		.12			.42	.10	.36			.19	.51	.65		.22	3.10						.86										6.53
Trenton	Grand	.02	.24		T.	1.97	.61	.04				.89	.27								.02	.61										4.67

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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HAIL STORM IN EXTREME NORTHWESTERN MISSOURI ON JUNE 6, 1931

By W. S. Belden

Destructive hail occurred in many places in extreme northwestern Missouri on the evening of June 6, 1931, in connection with the southeastward movement of a severe thunderstorm, which was also attended by high wind and moderate to heavy rainfall.

Hail was reported over a distance of 75 miles from extreme southwestern Atchison County through Holt County, extreme southwestern Andrew County and in northern Buchanan County. There was also damage from the hail in Doniphan County, Kansas, in the vicinity of the Missouri River.

The thunderstorm advanced at the rate of about 30 miles per hour, being noted a few miles southwest of Langdon, Mo., at 6 p. m. and it reached Gower, Mo., 75 miles to the southeastward, at about 8.30 p. m. The maximum width of the area in which there were paths or streaks of destructive hail was approximately 20 miles in southern Holt County. The paths or streaks of hail damage ranged in width from one-half mile to about four miles.

At Bigelow and vicinity gardens, orchards and field crops, consisting mostly of corn and wheat, were seriously damaged. In a large apple orchard southeast of Mound City the north and west sides of trees were stripped of foliage, young fruit was either knocked off the trees or badly bruised, twigs were cut off, and the bark on trees was split and torn. Hail washed from hillsides to ravines in the orchard was found to be about three feet deep seventeen hours after the storm. Heavy losses were sustained at Amazonia and vicinity. To the northward and eastward of St. Joseph truck crops such as strawberries, grapes, potatoes, and especially staked tomato plants, were in some cases more than half destroyed.

Hailstones were generally from one-fourth inch to one inch in diameter. At various places in the hail area it was necessary to replant corn, there were thousands of window panes broken, and young birds and even fledglings were killed by the hail.

Owing to the varying degree of losses resulting from the hail, ranging from little or no injury to complete destruction, and the period of years required for fruit trees to fully recover from the effects of the storm, it is very difficult to determine approximately the total property loss, but it is believed that $75,000 would be a conservative estimate.

Daily Temperatures for June, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum...	75	80	88	87	87	86	75	82	87	85	84	85	85	90	87	88	89	92	96	94	95	97	100	100	105	103	104	104	104	104	..	91.3
	Minimum ...	52	57	64	69	69	61	57	52	64	66	64	62	62	68	68	67	64	72	72	72	68	74	76	73	74	75	74	78	75	74	..	67.4
Columbia	Maximum...	74	82	87	87	87	73	69	78	84	85	84	81	85	87	84	84	88	91	93	91	92	95	97	96	97	97	99	99	100	101	..	88.2
	Minimum ...	51	58	66	70	70	62	54	49	64	66	66	64	64	69	69	67	65	73	70	72	70	75	75	74	73	74	74	76	75	78	..	67.8
Fayette	Maximum...	76	82	88	90	88	72	71	83	86	85	84	82	89	90	86	86	86	91	93	94	93	95	99	98	100	98	99	100	100	101	..	89.5
	Minimum ...	47	55	57	56	67	64	56	46	51	62	63	64	59	64	67	65	60	67	69	69	69	70	71	69	71	71	70	72	72	72	..	63.8
Hannibal	Maximum...	72	77	86	86	76	68	67	72	82	83	85	79	84	86	86	85	86	92	93	90	92	95	98	98	99	99	99	99	100	102	..	87.2
	Minimum ...	52	61	68	68	64	60	54	49	59	66	62	64	65	66	68	65	64	74	75	75	71	76	77	77	75	78	76	77	78	74	..	67.9
Jefferson City	Maximum...	77	82	88	89	87	86	70	81	81	85	86	83	89	91	88	86	80	89	92	95	94	96	97	98	99	98	101	101	101	103	..	89.8
	Minimum ...	50	56	64	64	67	63	56	51	62	61	64	64	63	66	68	62	56	68	69	70	69	73	73	75	70	72	73	74	73	77	..	65.8
Kirksville	Maximum...	70	76	82	83	73	69	67	76	84	83	79	77	83	82	84	81	85	86	91	89	90	93	97	95	97	98	99	99	100	101	..	85.6
	Minimum ...	52	55	65	64	63	55	54	48	58	63	65	62	61	64	62	60	61	65	69	68	66	71	72	72	72	74	72	73	75	75	..	64.5
Louisiana	Maximum...	72	75	85	86	85	72	70	75	80	80	84	83	85	90	87	85	86	95	92	90	90	96	95	95	101	101	103	100	102	102	..	88.1
	Minimum ...	45	52	62	66	65	60	52	44	56	64	66	67	67	68	65	62	55	70	70	72	72	75	75	73	70	70	75	75	77	70	..	65.3
Macon	Maximum...	74	75	78	87	83	82	76	69	78	86	84	84	80	83	88	88	85	88	91	93	94	91	95	98	98	99	99	99	100	99	..	87.5
	Minimum ...	45	52	56	64	66	65	57	55	49	61	64	64	63	61	66	65	63	60	69	72	70	66	72	73	73	73	74	75	76	75	..	64.8
Mexico	Maximum...	75	87	88	81	82	80	69	78	85	86	89	82	85	88	85	85	90	93	94	94	94	97	100	100	99	100	100	101	102	104	..	89.8
	Minimum ...	49	57	63	61	65	65	56	48	59	64	64	64	63	65	65	63	60	69	69	74	74	74	72	72	72	74	74	75	74	74	..	65.6
St. Louis(1)	Maximum...	74	78	88	89	85	81	67	76	82	84	86	80	86	89	87	86	89	94	95	94	94	96	97	97	100	100	102	101	102	102	..	89.4
	Minimum ...	54	58	62	66	67	63	59	55	57	63	69	70	68	73	71	66	64	70	77	77	72	75	78	77	75	80	81	82	83	82	..	69.8
Unionville	Maximum...	72	78	84	88	75	70	68	78	85	82	80	78	85	88	90	86	88	90	95	90	90	92	96	102	100	98	100	100	100	102	..	87.7
	Minimum ...	52	50	64	66	62	55	50	46	60	64	65	62	61	64	60	61	60	70	70	64	65	70	74	70	71	74	72	74	75	74	..	64.2
Warrenton	Maximum...	75	80	89	86	85	81	73	76	83	84	87	84	84	87	84	85	89	92	94	94	94	96	97	99	101	100	101	100	102	103	..	89.5
	Minimum ...	50	54	63	69	65	68	57	50	58	61	66	67	65	67	67	64	60	68	72	70	71	75	74	73	71	74	73	74	77	76	..	66.6
Southeast Lowlands																																	
Campbell	Maximum...	79	87	91	93	95	92	85	80	90	95	94	84	91	96	85	90	97	101	100	99	100	100	100	93	99	101	104	105	104	106	..	94.5
	Minimum ...	50	50	51	58	61	61	63	46	51	59	66	65	60	58	62	64	62	62	67	68	68	69	70	64	67	70	70	71	70	71	..	62.5
Caruthersville	Maximum...	79	80	86	90	94	95	92	85	82	88	94	92	91	92	95	87	91	94	100	100	92	99	101	98	93	96	99	100	105	105	..	93.2
	Minimum ...	60	57	59	63	68	68	69	68	53	75	73	78	74	72	74	74	73	74	76	80	77	75	75	74	72	76	79	79	80	80	..	71.8
Doniphan	Maximum...	79	83	89	90	93	93	85	81	84	90	89	87	90	93	84	90	93	98	97	96	97	98	99	94	93	95	98	102	102	103	..	92.2
	Minimum ...	46	52	53	59	61	64	65	48	55	62	69	64	62	60	65	65	67	66	68	72	67	70	71	66	69	71	72	73	72	72	..	64.2
Jackson	Maximum...	72	79	85	86	90	85	85	73	80	87	89	85	86	91	91	88	87	92	92	91	92	94	91	79	92	93	96	98	98	99	..	88.2
	Minimum ...	44	44	56	60	65	63	60	42	50	62	63	64	62	60	63	64	57	61	67	72	67	67	69	65	65	70	69	65	70	70	..	62.0
Poplar Bluff	Maximum...	78	86	88	89	91	90	78	82	83	90	89	81	90	90	81	92	90	94	95	95	95	97	98	88	95	96	98	101	103	101	..	90.8
	Minimum ...	48	52	53	58	65	64	55	48	54	61	62	66	62	62	65	65	63	64	68	70	68	70	72	68	69	72	72	74	72	73	..	63.8
Sikeston	Maximum...	77	84	91	93	96	93	76	78	86	92	91	81	91	95	90	89	89	98	99	96	98	99	98	94	96	98	99	101	102	101	..	92.4
	Minimum ...	52	51	58	63	60	67	62	49	55	64	69	68	65	65	67	68	64	68	73	74	69	68	74	68	80	76	76	76	76	75	..	66.7
Cairo, Ill	Maximum...	72	81	88	89	90	88	73	74	80	88	89	81	87	92	87	87	87	93	95	94	94	94	92	89	93	96	98	99	100	99	..	89.0
	Minimum ...	54	56	64	68	73	70	60	56	58	68	71	69	67	68	70	70	66	71	76	76	73	75	69	69	72	77	77	79	80	77	..	69.3
Ozark Plateau																																	
Arcadia	Maximum...	72	78	84	84	86	83	75	76	78	81	83	76	82	86	81	83	84	89	90	91	87	91	93	88	92	92	95	96	98	97	..	85.7
	Minimum ...	41	46	56	65	64	66	58	43	50	61	64	62	62	58	62	60	57	61	65	66	67	64	69	68	65	66	66	67	65	66	..	61.0
Aurora	Maximum...	74	82	82	86	85	83	81	81	80	78	80	82	86	88	87	83	85	88	89	91	91	92	93	93	92	92	94	94	95	96	..	86.8
	Minimum ...	45	54	61	65	62	65	60	53	60	61	62	63	63	65	65	64	66	68	70	67	68	72	73	73	71	70	73	70	70	74	..	65.1
Birchtree	Maximum...	76	78	85	85	87	86	82	81	80	84	85	80	85	87	85	85	86	90	91	92	93	94	96	89	92	93	95	98	99	100	..	88.0
	Minimum ...	45	54	58	60	60	65	59	45	55	63	65	62	64	61	62	64	65	64	66	65	64	65	68	66	66	69	69	69	70	72	..	62.7
Eldon§§	Maximum...	77	82	86	89	90	78	69	82	81	86	87	82	88	91	85	87	89	92	94	95	94	95	97	98	100	98	99	102	101	102	..	89.9
	Minimum ...	50	54	59	64	64	68	57	54	58	64	64	64	64	65	66	65	63	67	69	67	67	71	71	72	70	71	72	74	72	75	..	65.4
Farmington	Maximum...	74	82	88	90	85	84	80	77	83	87	85	75	84	92	87	86	89	94	96	93	92	98	100	95	96	98	102	102	103	101	..	89.9
	Minimum ...	45	47	59	62	64	64	59	54	62	62	63	62	64	60	65	66	59	64	68	63	69	68	71	69	67	65	69	70	67	68	..	63.2
Koshkonong	Maximum...	76	80	80	83	90	..	84	81	75	86	86	80	86	87	79	89	89	91	91	91	92	94	98	93	94	95	97	99	99	100	[a]	88.4
	Minimum..	54	51	58	61	64	..	63	53	60	62	68	68	66	66	64	66	67	69	71	70	68	73	73	70	71	74	74	74	78	75	..	[a] 66.6
Lebanon	Maximum...	77	81	84	86	87	78	70	83	75	83	85	78	87	87	80	87	89	91	92	95	94	95	97	97	97	100	100	100	102	103	..	88.7
	Minimum ...	40	54	58	60	62	55	55	45	59	63	62	59	50	62	64	60	61	66	66	64	64	66	67	65	67	69	66	70	68	70	..	61.2
Mountain Grove	Maximum...	77	78	84	87	86	85	80	85	78	82	83	81	89	84	83	83	85	87	89	92	92	94	96	92	92	93	95	96	99	98	..	87.5
	Minimum ...	43	52	58	62	64	64	57	47	58	60	64	60	61	65	64	63	65	68	67	66	68	70	71	69	68	70	69	71	72	71	..	63.6
Neosho	Maximum...	78	89	86	87	89	84	83	84	83	83	83	83	90	88	88	87	89	91	91	93	94	93	93	95	95	96	99	97	100	99	..	89.7
	Minimum ...	42	54	65	64	58	64	61	48	61	64	62	64	60	65	65	63	65	67	67	61	64	67	71	70	67	66	67	69	67	70	..	63.3
Rolla	Maximum...	74	80	86	85	86	82	79	76	78	82	84	81	82	85	82	83	86	89	90	91	89	91	93	92	92	92	94	96	96	98	..	86.5
	Minimum ...	45	56	64	64	65	68	58	50	61	62	66	63	64	65	67	67	65	68	71	70	69	72	73	72	70	71	71	74	72	76	..	66.0
Springfield	Maximum...	73	81	84	85	84	81	69	83	71	79	82	79	88	84	78	83	85	89	90	91	91	92	94	93	92	93	95	94	95	97	..	85.8
	Minimum ...	52	57	64	65	66	66	59	55	58	65	61	64	64	69	64	66	68	70	70	70	70	73	74	74	72	73	74	75	76	76	..	67.0
Southwest Plain																																	
Appleton City	Maximum...	76	83	88	88	87	78	74	84	80	83	83	83	91	89	81	87	89	91	93	94	93	95	96	97	98	101	99	98	99	101	..	89.3
	Minimum ...	49	57	61	64	65	60	56	52	63	65	60	63	60	65	63	65	65	69	68	68	65	65	71	72	71	71	73	75	73	74	..	64.9
Clinton	Maximum...	79	86	90	91	91	80	75	90	75	78	78	86	91	90	88	88	93	92	98	100	100	102	105	106	104	106	104	105	106	106	..	92.8
	Minimum ...	52	56	61	64	65	61	50	61	61	64	61	64	61	65	64	66	66	79	79	68	65	70	70	71	71	71	73	74	73	80	..	66.2
Harrisonville§§	Maximum...	75	84	87	89	88	74	75	85	84	81	80	83	89	86	84	85	89	91	93	96	95	96	99	98	100	99	100	100	101	101	..	89.6
	Minimum ...	50	53	60	64	65	59	55	55	56	64	63	61	61	66	64	66	66	69	68	69	65	65	71	72	72	72	72	75	74	75	..	64.9
Lamar	Maximum...	78	83	89	90	90	83	76	87	80	84	82	84	91	89	85	90	90	91	93	97	96	97	97	96	101	100	104	101	101	103	..	90.9
	Minimum ...	49	58	65	66	65	65	59	53	65	66	61	64	64	67	67	65	68	70	70	71	69	72	73	73	72	71	73	74	73	74	..	66.7
Lamonte	Maximum...	76	81	86	88	87	75	70	84	82	80	78	82	86	89	85	88	89	90	94	94	93	95	96	97	99	98	100	100	101	103	..	88.9
	Minimum ...	53	58	65	66	67	60	56	51	65	63	61	64	61	66	66	66	65	71	70	70	68	72	73	73	72	73	73	75	74	74	..	66.4
Marshall	Maximum...	75	82	89	88	88	83	84	83	87	84	82	81	86	89	86	87	89	93	94	94	96	100	98	99	97	98	99	100	100	102	..	90.2
	Minimum ...	54	55	57	69	70	60	55	50	65	64	64	64	63	66	66	65	65	70	71	77	69	71	77	75	76	75	77	78	77	77	..	67.4
Nevada	Maximum...	75	83	87	88	87	81	75	84	79	84	82	82	88	85	81	87	89	91	92	93	93	94	95	96	91	98	100	98	98	100	..	88.5
	Minimum ...	54	58	60	63	66	62	57	53	66	65	61	64	63	67	66	64	66	70	70	70	68	74	73	74	74	69	73	75	75	76	..	66.5
Warrensburg	Maximum...	78	83	89	80	88	76	74	89	89	85	85	85	89	89	80	87	94	95	91	91	96	99	101	102	104	105	105	103	105	105	..	91.4
	Minimum ...	52	50	64	66	67	58	50	54	51	63	58	62	61	65	60	63	64	71	70	71	67	72	73	74	73	74	74	75	75	74	..	65.0
Warsaw	Maximum...	77	85	89	91	90	80	77	87	85	85	86	83	90	92	88	88	90	94	96	97	96	97	99	100	99	100	100	103	103	103	..	91.7
	Minimum ...	56	59	63	64	65	65	57	49	62	65	62	65	60	63	64	62	65	70	70	69	66	69	72	71	71	70	71	75	71	71	..	65.4
Northwest Plateau																																	
Chillicothe	Maximum...	81	74	83	87	89	85	72	71	83	86	87	77	82	88	89	83	86	90	92	94	93	94	97	100	100	103	102	104	104	105	..	89.4
	Minimum ...	49	47	62	62	65	56	52	61	60	60	66	59	59	63	64	69	61	69	69	68	64	64	70	71	70	72	72	72	75	71	..	64.1
Grant City	Maximum...	71	81	85	88	75	68	69	80	82	83	76	78	85	87	87	87	89	90	93	91	88	93	98	97	98	100	99	100	100	100	..	87.3
	Minimum ...	61	57	63	65	62	56	51	51	63	64	63	62	63	66	66	63	64	69	68	67	64	72	72	70	72	74	76	74	75	76	..	65.6
Kansas City	Maximum...	76	84	87	89	87	74	74	85	83	83	72	82	88	87	81	85	90	92	93	94	94	96	98	97	99	97	101	100	99	99	..	88.9
	Minimum ...	60	63	70	70	66	59	57	63	69	66	62	63	68	72	68	67	69	72	75	69	69	77	78	79	79	79	80	81	82	82	..	70.5
Kidder	Maximum...	79	75	84	88	88	89	72	70	85	86	86	79	81	89	87	84	84	89	90	93	94	95	96	99	99	101	100	100	100	100	..	88.7
	Minimum ...	45	50	54	60	70	63	54	50	50	60	60	57	56	58	62	62	60	59	68	66	69	62	69	72	67	68	72	70	71	69	..	61.8
Lexington	Maximum...	76	85	87	90	89	75	74	83	85	85	81	84	89	91	89	90	92	92	95	96	96	97	100	100	101	100	102	102	102	102	..	91.0
	Minimum ...	55	59	66	69	71	60	57	54	62	64	62	62	64	66	68	66	65	71	72	73	69	77	77	78	74	76	77	79	78	77	..	68.3
Maryville	Maximum...	73	86	89	90	79	70	72	86	85	87	80	82	87	89	87	89	91	92	95	92	90	95	100	99	99	99	100	100	100	101	..	89.5
	Minimum ...	51	56	61	65	64	55	50	50	61	64	60	61	59	65	64	64	63	66	69	70	63	70	69	69	69	70	72	71	71	70	..	63.7
Oregon	Maximum...	71	88	90	92	87	73	76	89	81	83	81	84	89	91	90	91	92	93	94	94	94	96	99	99	101	101	101	102	100	101	..	90.8
	Minimum ...	55	62	67	68	65	56	52	56	65	68	62	61	64	68	63	64	66	71	73	74	65	74	74	75	76	76	76	78	77	77	..	67.6
St. Joseph	Maximum...	73	86	88	89	82	73	74	86	84	83	78	83	87	87	86	88	91	92	93	94	93	96	99	98	99	98	100	100	100	100	..	89.3
	Minimum ...	58	62	68	69	60	56	54	53	68	67	62	62	64	67	68	65	67	71	74	66	67	76	77	77	78	76	77	78	79	76	..	68.1
Trenton	Maximum...	76	82	86	87	79	71	71	78	86	85	76	81	90	86	87	84	89	92	95	91	93	96	100	99	101	99	102	101	101	102	..	88.9
	Minimum ...	51	56	62	66	62	58	54	48	62	65	62	61	64	65	64	65	62	68	69	68	67	72	71	72	71	73	73	73	74	73	..	65.0

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO St. Louis, 7-17-31—970.

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CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., JULY, 1931 No. 7

GENERAL SUMMARY

July, 1931, was abnormally warm and relatively dry over most of Missouri, though this month was neither so warm nor as dry as the same month in 1930. The mean temperature, 80.3°, has been equaled or exceeded in only about six other Julys since 1888; and maximum, 110°, has been equaled or topped in only six Julys covering the same length of record.

The rainfall was unevenly distributed. The southeastern lowlands received about normal to slightly more than normal moisture. The western sections were drier than the eastern areas, the former getting about 70 per cent of the normal, and the latter section about 80 per cent of the normal. The Ozarks did somewhat better than this, getting about 90 per cent of the usual, although this was largely increased by a few local downpours in the western part of this section. Excessive amounts were widely separated and few in number. At Joplin, Jasper County, a veritable downpour occurred, 7.47 inches, on the 20th, this amount being 88 per cent of the total monthly fall. At Lockwood, Dade County, more than 8 inches occurred, but it was better distributed through the month than the rain at Joplin. Only two stations received less than 1.00 inch as the monthly total, 8 about 6 inches, and the remainder between 2.00 inches and 4.00 inches.

The rains occurred as local showers in three well separated periods, the first covering several days in the first week, the second coming along about the middle of the month, and the last around the 20th. The last rains were more general and generous, breaking a long heat spell and greatly helping all growing crops for the time being. At the end of the month most crops were again suffering from lack of moisture and a scorching sun. Corn on higher and thin lands was seriously damaged; pastures were badly scorched, as a rule, and domestic and stock water supplies were running low in some localities. Wheat and oats gave unusually fine yields. There were some local complaints of damage by grasshoppers and other insects. There was a general hot wind on the 28th, but otherwise the month was remarkably free from hot winds, as well as other wind and hail storms.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 80.3°, or 3.0° above the normal, but 0.9° lower than July, 1930. The highest local monthly mean was 84.7°, at Caruthersville; and the lowest local monthly mean was 76.4°, at Arcadia. The highest temperature recorded was 110°, at Clinton on the 29th, and the lowest was 49°, at Dean on the 6th. On the average there were 18 days with temperatures 90° or higher, and 5 days with 100° or higher.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 3.23 inches, or 0.77 inch less than the 60 years' average, and 2.26 inches more than last July. The greatest local monthly amount was 8.66 inches, at Lockwood, Dade County; and the least local monthly amount was 0.43 inch, at Birchtree, Shannon County. The greatest amount in any twenty-four consecutive hours was 7.47 inches, at Joplin, Jasper County, on the 20th.

MISCELLANECUS PHENOMENA

Hail.—St. Louis and Farmington on the 23d; no damage reported.

Halos, lunar.—None. Solar.—1st, 8th, and 10th.

Thunderstorms.—Local 8d, 5th, 9th, 11th, 13th, 14th, 15th, 16th, 21st, 24th, 25th, and 30th. More general 1st, 2d, 4th, 12th, 17th, 18th, 19th, 20th, 22d, 23d, and 31st.

(Continued on Page 34)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity 7 a. m.	Mean relative humidity noon	Mean relative humidity 7 p. m.	Sunshine Total hours	Sunshine Percentage of possible	Wind Total movement miles	Wind Average hourly velocity	Wind Max. velocity Miles per hour	Wind Max. velocity Direction	Wind Max. velocity Date
Columbia	29.92	73	44	48	358	79	3,854	5.2	23	w.	4
Hannibal	29.92	72	47	..	...	..	4,446	6.0	22	se.	22
Kansas City	29.90	67	46	47	371	82	4,947	6.6	39	sw.	4
St. Joseph	29.88	72	48	51	349	77	4,388	5.9	40	w.	12
St. Louis	29.92	67	48	46	308	68	6,358	8.5	40	sw.	22
Springfield	29.95	77	49	50	367	82	5,225	7.0	31	ne.	23
Cairo, Ill.	29.93	80	57	59	...	..	3,824	5.1	20	ne.	1
Keokuk, Iowa	29.93	70	47	50	379	83	3,586	4.8	17	nw.	1

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR JULY

Year	Temperature Mean	Temperature Departure	Temperature Highest	Temperature Lowest	Precipitation Mean	Precipitation Departure	Precipitation Greatest in 24 hours	Precipitation Total snowfall, unmelted	Number of days With .01 inch or more	Number of days Clear	Number of days Partly cloudy	Number of days Cloudy
Normals	**77.3**	.....	**106**	**46**	**4.00**	.....	**5.19**	**0**	**8**	**17**	**9**	**5**
1888	79.3	+ 2.0	111	50	3.31	−0.69	....	0	7	..	..	..
1889	77.1	− 0.2	107	46	3.75	−0.25	....	0	8	..	..	..
1890	79.6	+ 2.3	106	52	2.98	−1.02	....	0	5	..	..	..
1891	72.7	− 4.6	103	40	3.55	−0.45	....	0	8	..	..	..
1892	75.8	− 1.5	101	45	4.99	+0.99	4.75	0	8	12	10	9
1893	77.3	0.0	101	51	4.91	+0.91	6.44	0	8	14	12	5
1894	76.5	− 0.8	109	42	2.48	−1.52	4.90	0	5	18	10	3
1895	74.4	− 2.9	106	45	6.79	+2.79	6.52	0	10	10	12	9
1896	77.3	0.0	108	48	5.87	+1.87	8.00	0	9	15	11	5
1897	78.7	+ 1.4	106	48	3.22	−0.78	4.05	0	6	19	9	3
1898	76.1	− 1.2	104	42	5.58	+1.58	8.15	0	9	16	10	5
1899	76.0	− 1.3	102	43	4.51	+0.51	4.48	0	9	15	11	5
1900	76.9	− 0.4	102	46	4.11	+0.11	7.03	0	8	17	10	4
1901	85.4	+ 8.1	116	46	2.02	−1.98	3.78	0	5	19	10	2
1902	77.0	− 0.3	103	50	4.59	+0.59	5.30	0	8	17	11	3
1903	77.4	+ 0.1	102	51	3.22	−0.78	3.26	0	8	17	10	4
1904	74.2	− 3.1	100	47	4.65	+0.65	4.15	0	10	15	11	5
1905	73.4	− 3.9	101	48	7.45	+3.45	7.60	0	12	12	10	9
1906	74.7	− 2.6	100	48	3.53	−0.47	4.46	0	8	17	10	4
1907	78.4	+ 1.1	105	47	4.57	+0.57	6.70	0	8	19	8	4
1908	76.5	− 0.8	101	49	2.23	−1.77	2.65	0	8	18	9	4
1909	76.7	− 0.6	102	41	6.41	+2.41	10.71	0	10	17	8	6
1910	76.8	− 0.5	109	46	6.70	+2.70	5.80	0	9	16	9	6
1911	78.0	+ 0.7	113	43	3.95	−0.05	4.20	0	8	16	9	6
1912	78.8	+ 1.5	104	52	2.74	−1.26	3.17	0	7	18	9	4
1913	80.2	+ 2.9	108	47	3.13	−0.87	3.62	0	7	18	9	4
1914	80.5	+ 3.2	109	45	2.67	−1.33	4.45	0	17	17	9	5
1915	74.6	− 2.7	102	42	6.05	+2.05	6.77	0	2	14	9	8
1916	81 6	+ 4.3	109	52	1.25	−2.75	2.55	0	3	25	5	1
1917	77.5	+ 0.2	107	42	2.96	−1.04	3.40	0	8	20	8	3
1918	77.1	− 0.2	110	41	1.76	−2.24	3.75	0	6	19	8	4
1919	80.0	+ 2.7	115	50	2.33	−1.67	4.55	0	5	23	6	2
1920	76.3	− 1.0	105	47	3 25	−0.75	3.84	0	7	18	8	5
1921	80.3	+ 3.0	109	46	2.32	−1.68	2.25	0	5	20	8	3
1922	76.8	− 0.5	103	46	5.85	+1.85	12.25	0	8	17	9	5
1923	78.2	+ 0.9	105	50	3.07	−0.93	7.42	0	6	18	8	5
1924	73.3	− 4.0	103	40	5.39	+1.39	7.14	0	10	15	11	5
1925	77.9	+ 0.6	106	46	2.71	−1.29	3.25	0	7	16	10	5
1926	78.0	+ 0.7	108	40	3.14	−0.86	6.00	0	7	17	9	5
1927	75.8	− 1.5	101	48	4.13	+0.13	4.65	0	8	18	9	4
1928	77.2	− 0.1	102	48	2.97	−1.03	3.30	0	7	17	10	4
1929	77.8	+ 0.5	104	50	4.12	+0.12	4.95	0	8	16	10	5
1930	81.2	+ 3.9	113	42	0.97	−3.03	2.09	0	3	22	7	2
1931	80.3	+ 3.0	110	49	3.23	−0.77	7.47	0	7	18	9	4
.....	....	.....	...	..	....	.....	....	..	..	..	..	..

Climatological Data for July, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	82.4	+ 6.7	104	1†	57	8	31	3.37	−0.98	1.10	0	9	18	3	10	nw.	O. K. Benecke
Clifton Hill	Randolph	731	32	80.0	+ 3.6	105	28	53	6†	38	2.24	−1.16	1.26	0	9	21	5	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	81.0	+ 4.1	102	29	57	6	30	2.53	−0.96	1.52	0	8	17	11	3	s.	U. S. Weather Bureau
Downing	Schuyler	876	10	78.2	+ 1.8	103	29†	55	8†	35	3.11	−1.38	1.05	0	9	21	10	0	e.	James Taylor
Elsberry	Lincoln	449	0	79.9	.....	105	1	51	6	38	3.16	.....	1.00	0	6	16	2	13	se.	Ray E. Mills
Fayette	Howard	661	51	80.4	+ 3.0	105	28	54	6	36	1.49	−2.11	0.80	0	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	79.8	+ 1.9	102	1†	55	6	33	2.84	−1.01	1.10	0	7	18	10	3	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	3.80	−0.11	1.75	0	9	16	8	7	sw.	J. W. Pulliam
Hannibal	Marion	534	39	80.4	+ 3.6	101	29	58	6	29	2.63	−0.46	0.91	0	10	16	10	5	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	80.8	+ 2.7	103	28	59	5	31	4.01	+0.56	1.22	0	6	17	6	8	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	78.9	+ 2.8	101	1†	58	6†	31	6.37	+2.30	2.42	0	8	22	5	4	s.	Prof. J S. Stokes
Louisiana	Pike	469	37	79.2	+ 2.8	102	1	51	6	35	3.65	+0.41	1.25	0	5	21	7	3	s.	Stark Bros. Nurseries
Macon	Macon	875	32	81.0	+ 3.6	103	29†	58	7†	33	1.94	−1.43	0.83	0	6	18	3	10	sw.	W. C. Brown
Mexico	Audrain	800	42	81.0	+ 3.7	105	29	55	6†	36	2.46	−1.14	1.10	0	7	26	0	5	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	2.66	−1.07	1.44	0	9	18	11	2	ne.	J. S. Conway
St. Charles	St. Charles	456	43	82.0	+ 3.9	104	1	58	10	34	2.09	−1.03	0.84	0	6	14	11	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	82.2	+ 3.4	104	1	66	6	28	4.06	+1.08	1.41	0	8	19	9	3	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	81.5	+ 1.4	103	1	62	23	23	3.72	+1.25	1.38	0	11	24	5	2	se.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	2.59	−1.29	1.32	0	8	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	33	80.4	+ 2.4	105	29	55	8	33	1.81	−2.46	0.70	0	6	15	14	2	s.	Frank Hall
Unionville	Putnam	1,062	38	79.0	+ 2.4	104	30	54	8	33	5.71	+1.65	2.81	0	18	18	6	7	sw.	Geo. W. Davis
Warrenton	Warren	816	49	81.8	+ 4.0	104	1†	58	10	33	1.33	−1.93	0.63	0	3	9	20	2	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	80.5	+ 3.6	104	29	59	10	28	1.71	−1.70	0.91	0	8	17	8	6	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	80.5	+ 3.2	105	1†	51	6	38	3.01	−0.59	2.81	0	8	18	8	5	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	80.6	.....	107	15	57	11†	46	4.56	+0.90	1.89	0	10	11	18	2	s.	Jeff. King
Caruthersville	Pemiscot	265	35	84.7	+ 4.1	105	1†	65	24	32	4.65	+1.26	3.05	0	7	12	14	5	s.	Sam Smith
Doniphan	Ripley	344	27	81.0	+ 2.8	104	1	57	10†	43	3.73	−0.38	1.60	0	7	19	11	1	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	76.4	− 1.0	100	1	55	10†	38	1.84	−1.64	0.64	0	5	7	9	15	s.	John G. Putz
Marble Hill	Bollinger	470	36	81.4	+ 4.1	106	1	55	10	45	2.30	−2.10	0.80	0	5	12	12	7	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	6.39	+3.37	2.92	0	7	20	9	2	sw.	John A. Spence
Poplar Bluff	Butler	339	27	79.6	+ 0.9	103	1	59	13	36	5.02	+1.54	1.95	0	5	19	6	6	w.	J. H. Wolpers
Sikeston	Scott	318	30	81.0	+ 2.9	101	1	60	10	33	6.55	+2.18	2.35	0	8	20	9	2	ne.	John A. LaFont
Cairo, Ill	Alexander, Ill	358	56	80.9	+ 1.3	100	1	66	25	26	1.97	−1.10	0.96	0	11	12	11	8	s.	U. S. Weather Bureau
Section means and	extremes	....	..	80.7	+ 2.2	103	15	55	10†	46	4.11	+0.45	3.05	0	7	15	11	5	s.	
Ozark Plateau																				
Arcadia	Iron	926	49	76.4	+ 0.5	98	1	52	10†	39	4.23	+0.09	1.04	0	9	26	2	3	e.	Arcadia College
Aurora	Lawrence	1,370	39	79.4	+ 1.6	96	1†	54	6	38	2 81	−2.38	1.50	0	5	25	2	4	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	79.2	+ 2.8	101	1	54	6†	39	0.43	−3.43	0.36	0	2	27	3	1	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	80.4	.....	103	1	56	6†	34	4.17	.....	2.20	0	7	21	10	0	s.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	3.19	.....	2.50	0	3	18	11	2	sw.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	80.0	+ 2.4	103	2†	49	6	48	1.86	−2.33	1.28	0	3	18	12	1	sw.	H. E. Dean
Eldon	Miller	934	35	79.8[b]	+ 2.8	104	29	58	10	35	3.16	−0.38	2.02	0	4	8	17	6	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	79.1	+ 3.8	103	1	54	6	43	3.21	−0.23	1.58	0	14	12	17	2	sw.	Robert Forsyth
Goodland	Iron	1,000	37	76.8	+ 1.2	101	1	51	6	40	1.89	−1.99	0.75	0	6	20	8	3	s.	F. M. Adams
Greenville	Wayne	381	7	77.8	.....	106	1	52	10	45	6.08	+2.31	1.81	0	5	18	12	1	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	2.23	−1.77	0.73	0	6	24	3	4	s.	A. W. Madison
Koshkonong	Oregon	958	30	80.8[a]	+ 2.5	102	1	63	6	32	4.21	+0.54	1.20	0	8	15	7	9	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	79.4	+ 2.5	103	1	53	10	38	4.38	+0.41	2.37	0	4	23	4	4	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	80.3	+ 2.7	100	1†	58	6	30	8.66	+3.95	3.20	0	5	22	7	2	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	30	80.3	+ 4.3	103	1†	56	6†	38	1.50	−2.33	0.66	0	6	12	16	3	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	79.6	+ 2.0	100	4	53	6	36	4.62	+0.31	2.85	0	9	22	8	1	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	79.4	+ 2.0	99	1	56	6	29	4.84	+0.96	3.50	0	5	7	12	12	s.	F. H. Lane
Salem (near)	Dent	1,173	27	78.0	+ 1.1	100	1	53	6	37	2.81	−0.55	0.99	0	7	19	9	3	sw.	A. C. Leech
Seligman	Barry	1,542	29	78.4[b]	+ 1.8	99	2	53	6	41	6.75	+2.44	2.39	0	9	14	14	3	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	78.2	+ 2.7	98	1†	51	6	36	1.79	−2.45	1.08	0	6	22	8	1	s.	Ira H. Hailey
Springfield	Greene	1,324	43	79.3	+ 2.5	98	1	61	6	27	4.08	−0.13	1.67	0	10	20	10	1	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	79.1	+ 2.3	106	1	49	6	48	3.66	−0.37	3.50	0	6	19	9	3	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	80.8	+ 2.5	102	29	57	6	33	1.57	−2.94	1.02	0	4	6	23	2	se.	W. G. Bigelow
Clinton	Henry	765	38	83.8	+ 6.3	110	29	56	6	36	1.19	−2.64	0.42	0	3	17	13	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	81.2	+ 3.4	106	28	58	6	35	1.43	−2.33	0.65	0	5	12	8	11	s.	John H. Patterson
Lamar	Barton	980	44	81.7	+ 3.2	103	1	58	6	31	3.87	−0.31	2.20	0	4	22	6	3	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	82.0	+ 2.5	106	29	58	6	35	1.91	−2.04	1.16	0	4	28	3	0	s.	J. E. Wheeler
Marshall	Saline	779	43	81.8	+ 4.5	103	28	59	8	31	2.37	−1.47	1.75	0	8	22	8	1	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	79.6	− 0.6	99	1	52	8	32	4.89	+0.95	2.32	0	8	18	9	4	sw.	George A. Kaupp
Warrensburg	Johnson	878	44	82.6	+ 3.8	109	29	58	6	38	2.39	−1.46	1.32	0	3	23	6	2	sw.	E. A. Markey
Warsaw	Benton	687	30	82.8	+ 4.5	107	29	56	6	37	2.25	−1.84	1.20	0	5	20	10	1	e.	Everett Martin
Section means and	extremes	.....	..	81.8	+ 3.3	110	29	52	8	38	2.43	−1.56	2.32	0	5	18	10	3	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	79.0	+ 3.0	104	28†	52	8	35	3 62	−0.61	1.45	0	8	23	4	4	se.	A. S. Cumming
Chillicothe	Livingston	779	21	81.1	+ 0.9	109	29†	51	8	41	2.06	−2.10	0.55	0	7	22	7	2	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	42	80.2	+ 3.8	104	28†	56	8	35	2.78	−1.55	0.82	0	10	16	10	5	s.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	79.5	+ 3.4	100	1	52	8	35	3.28	−0.60	0.92	0	10	26	0	5	s.	Fred L. Stiff
Grant City	Worth	1,134	27	79.2	+ 3.0	105	29	55	8	33	4.26	−0.57	1.10	0	10	15	16	0	sw.	W. P. Spillman
Kansas City	Jackson	963	42	81.7	+ 3.6	102	28	62	5	28	3.24	−0.89	0.91	0	9	18	10	3	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	78.0	+ 1.1	104	29	53	6†	39	3.20	−0.72	1.09	0	8	20	3	8	sw.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	1.06	−1.87	0.46	0	8	..	.	..	.....	H. L. Yates
Lexington	Lafayette	688	46	83.0	+ 5.9	104	28	60	8	32	3.54	−1.14	1.82	0	8	22	7	2	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	79.3	+ 3.7	106	28†	52	8	42	2.30	−2.83	0.94	0	6	18	11	2	se.	J. R. Brink
Oregon	Holt	1,048	75	82.2	+ 6.6	105	28†	57	5	35	2.55	−1.71	1.31	0	5	22	8	1	sw.	Mina Wright
St. Joseph	Buchanan	967	23	80.6	+ 1.9	103	28	57	8	31	4.05	+1.01	1.42	0	8	17	11	3	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	78.6	+ 1.6	105	28	54	9	36	2.51	−1.28	0.96	0	8	20	6	5	se.	Albert Volker
Trenton	Grundy	822	35	80.0	+ 3.1	105	28	53	9	38	2.23	−1.83	0.90	0	9	21	7	3	e.	W. H. Estes
Section means and	extremes	.....	..	80.2	+ 3.2	109	29†	51	8	42	2.91	−1.19	1.82	0	8	20	8	3	sw.	
State means and	extremes	.....	..	80.3	+ 3.0	110	29	49	6	48	3.23	−0.77	7.47	0	7	10	9	4	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for July, 1931

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville	Missouri			.03		.32				T.			.04							.03	1.33		T.									1.75
Bowling Green	Mississippi			.08	.15		.20													1.03	1.18	.09	1.87	.98								5.58
Brunswick	Grand		.03	.02	.15	.64							.07	.30						.71	1.10	.35											3.37
Clifton Hill	Chariton		.07	.05		.22							T.	.09					.23	.02	1.26	.01										.29	2.24
Columbia***	Missouri	T.	T.	.29	.60	.02			T.	T.		.02	.04					T.		T.	1.52		.03	.01								T.	2.53
Downing	Mississippi		1.05	.92		.03				.16			.10	.29						.10	.36			T.								.10	3.11
Edina	do			.38	.36	T.							T.	.45						.55	.75												2.49
Elsberry	do		T			.30													.90		.13		.70	1.00								.13	3.16
Fayette	Missouri					.50						.08		.09						T.	.80			.02									1.49
Fulton	do				.53	.60								.03						T.	1.10	.08			.30							.20	2.84
Gorin	Mississippi		.03	1.06						.04		.02	.02	.25					.50	.13	1.75												3.80
Hannibal***	do			.91	.04	.08						.01	.02	T.					T	.36	.52		.14	.54								.01	2.63
Hermann	Missouri		.01			.50										T.					.64	.27			.28							.08	1.78
Jefferson City	do		.75	.53	1.22								.10							.80	.61												4.01
Kahoka	Mississippi			.60										.45							1.23												2.28
Kirksville	do			2.42		.05						.20		.50					.02	.05	.98											2.15	6.37
Knox City	do																																
LaBelle	do				.38									.25							.75	.77										T.	2.15
Laddonia	do					.20														.15	1.40			.16									1.91
LaGrange	do				.31														.22		1.08	.67	.32										2.60
Louisiana	do			.10																1.25	.25		1.05	1.00									3.65
Lucerne	Grand			.15		.10					.18	.15		.79						.48	.70											.08	2.63
Macon	Chariton					.08							.15	.04						.80	.83	.04											1.94
Memphis	Mississippi			3.64	.19	T.						.39			.40						.33												4.95
Mexico	do					.53							.05							.03	1.10	.36		.02								.37	2.46
Milan	Grand		.48	.47	.10					.06			.14	.30							1.24												2.79
Monroe City	Mississippi			.06	.03	.20							.03						.32	.04	1.44		.05	.49								T.	2.66
New London	do				.15	.19							T.					1.14		.98	1.43	.27		.14	.65								4.95
Pacific	Meramec			.60		.69										.43	.10				.27	1.66		.55	.05								4.35
Palmyra	Mississippi												.85								.60				.26								1.71
Paris	do					.21															1.72												1.93
Perry	do			.10		.30				T.		T.						T.			1.30	.06			.46								2.22
Philadelphia	do			1.00	.19								.05								.70												1.94
Plevna	do		.21		.34									.28						.97	.52	.76											3.08
St. Charles	Missouri			.61		.09														T	.30	.84	.07	.18									2.09
St Louis (1)***	Mississippi	.30	1.13	.28	T.	T.			T.	T.								.02		T.	1.08	.27	.24	.74									4.06
St. Louis (2)*	do	.05	.05	1.38		02				T.								.07		.01	.84	.29	.28	.71								.02	3.72
Shelbina	do					.07					T.		.75	.02						.05	1.32	.04		.06	.28									2.59
Steffenville	do		T.	.58								.05	.10						.28	.10	.70											T.	1.81
Troy	do	.01				.78															.40			.83	.10								2.12
Union	Meramec				.18	.36															.42	2.78		.03	.05								3.82
Unionville	Chariton		.51	2.30		.15					.30	.05	.10	1.05					.45	.50	.30											T.	5.71
Valley Park	Meramec				.39	.32	T.									.08				T.	.27	1.12		.34	.05								2.57
Warrenton	Mississippi					.45			T.												.63		T.	.25									1.33
West Ely	do			T.	.41							T.								T.	1.20	.28	T.	.50								T.	2.39
Winfield	do					.40															.47			.75								.12	1.74
Keokuk, Ia.***	do		.59	.33		T.				.04		.02	.14	.11					T.	.42	.06											T.	1.71
Southeast Lowlands																																	
Campbell	St. Francis	.01		.62	.53	.42	.02	.05											.03			1.89		.84	.15								4.56
Cape Girardeau	Mississippi					.34																.25	.01	.01	.05								0.66
Caruthersville	do		.05				.10												.13			3.05	.45	.42	.45								4.65
Dexter	St. Francis		.25		.03	.11													.15			1.15		.55									2.24
Doniphan	Black			.60	.07	.40												.16			.40	.50		T.							1.60		3.73
Fisk	St. Francis			.05	T.	.03				T.								.06				.70	T.	1.15									1.99
Jackson	Mississippi		.64			.44												T.			.27	.24		.25									1.84
Marble Hill	do					.80			.10												.30	.32		.78									2.30
Morehouse	do		.08	.14	1.24	.88															2.92	.80		.33									6.39
New Madrid	do		.60	.03	.12	.46	T.	.02											.01			3.47	.38	1.70	.06								6.85
Parma	St. Francis		.26	.10	.22	.52													.33			2.65	.03	.42									4.53
Poplar Bluff	Black			1.23		.42													T.			1.95		.90	.52								5.02
Sikeston	Mississippi	.20	1.15	.50		1.20														2.35	.10	.60	.45									6.55
Cairo, Ill.***	do	.14	.25	.26	.05	.10				.02						T.		.07	T.		.43	.54	.03	.08	T.								1.97
Ozark Plateau																																	
Arcadia	St. Francis	T.		T.	1.04	.40	1.04		.06									T.		.02	.05	.97		.24								.41	4.23
Aurora	Neosho		T.		T	.09								.07				T			1.50			.90	.25						T.	2.81
Birchtree (near)	Black																				.36	.07											0.43
Buffalo	Osage				.03	.42		.02										.08			2.20			.10	1.32								4.17
Caplinger Mills	do		T.		.67					T.									T.	T	2.50			.02									3.19
Chaonia	St. Francis		.71		.03	.62													.03			.93			.23	.01							2.56
Dean	Neosho				T.	T.		T.	T.	T.								T.	T.	T.	1.28	.33			.25							T.	1.86
Eldon	Missouri			.12	.97										T.						2.02			.05									3.16
Farmington	St. Francis	.03	.03	.69		.43			.03					.06			.03	.06		.03	.08	.09		1.58	.02							.05	3.21
Fredericktown	do		.64			.28				.28												.22		.42									1.84
Galena	White					1.18			.12									.14	.03			.64			.55	.62								3.28
Goodland	Black			.75	.05	.61															.25	.17										.06	1.89
Greenville	St. Francis	1.36	T.			1.27															1.81	.49		1.15									6.08
Hailey	White			.22	.26														.26		.53	.23	T.		.73								2.23
Koshkonong	Black		.50	.25		.25												.10	T.		1.20	.64		.33								.94	4.21
Lebanon	Osage				1.36													.26			2.37			.39								T.	4.38
Leeper	Black			.95	.07	.80													.09			1.24		.23	.09								3.47
Lockwood	Osage		T.		1.82													.40	.06		3.18			T.		3.20						T.	8.66
Mountain Grove	White		.21			.66				T.								T.	.21	T.	.34	.04			.04							T		1.50
Neosho	Neosho				.25	.73		T.	.12									.12	.06	T.	2.85	.06			T.	.04						T.	.39	4.62
Owensville	Gasconade				.40	1.40															.34	1.21											3.35
Ozark Beach	White																																
Rolla	Meramec				.53	.62														T.		.15	3.50		.04								4.84
Salem (near)	do			.08	.08	.78			.02											.55	.31				.99								2.81
Seligman	Neosho					.27		T.										.26	.06	.02	.76	1.65			1.26	2.39							.08	6.75
Seymour (near)	White		.14		T.	1.08		T.	T.					T.				T.	.06	.04	.22					.25						T		1.79
Springfield**	do		T.		1.58	.09		.01		T.				.56				T.	T.	.04	1.13			.28	.34	T.						.03	.02	4.08
Steelville	Meramec				.44	.91															.29	2.70			.98								5.32
Stover	Missouri			.02		1.10														.02	.63	.41		.01									2.19
Tuscumbia	Osage		T.			1.50			.02	T.									.10	.67	.77	1.72		.24									5.02
Williamsville	Black			.83		.54													.05			1.45	.02	.67	.94								4.50
Willow Sprgs. (near)	White			.88	.04	.33													.10			.50		.03								.11	1.99

Continued on next page

Daily Precipitation for July, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage	....	.27	....	.05	.23	....	....	T.	T.	....	T.	....	...	....	....	....	T.	....	T.	1.02	....	....	T.	....	....	....	....	....	....	....	....	1.57
Clinton	do	....	.35	....	.42	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.42	....	....	....	....	....	....	....	....	....	....	....	1.19
Concordia‖	Missouri	.20	....	....	.82	....	....	....	....	....	....	....	.16	....	....	....	....	....	....	....	.55	....	....	.05	....	....	....	....	....	....	....	....	1.78
Harrisonville‖	Osage	....	.65	....	....	.52	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.15	.05	....	.06	....	....	....	....	....	....	....	....	1.43
Joplin‖	Neosho	....	....	....	.50	.09	....	.04	....	....	....	....	....	....	....	....	....	.05	.08	....	7.47	....	....	.15	....	.05	....	....	....	....	....	.01	8.44
Lamar‖	do	....	....	....	1.08	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.45	2.20	....	.14	T.	....	....	....	....	....	....	....	....	3.87
Lamonte	Missouri	....	.23	....	1.16	....	....	....	....	....	....	....	....	....	....	....	....	.07	....	....	.45	..	....	....	....	....	....	....	....	....	....	....	1.91
Marshall	do	.09	.04	....	.41	....	....	....	....	....	....	.01	....	....	....	....	....	T.	....	.05	1.75	....	.01	....	....	....	....	....	....	....	T.	.01	2.37
Nevada	Osage	....	.46	....	....	1.42	....	.13	....	.08	....	.08	....	....	....	....	....	....	T.	....	2.32	....	....	.10	.30	T.	....	....	....	....	....	....	4.89
Osceola‖	do	....	.45	....	....	.87	....	....	....	....	....	....	....	....	....	....	....	....	.21	.20	....	.82	....	.15	....	....	....	....	....	....	....	....	2.70
Warrensburg	Missouri	....	.38	....	....	.69	....	....	....	T.	....	....	T.	....	....	....	....	....	T.	T.	1.32	....	....	....	....	....	....	....	....	....	....	T.	2.39
Warsaw	Osage	.14	.23	....	....	1.20	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	.64	....	....	.04	....	....	....	....	....	....	....	....	2.25
Waverly ‖	Missouri	....	.10	....	....	.79	....	....	....	....	....	....	....	.16	....	....	....	....	....	.12	4.10	.03	.02	....	....	....	....	....	....	....	....	.04	5.36
Northwest Plateau																																	
Albany‖	Grand	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bethany	do	....	1.45	.08	.10	....	....	....	....	....	....	.52	.85	....	....	....	....	....	.12	T.	.45	....	.05	....	....	....	....	....	....	....	....	....	3.62
Chillicothe‖	do	T.	....	.12	T.	.24	....	....	....	....	T.	....	.18	.47	....	....	....	....	....	.14	.55	.36	....	T.	....	....	....	....	....	....	....	....	2.06
Conception	Missouri	....	.66	.06	.29	.05	....	....	....	....	....	.12	.63	.09	....	....	....	.82	.03	.03	....	....	....	....	....	....	....	....	....	....	....	....	2.78
Edgerton	do	....	.59	.15	.92	.03	....	....	....	....	....	T.	.03	.73	....	....	....	....	....	.13	.51	....	.08	.11	....	....	....	....	....	....	....	....	3.28
Gallatin ‖	Grand	....	.06	.15	.29	.06	....	....	....	....	....	....	.70	.92	....	....	....	....	....	.50	.85	....	.13	....	....	....	....	....	....	....	....	....	3.66
Grant City	do	....	.22	.11	.44	.68	....	....	....	....	....	1.10	.44	.16	....	....	....	....	T.	.09	.84	....	.18	....	....	....	....	....	....	....	....	T.	4.26
Kansas City***	Missouri	.07	.39	.10	.72	....	....	T.	....	....	....	T.	.38	.53	....	....	....	....	....	.62	.18	....	T.	.25	....	....	....	....	....	....	....	T.	3.24
Kidder ‖	Grand	....	.13	.08	.03	.18	....	....	....	T.	.73	....	.10	.86	....	....	....	....	....	T.	1.09	....	T.	....	....	....	....	....	....	....	....	T.	3.20
King City	Missouri	....	.46	.01	.11	.08	....	....	....	....	....	.14	.12	.13	....	....	....	....	.01	T.	....	....	....	....	....	....	....	....	....	....	....	....	1.06
Lexington	do	....	.16	.11	....	.82	....	....	....	....	....	....	....	.40	....	....	....	....	....	....	1.82	.10	.09	.04	....	....	....	....	....	....	....	....	3.54
Maryville ‖	do	....	.94	.23	....	.37	....	....	....	....	....	....	.41	.29	....	....	....	....	....	....	.06	....	....	....	....	....	....	....	....	....	....	....	2.30
Oregon	do	....	.76	....	.26	....	....	....	....	....	....	.13	1.31	....	....	....	....	....	.09	....	....	....	T.	....	....	....	....	....	....	....	....	....	2.55
St. Joseph***	do	.05	1.26	T.	.26	....	....	....	....	....	....	.06	.37	....	....	....	....	T.	T.	1.21	....	....	.03	....	....	....	....	....	....	....	....	.81	4.05
Tarkio	do	.96	....	....	.31	....	....	....	....	....	....	.30	.16	....	....	....	....	....	.13	.10	.13	....	....	....	....	....	....	....	....	....	....	.42	2.51
Trenton	Grand	....	.02	.42	....	.08	....	....	....	T.	....	.19	.30	.90	....	....	....	....	....	.02	.16	....	.14	....	....	....	....	....	....	....	....	....	2.23
		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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Winds.—At Farmington in the early morning of the 23d there occurred a severe electric storm with a hard blow and and some light hail; damage immaterial. In the northwest part of the State rather high winds from the west-southwest on the 12th; no damage reported. At Greenville, on the 1st, a passing thunderstorm squall unroofed some houses, blew down timber, and flattened corn; $200 would cover damage to houses.

ERRATA

Report for April, 1931, page 17.
Fayette, highest temperature 80°, on the 29th.
Lamonte, number of days with 0.01 inch or more precipitation, 8.
Bethany, prevailing wind direction, NE. Salem, NW.

Daily Temperatures for July, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	104	95	90	93	89	92	91	88	91	92	91	93	96	101	101	100	99	100	92	90	93	99	95	92	94	95	98	104	101	102	99	95.5
	Minimum	76	73	72	68	63	58	66	57	61	62	62	69	68	73	74	75	73	75	75	69	67	72	73	66	64	67	70	77	73	71	77	69.2
Columbia	Maximum	101	90	88	87	77	86	86	85	86	90	93	96	99	99	99	97	94	97	92	79	90	96	90	87	89	92	96	102	102	101	96	91.9
	Minimum	76	77	72	70	61	57	64	63	65	59	64	68	71	77	76	76	73	74	77	68	72	71	73	68	68	69	69	76	74	71	78	70.2
Fayette	Maximum	102	88	91	90	79	88	89	88	89	90	91	92	96	100	99	99	97	97	94	82	95	97	96	91	93	94	98	103	105	103	98	94.0
	Minimum	74	75	73	69	65	54	61	58	62	56	59	64	68	70	72	72	69	72	74	67	69	71	72	67	61	63	66	67	69	67	69	66.9
Hannibal	Maximum	101	91	78	87	79	87	85	85	87	84	87	88	91	99	97	97	98	96	91	83	93	96	86	86	88	89	93	100	101	100	96	90.9
	Minimum	77	75	71	70	64	58	65	60	63	60	61	72	71	74	78	78	75	76	70	68	70	70	73	68	64	65	68	77	76	75	77	70.0
Jefferson City	Maximum	96	91	89	83	86	87	87	87	90	91	92	97	99	99	97	96	95	94	90	90	91	92	87	90	92	94	98	103	101	98	97	92.9
	Minimum	74	72	69	65	59	62	62	65	60	61	67	67	71	74	73	72	70	73	66	70	69	73	69	66	66	66	74	72	73	73	74	68.6
Kirksville	Maximum	101	96	78	81	79	87	85	83	86	84	81	84	89	96	96	96	96	93	81	85	91	95	93	89	91	93	96	100	101	101	94	90.4
	Minimum	72	74	65	66	62	58	64	58	59	59	60	68	65	69	73	74	73	74	73	67	64	70	69	62	64	65	69	76	74	70	72	67.4
Louisiana	Maximum	102	97	95	90	86	86	86	84	84	85	86	92	93	100	96	98	98	95	100	82	90	85	85	86	87	87	90	96	97	99	100	91.5
	Minimum	70	70	72	67	68	51	60	52	62	53	58	70	68	65	74	75	70	75	75	69	70	74	70	65	60	60	60	74	75	70	74	67.0
Macon	Maximum	102	102	93	82	88	82	91	88	89	89	88	87	90	95	101	101	100	102	97	91	86	93	96	94	90	92	95	98	103	102	103	93.9
	Minimum	75	76	73	71	67	63	58	65	58	60	59	60	69	66	72	75	75	73	73	73	67	64	69	70	65	64	65	69	76	71	72	68.2
Mexico	Maximum	103	92	88	82	79	88	89	87	90	89	93	95	97	102	101	101	101	98	100	94	86	92	97	91	89	92	95	99	103	105	104	100	94.2
	Minimum	74	73	73	65	64	55	62	58	60	55	57	68	65	69	74	74	72	73	74	66	65	70	73	64	63	72	65	74	74	72	77	67.7
St. Louis(1)	Maximum	104	99	91	89	80	89	90	88	89	87	90	94	98	98	99	98	94	95	91	84	92	88	82	86	87	90	94	95	98	97	96	92.0
	Minimum	80	71	75	72	71	66	72	69	70	66	67	70	76	78	77	78	79	75	80	69	69	73	68	67	69	71	72	70	75	76	78	72.5
Unionville	Maximum	100	85	84	84	80	85	84	84	87	85	81	90	88	95	98	100	98	99	88	88	95	94	90	90	95	95	98	102	103	104	98	91.8
	Minimum	74	70	64	64	60	55	64	54	55	55	62	66	64	67	70	73	72	71	71	66	64	66	70	67	62	65	66	75	72	73	74	66.2
Warrenton	Maximum	104	96	92	90	86	89	88	88	89	88	91	93	96	101	101	100	96	99	94	90	92	93	91	89	92	94	98	101	104	102	95	94.3
	Minimum	75	76	74	70	67	61	64	62	66	58	61	67	70	74	74	74	74	72	74	68	70	70	70	64	64	66	67	73	71	73	76	69.2
Southeast Lowlands																																	
Campbell	Maximum	105	104	95	95	88	91	98	94	98	94	98	100	103	101	107	98	94	93	101	95	91	95	82	84	82	95	92	95	97	95	97	95.4
	Minimum	70	70	70	69	69	65	65	68	64	58	57	57	59	66	61	66	71	69	72	72	69	64	61	66	65	62	67	64	68	69	69	65.9
Caruthersville	Maximum	105	105	98	98	99	90	93	99	100	96	96	100	100	102	97	95	95	92	91	98	96	91	94	90	79	88	91	91	91	92	95	95.1
	Minimum	78	78	77	73	78	77	73	75	78	77	69	68	76	80	78	79	74	76	74	76	73	72	71	65	70	72	71	72	74	74	74	74.3
Doniphan	Maximum	104	102	95	90	88	90	96	88	89	93	94	97	100	99	98	95	92	88	99	95	91	96	97	84	90	93	92	95	95	99	95	94.2
	Minimum	73	72	73	70	71	63	68	64	65	57	58	60	57	71	72	68	74	71	74	74	71	68	63	70	69	63	66	66	69	72	70	67.8
Jackson	Maximum	100	94	87	82	82	82	89	86	81	86	87	90	95	90	91	91	88	87	91	88	83	89	83	85	85	89	88	88	89	90	90	87.9
	Minimum	70	70	70	70	67	56	63	64	61	55	55	62	57	69	71	68	77	69	65	73	68	61	63	67	55	56	56	66	67	72	70	64.9
Poplar Bluff	Maximum	103	101	93	92	86	88	96	87	86	93	92	95	96	94	93	93	88	88	97	87	88	98	88	82	88	90	89	90	90	92	94	91.5
	Minimum	73	73	72	73	68	63	67	67	66	60	60	61	59	70	71	69	73	71	73	74	71	64	64	65	67	61	68	67	69	72	69	67.7
Sikeston	Maximum	101	100	94	90	88	90	94	93	87	90	92	90	98	95	95	93	89	92	98	94	89	92	84	85	87	91	90	91	92	93	95	92.0
	Minimum	75	73	70	73	70	70	69	70	77	60	62	64	65	72	73	71	74	72	75	75	72	68	65	64	74	62	70	70	72	73	73	70.1
Cairo, Ill	Maximum	100	93	92	88	84	86	92	88	86	88	90	94	96	93	93	92	86	87	95	86	88	91	80	84	88	91	88	91	91	91	92	89.8
	Minimum	75	74	75	74	72	69	70	73	69	67	67	69	70	73	74	75	76	75	76	73	73	70	68	72	66	66	72	75	73	76	75	72.0
Ozark Plateau																																	
Arcadia	Maximum	98	97	88	86	81	84	90	83	81	86	88	91	94	93	92	90	90	87	92	85	87	92	86	83	85	88	91	92	94	95	92	89.1
	Minimum	66	69	73	70	66	53	61	60	59	52	52	59	55	67	67	66	68	70	73	69	69	61	61	69	55	54	58	67	65	69	70	63.6
Aurora	Maximum	96	94	94	95	93	92	91	83	87	87	92	93	96	94	94	92	89	88	90	88	89	93	92	91	84	86	92	93	93	91	89	91.0
	Minimum	74	73	72	71	63	54	60	65	62	59	61	66	67	69	69	69	69	71	73	69	68	66	75	65	67	66	68	72	70	75	71	67.7
Birchtree	Maximum	101	98	95	88	83	90	93	89	85	90	93	94	99	97	95	95	88	94	95	88	90	94	89	87	87	93	95	95	97	96	95	92.5
	Minimum	71	73	72	69	69	54	54	65	65	58	58	62	62	69	70	62	72	71	72	70	71	58	68	70	68	61	62	68	66	68	68	66.0
Eldon§§	Maximum	102	..	..	95	80	80	78	88	88	81	83	96	100	100	100	100	85	..	..	..	..	..	..	82	90	92	101	102	104	101	98	[b]92.4
	Minimum	76	74	..	..	65	59	60	60	64	58	61	63	69	71	72	73	70	70	..	..	..	..	..	..	65	66	66	70	71	70	74	[b]67.3
Farmington	Maximum	103	100	96	91	81	78	94	85	85	90	94	96	101	99	98	98	99	93	96	89	90	100	86	86	87	91	93	96	97	93	98	93.0
	Minimum	69	72	68	66	64	54	62	61	65	67	56	58	58	70	70	69	70	69	75	70	70	63	61	61	57	[a]56	61	68	70	70	70	65.2
Koshkonong	Maximum	102	98	95	89	82	90	96	86	85	91	94	95	100	97	..	95	88	84	94	88	83	92	87	83	87	99	91	92	96	96	90	[a]91.5
	Minimum	85	70	72	70	70	63	70	70	67	64	66	67	69	72	..	70	72	72	73	72	70	66	71	71	71	67	69	70	70	70	70	[a]70.0
Lebanon	Maximum	103	94	96	94	80	89	89	85	98	91	94	96	100	100	98	100	92	92	93	83	87	93	94	87	90	92	96	98	99	98	93	93.4
	Minimum	70	70	71	65	61	54	57	61	61	53	58	64	67	68	69	68	67	64	73	67	63	64	70	66	69	65	66	70	67	68	69	65.3
Mountain Grove	Maximum	103	101	99	90	87	91	95	85	85	94	92	94	99	96	93	94	88	87	91	85	91	96	92	89	88	94	96	98	103	101	94	93.3
	Minimum	74	72	70	70	64	56	64	63	60	56	65	64	69	69	69	68	70	70	72	73	69	65	70	67	69	66	67	69	68	70	69	67.3
Neosho	Maximum	99	96	96	100	97	89	90	83	89	91	93	96	97	96	95	97	94	87	89	87	90	94	93	92	90	93	95	96	96	96	89	93.1
	Minimum	70	73	68	68	63	53	57	61	59	58	59	65	66	68	68	65	65	70	71	69	69	63	74	69	68	63	65	71	66	71	70	66.0
Rolla	Maximum	99	95	92	86	85	83	85	81	82	85	89	92	95	94	95	94	91	89	92	86	84	92	91	90	90	85	89	93	96	97	93	90.0
	Minimum	76	74	75	71	60	56	65	65	66	58	61	70	66	68	73	73	71	71	76	69	70	67	74	70	66	65	67	72	72	72	74	68.8
Springfield	Maximum	98	93	93	93	77	88	87	81	83	86	90	93	91	93	89	90	82	84	87	79	86	93	91	85	86	88	93	94	94	92	87	88.6
	Minimum	78	75	76	69	61	61	67	68	68	65	67	69	70	73	73	71	71	72	74	70	70	68	66	66	71	68	70	73	73	75	73	70.0
Southwest Plain																																	
Appleton City	Maximum	100	89	90	98	82	89	87	87	87	91	90	96	99	97	96	98	95	88	90	84	95	96	100	94	92	94	98	99	102	97	92	93.3
	Minimum	75	70	71	72	61	57	65	61	64	59	63	70	71	71	73	72	70	70	71	70	65	68	73	68	69	67	68	71	69	71	74	68.4
Clinton	Maximum	102	88	80	80	75	85	80	80	88	87	100	106	107	103	103	100	101	99	98	90	98	105	106	93	100	102	108	108	110	108	99	96.4
	Minimum	85	70	73	73	64	56	66	62	67	60	66	71	76	76	83	81	71	73	72	72	71	71	72	70	68	68	[a]74	75	78	72	75	71.3
Harrisonville§§	Maximum	101	86	87	92	81	90	86	86	87	92	89	97	99	100	98	97	96	92	93	80	99	102	101	91	95	95	100	106	104	101	96	94.2
	Minimum	75	70	71	71	60	58	62	61	64	63	64	68	69	71	73	72	72	72	72	71	65	67	70	65	66	67	71	72	69	70	73	68.2
Lamar	Maximum	103	98	96	100	85	89	89	85	92	91	90	97	101	99	98	99	94	89	94	87	91	96	96	92	92	94	96	100	99	93	96	94.2
	Minimum	74	73	73	71	63	58	63	65	65	61	63	70	70	73	73	71	69	71	74	69	68	67	70	71	72	67	72	73	70	73	73	69.2
Lamonte	Maximum	103	86	86	90	78	88	87	87	89	91	93	96	99	100	100	99	98	97	94	84	93	99	100	94	96	97	101	105	106	102	100	94.8
	Minimum	75	71	71	69	62	58	64	60	66	60	64	70	69	74	74	74	72	72	74	69	66	70	72	66	67	68	70	76	71	70	77	69.1
Marshall	Maximum	101	99	85	91	87	87	87	86	87	89	88	93	96	99	99	97	96	95	93	85	91	98	96	90	92	94	98	103	102	101	97	93.6
	Minimum	78	73	71	71	62	61	61	59	60	61	62	68	73	74	76	75	76	74	67	73	79	72	74	65	67	67	67	77	74	74	77	69.9
Nevada	Maximum	99	88	91	96	80	88	85	83	86	88	90	95	97	96	95	95	92	87	92	84	92	93	95	88	88	90	94	95	96	93	93	91.1
	Minimum	78	70	70	70	62	59	53	52	64	59	65	69	70	74	73	73	68	70	73	70	66	69	72	65	69	67	72	72	71	73	74	68.1
Warrensburg	Maximum	103	91	90	88	82	95	87	90	89	96	94	101	102	103	103	104	100	99	100	86	92	100	98	96	100	101	104	107	109	104	100	97.2
	Minimum	77	70	70	75	59	58	65	60	64	60	63	65	66	65	74	74	71	72	70	68	64	68	70	64	65	68	68	75	73	73	72	67.9
Warsaw	Maximum	104	96	94	95	92	92	88	88	89	93	95	99	102	103	102	101	97	94	95	93	96	99	103	93	95	95	101	104	107	103	101	97.1
	Minimum	73	72	72	72	64	56	60	60	64	57	61	70	70	74	75	73	68	70	75	70	68	69	67	71	69	68	67	75	70	70	76	68.6
Northwest Plateau																																	
Chillicothe	Maximum	107	106	94	82	90	83	95	90	87	93	91	90	97	94	103	103	102	101	103	96	86	96	102	93	93	96	100	103	109	109	107	96.8
	Minimum	73	71	70	66	59	55	62	51	56	59	57	67	64	65	70	72	71	69	73	66	59	69	69	58	59	65	65	75	69	68	74	65.4
Grant City	Maximum	100	84	82	85	77	88	85	84	88	88	76	87	89	94	94	94	99	97	89	85	96	96	88	93	94	94	98	103	105	102	98	91.4
	Minimum	75	71	67	65	57	57	62	55	58	60	63	65	63	71	71	70	74	74	68	68	65	70	70	62	64	71	72	70	74	70	72	66.9
Kansas City	Maximum	99	83	79	88	79	90	83	84	85	88	87	94	95	98	97	96	93	93	90	82	92	98	94	87	91	94	99	102	101	100	95	91.5
	Minimum	73	71	71	67	62	66	69	67	67	67	69	67	67	77	79	78	78	77	71	70	68	75	73	67	70	74	77	80	77	79	76	71.9
Kidder	Maximum	101	101	90	82	88	82	91	86	85	90	86	86	91	92	97	100	99	97	98	89	86	92	98	91	90	94	94	98	104	102	100	92.9
	Minimum	71	68	67	61	55	53	59	53	54	57	59	61	55	68	66	68	81	71	60	55	50	60	59	63	65	68	67	69	70	70	76	[a]63.2
Lexington	Maximum	101	90	84	96	82	92	90	90	91	94	90	97	98	100	100	100	101	98	93	89	94	99	97	93	98	97	101	104	103	101	99	95.5
	Minimum	81	72	73	70	61	61	66	60	62	62	66	74	67	76	76	76	75	75	75	69	66	71	74	64	67	70	71	78	72	75	79	70.5
Maryville	Maximum	101	86	79	82	79	89	83	86	89	89	83	90	92	97	97	97	99	97	97	89	99	99	95	96	96	98	102	106	106	103	99	93.5
	Minimum	73	70	67	65	55	54	56	52	56	58	63	65	63	70	67	69	70	71	70	65	57	70	72	57	62	69	70	74	72	65	72	65.1
Oregon	Maximum	98	88	80	87	84	92	87	88	91	94	90	91	94	97	97	98	100	100	92	93	99	98	99	97	98	98	102	105	105	104	99	95.0
	Minimum	78	70	70	68	57	62	61	60	59	61	65	66	65	75	74	75	75	73	73	69	64	74	73	63	67	73	76	79	74	75	78	69.4
St. Joseph	Maximum	98	85	79	87	81	90	82	82	87	89	83	91	92	96	96	95	97	96	89	88	95	98	94	91	93	95	100	103	102	99	95	91.9
	Minimum	74	71	69	64	59	63	63	57	62	63	67	67	67	77	75	76	74	73	70	69	64	75	72	65	65	73	75	79	76	76	70	69.4
Trenton	Maximum	101	88	79	85	83	93	86	84	91	87	80	89	93	97	99	99	99	98	94	86	97	99	95	93	94	96	99	105	104	104	98	93.4
	Minimum	74	72	70	58	61	55	64	54	53	59	60	65	65	69	71	73	72	72	73	68	61	72	73	61	61	67	69	75	74	72	70	66.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO St. Louis, 8-28-31—970.

7.05
YMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

19 MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., AUGUST, 1931 No. 8

GENERAL SUMMARY

August opened hot and dry, conditions brought over from he preceding month of July. However, after the 8th, August emperatures prevailed generally below the normal and the nonth was quite satisfactory from the side of personal comfort. When both temperature and rainfall are considered for the State, as a whole, August, 1931, was nearer a normal month han has been experienced for a long time.

A generous and general rain over a three-day period beginning on the 3d, and again on the 9th and 10th, quite effectually broke the persistent drought conditions of the preceding two nonths. Further timely rains of the 18th, 19th, and 27th and 28th brought all section averages to above normal values. Some of the central-east counties beginning with Boone received louble the normal. About 23 stations received less than normal rainfall, the largest cluster 8 or 10 in the northeast from about Ralls County to Putnam, Schuyler, Scotland and Clark; however, only five stations got less than two inches. On the other hand 48 stations received more than 5 inches, and 12 got 8 inches or more.

While the rains came too late for best results to the main crop of corn, still they were helpful and improved the crop on the bottom lands and heavier soils. All legumes and other forage crops were much improved; and the ground was put in good condition for plowing. The water shortage extending over 18 months in much of the State was fully replenished; and fruit crops, all kinds, produced more abundantly than for several years. The net effect of August weather after about the 10th was favorable generally.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 74.9°, 1.1° below normal, and 3.6° cooler than last August. The highest local monthly mean was 77.9°, at Clinton; and the lowest local monthly mean, 72.2°, occurred at Seymour. The highest temperature reported was 106°, at Chillicothe on the 8th; and the lowest was 44°, at Goodland on the 13th, and Edgerton on the 29th. The greatest daily range was 45°, at Maryville on the 29th. The temperature reached 90° or higher on 10 days; and 100° or higher at one to 14 stations on one or two days.

PRECIPITATION

The average precipitation for the State, as shown by the records of 115 stations, was 4.77 inches, 1.02 inches greater than the 60 years' average, and 2.75 inches more than August, 1930. The greatest local monthly amount was 11.00 inches, at Buffalo; and the least local monthly amount was 0.54 inch, at La Grange. The greatest amount in any 24 consecutive hours was 5.36 inches, at Springfield on the 5th and 6th. More than 4 inches fell within 24 hours or less at Buffalo, Seymour, and Warsaw; and more than 3 inches at Columbia, Caruthersville, Doniphan, Mountain Grove, Neosho, Clinton, Lamonte, Marshall, Nevada, Oregon, and Trenton.

MISCELLANEOUS PHENOMENA

Earthquake: Three earth tremours were felt at Kansas City on August 9th, at 12.20 a. m., 1.05 a. m., and 1.15 a. m.

Fog, dense.—St. Louis 27th; Warrensburg 3d, and 20th.

Hail.—Small, without damage.—Bethany, 11th; Jackson, 26th; Gorin, St. Charles 28th; Grant City 30th, and Eldon on the 31st.

Halos, lunar.—24th, and 28th. Solar.—5th, 7th, 8th, 16th, 24th, 27th, 28th, and 31st.

(Continued on Page 39)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity 7 a. m.	Mean relative humidity noon	Mean relative humidity 7 p. m.	Sunshine Total hours	Sunshine Percentage of possible	Wind Total movement miles	Wind Average hourly velocity	Wind Max. velocity Miles per hour	Wind Max. velocity Direction	Wind Max. velocity Date
Columbia	30.03	87	53	60	311	74	3,520	4.7	31	nw.	31
Hannibal	30.04	81	50	..	...	..	3,916	5.3	24	w.	28
Kansas City	30.03	77	51	55	325	77	4,780	6.4	27	n.	9
St. Joseph	30.01	85	54	58	311	73	3,920	5.3	24	sw.	1
St. Louis	30.00	78	52	58	283	67	5,608	7.5	33	nw.	2
Springfield	30.05	85	61	65	297	71	5,121	6.9	30	nw.	10
Cairo, Ill.	30.03	88	60	68	...	..	4,403	5.9	26	n.	11
Keokuk, Iowa	30.05	75	50	56	341	80	3,485	4.7	22	w.	26

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

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COMPARATIVE DATA FOR AUGUST

Year	Temperature Mean	Temperature Departure	Temperature Highest	Temperature Lowest	Precipitation Mean	Precipitation Departure	Precipitation Greatest in 24 hours	Precipitation Total snowfall, unmelted	Number of days With .01 inch or more	Number of days Clear	Number of days Partly cloudy	Number of days Cloudy
Normals	**76.0**	.....	**105**	**44**	**3.75**	.....	**4.91**	**0**	**8**	**17**	**9**	**5**
1888	74.0	− 2.0	110	48	7.25	+3.50	....	0	11	..	..	..
1889	73.5	− 2.5	101	52	1.96	−1.79	....	0	14	..	..	..
1890	73.3	− 2.7	104	49	4.84	+1 09	....	0	9	..	..	..
1891	73.2	− 2.8	108	38	5.34	+1.59	....	0	8	..	..	..
1892	74.3	− 1.7	100	40	2.42	−1.33	4.55	0	6	17	8	6
1893	72.8	− 3.2	100	40	2.20	−1.55	5.66	0	4	18	10	3
1894	77.0	+ 1.0	111	39	1.58	−2.17	3.07	0	5	14	16	1
1895	75.3	− 0.7	104	48	4.23	+0.48	3.50	0	8	15	11	5
1896	76.6	+ 0.6	108	41	3.25	−0.50	4.80	0	6	17	10	4
1897	74.1	− 1.9	108	41	2.39	−1.36	5.00	0	6	19	9	3
1898	75.8	− 0.2	103	44	3.03	−0.72	4.75	0	5	17	10	4
1899	78.8	+ 2.8	107	49	3.35	−0.40	4.28	0	7	18	10	3
1900	80 3	+ 4.3	105	52	3.51	−0.24	2.77	0	6	19	9	3
1901	78.4	+ 2.4	109	47	1.88	−1.87	4.33	0	5	19	9	3
1902	75.0	− 1.0	103	47	6.16	+2.41	7.84	0	10	14	11	6
1903	74.4	− 1.6	102	43	5.40	+1.65	6.40	0	10	16	11	4
1904	73.7	− 2.3	100	43	5.46	+1.71	4.43	0	8	16	10	5
1905	76.4	+ 0.4	102	48	4.69	+0.94	3.94	0	8	19	7	5
1906	76.6	+ 0.6	101	40	4.72	+0.97	3.55	0	11	14	10	7
1907	77.3	+ 1.3	109	47	3.71	−0.04	6.30	0	9	17	8	6
1908	76.4	+ 0.4	102	46	3.87	+0.12	3.57	0	8	17	9	5
1909	79.5	+ 3.5	110	40	0.55	−3.20	4.00	0	2	24	6	1
1910	74.7	− 1.3	103	40	2.77	−0.98	5.80	0	6	15	9	7
1911	75.4	− 0.6	109	41	4.20	+0.45	5.17	0	7	15	8	8
1912	76.2	+ 0.2	104	41	4.19	+0.44	2.62	0	9	17	8	6
1913	82.8	+ 6.8	110	41	1.06	−2.69	3.51	0	3	22	7	2
1914	78.0	+ 2.0	106	49	4.25	+0.50	8.50	0	9	15	9	7
1915	69.8	− 6.2	98	37	7.86	+4.11	8.20	0	12	12	9	10
1916	79.2	+ 3.2	107	41	4.05	+0.30	6.48	0	7	19	7	5
1917	73.3	− 2.7	104	38	4.45	+0.70	5.20	0	9	16	8	7
1918	81.8	+ 5.8	111	45	3.34	−0.41	3.42	0	8	17	9	5
1919	75.7	− 0.3	106	44	4.29	+0.54	7.00	0	8	17	9	5
1920	73.1	− 2.9	102	43	4.78	+1.03	5.77	0	9	15	8	8
1921	76.8	+ 0.8	109	48	5.27	+1.52	5.20	0	9	14	0	7
1922	77.5	+ 1.5	107	46	2.40	−1.35	3.87	0	6	18	18	5
1923	77 3	+ 1.3	108	42	3.99	+0.24	5.25	0	8	16	9	6
1924	77.2	+ 1.2	106	48	4.14	+0.39	3.50	0	7	19	8	4
1925	76.5	+ 0.5	107	45	3.45	−0.30	4.26	0	6	19	8	4
1926	77.5	+ 1.5	106	50	5.63	+1.88	5.83	0	10	15	9	7
1927	71.1	− 4.9	97	39	5.06	+1.31	7.76	0	9	14	10	7
1928	76.4	+ 0.4	99	45	5.35	+1.60	5.52	0	9	15	10	6
1929	76.0	0.0	105	43	2.50	−1.25	3.27	0	6	18	9	4
1930	78.5	+ 2.5	114	47	2.02	−1.73	2.54	0	6	16	10	5
1931	74.9	− 1.1	106	44	4.77	+1.02	5.36	0	9	15	9	7
.....	....	.....	..	..	....	.....	....	..	..	..	..	..

Climatological Data for August, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	76.5	+ 2.7	102	7	51	29	39	5.54	+1.70	1.80	0	10	19	5	7	se.	O. K. Benecke
Clifton Hill	Randolph	731	32	72.8	− 3.4	100	7	47	29	37	4.68	+0.67	2.13	0	7	16	10	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	75.0	− 0.6	98	7	53	13	31	8.86	+5.26	3.75	0	10	13	10	8	sw.	U. S. Weather Bureau
Downing	Schuyler	876	10	74.0	− 0.9	99	8	51	12†	35	2.07	−1.65	0.85	0	9	16	10	5	se.	James Taylor
Elsberry	Lincoln	449	0	73.8	.....	102	8	45	13	36	5.18	.....	1.39	0	11	11	7	13	se.	Ray E. Mills
Fayette	Howard	661	51	75.3	− 0.8	101	7	48	13†	43	3.08	−0.18	1.27	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	74.2	− 2.3	99	8	50	13	31	5.00	+1.53	1.35	0	10	14	13	4	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	2.35	−0.77	1.11	0	10	13	9	9	se.	J. W. Pulliam
Hannibal	Marion	534	39	75.0	0.0	100	8	53	13	30	2.71	−0.63	2.15	0	7	14	9	8	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	76.0	− 0.7	97	6†	51	12	37	3.68	+0.43	1.10	0	13	14	8	9	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	73.6	− 0.4	97	8	50	12	34	1.81	−1.70	0.95	0	7	18	5	8	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	73.0	− 2.0	100	8	48	12†	37	3.47	−0.35	1.90	0	7	20	8	3	s.	Stark Bros. Nurseries
Macon	Macon	875	32	75.6	− 0.7	100	9	51	30	36	3.54	0.00	2.55	0	9	19	4	8	w.	W. C. Brown
Mexico	Audrain	800	42	75.1	− 1.0	100	8	50	12†	35	6.28	+3.04	1.57	0	10	24	0	7	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	2.89	−1.68	1.27	0	7	16	8	7	n.	J. S. Conway
St. Charles	St. Charles	456	43	77.0	+ 0.3	101	8†	53	12†	36	7.49	+4.01	2.07	0	10	11	11	9	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	77.2	− 0.3	100	8	58	12	27	3.46	+0.47	1.46	0	11	16	9	6	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	76.7	− 0.5	100	8	57	12	26	3.34	−0.91	1.04	0	11	19	8	4	w.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	3.23	+0.21	1.32	0	11	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	33	74.6	− 2.1	99	7	48	12†	40	1.45	−2.26	0.75	0	4	16	11	4	s.	Frank Hall
Unionville	Putnam	1,062	38	75.1	+ 0.1	101	8	47	12	39	2.58	−1.49	2.00	0	5	19	5	7	sw.	Geo. W. Davis
Warrenton	Warren	816	49	76.0	+ 0.4	102	8	53	12†	29	4.57	+0.17	0.94	0	11	8	18	5	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	74.6	− 0.4	100	8	54	12	30	2.40	−0.80	1.29	0	9	12	9	10	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	75.1	− 0.7	102	7†	47	12†	43	3.90	+0.23	3.75	0	9	16	8	7	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	75.6	.....	100	2	51	13	37	6.27	.....	2.43	0	13	13	15	3	s.	Jeff. King
Caruthersville	Pemiscot	265	35	77.4	− 2.3	96	2	60	13†	26	8.30	+4.92	3.25	0	10	13	8	10	s.	Sam Smith
Doniphan	Ripley	344	27	76.0	− 1.4	98	2†	53	13	35	7.96	+3.68	3.62	0	12	..	..	..	s.	W. W. Martin
Jackson	Cape Girardeau	428	40	71.4	− 4.8	91	1†	51	13	32	6.26	+2.65	1.67	0	14	8	7	16	s.	John G. Putz
Marble Hill	Bollinger	470	36	76.0	− 1.0	100	2	51	13	35	7.10	+3.50	1.90	0	10	9	12	10	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	4.08	+0.10	1.13	0	11	15	8	8	sw.	John A. Spence
Poplar Bluff	Butler	339	27	75.5	− 2.5	95	1†	50	12	32	5.55	+1.18	1.53	0	12	16	9	6	s.	J. H. Wolpers
Sikeston	Scott.	318	30	77.0	− 0.6	97	2†	53	13	31	3.25	−0.61	0.99	0	9	19	5	7	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	56	76.2	− 1.6	92	1	59	13	23	7.14	+4.12	2.33	0	9	7	8	16	sw.	U. S. Weather Bureau
Section means and	extremes	....	..	75.6	− 2.0	100	2	50	12	37	6.21	+2.44	3.62	0	11	12	9	10	s.	
Ozark Plateau																				
Arcadia	Iron	926	49	72.8	− 1.7	95	9	45	13	34	4.30	+0.57	1.35	0	12	22	0	9	w.	Arcadia College
Aurora	Lawrence	1,370	39	74.1[e]	− 2.7	91	7†	55	22	26	8.76	+4.28	2.15	0	8	10[e]	6[e]	10[e]	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	75.2	− 0.7	99	2	53	13	32	7.95	+3.37	2.15	0	7	22	5	4	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	75.2	.....	98	1†	51	11	41	11.00	.....	4.51	0	7	21	10	0	s.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	5.74	.....	2.60	0	7	16	9	6	s.	J. M. Atkinson
Dean II	McDonald	1,000	32	73.9	− 3.6	96	1‡	46	12	36	4.37	+0.21	2.10	0	6	16	10	5	e.	H. E. Dean
Eldon	Miller	934	35	75.1	− 1.3	98	1†	49	13†	33	2.61	−1.21	0.85	0	10	7	16	8	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	75.0	+ 0.2	101	8	50	13	38	4.04	+0.47	1.40	0	13	14	12	5	sw.	Robert Forsyth
Goodland	Iron	1,000	37	....	.....	98	8	44	13	..	1.83	−2.15	0.54	0	10	16	13	2	s.	F. M. Adams
Greenville	Wayne	381	7	74.3	.....	96	1†	47	13	37	7.42	+4.07	1.57	0	11	14	17	0	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	...	.....	..	..	..	..	..	6.67	+1.30	2.50	0	10	21	6	4	sw.	A. W. Madison
Koshkonong	Oregon	958	30	75.4	− 2.3	94	1†	56	12†	27	3.66	−0.68	1.06	0	9	16	6	9	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	73.0	− 3.3	95	1	46	13	35	7.11	+3.23	1.96	0	11	20	1	10	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	73.6	− 3.6	90	1†	53	12†	27	6.49	+2.13	1.88	0	10	18	11	2	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	30	74.4	− 0.7	96	1	49	12	34	6.15	+1.73	3.90	0	11	11[g]	10[g]	3[g]	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	74.6	− 2.3	95	8	48	12	33	6.76	+2.62	3.83	0	10	22	5	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	74.8	− 1.0	96	1	51	13	28	5.59	+1.51	1.45	0	12	10	8	13	sw.	F. H. Lane
Salem(near)	Dent	1,173	27	73.6	− 2.5	96	8	49	12†	36	2.68	−1.80	0.77	0	9	18	9	4	sw.	A. C. Leech
Seligman	Barry	1,542	29	72 4	− 3.2	91	8	49	12†	34	4.99	+0.95	2.14	0	10	18	10	3	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,612	25	72.2	− 2.8	93	1	48	13	32	9.30	+5.34	4.20	0	10	18	7	6	s.	*Ira H. Hailey
Springfield	Greene	1,324	43	73.0	− 2.7	91	1	55	13	24	10.68	+6.59	5.36	0	11	16	10	5	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	74.0	− 2.3	101	8	44	13	44	6.10	+1.71	5.36	0	10	16	9	6	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	74.9	− 2.9	95	1†	53	12†	34	3.18	−0.50	0.92	0	7	11	18	2	sw.	W. G. Bigelow
Clinton	Henry	765	38	77.9	+ 1.1	100	1†	54	29	38	5.40	+2.03	3.23	0	7	17	12	2	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	75.2	− 0.6	99	1	54	12†	38	4.17	+0.12	2.48	0	7	5	10	16	e.	John H. Patterson
Lamar	Barton	980	44	76.2	− 2.3	97	1	52	12	37	3.68	−0.55	2.05	0	10	16	8	7	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	75.2	− 1.5	101	1	52	12†	34	5.78	+2.05	3.20	0	8	23	5	3	s.	J. E. Wheeler
Marshall	Saline	779	43	75.6	0.0	100	7	53	12†	34	6.19	+2.55	3.18	0	9	18	9	4	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	75.0	− 1.9	98	9	51	12	31	6.17	+2.53	3.10	0	7	11	12	8	s.	George A. Kaupp
Warrensburg	Johnson	878	44	76.3	− 0.7	100	1†	52	12	35	2.71	−0.78	1.80	0	6	21	6	4	ne.	E. A. Markey
Warsaw	Benton	687	30	76.4	− 1.0	100	1	53	12†	34	8.45	+4.16	4.82	0	11	17	12	2	s.	Everett Martin
Section means and	extremes	.....	..	75.9	− 1.1	101	1	51	12	38	5.08	+1.30	4.82	0	8	15	10	6	s.	
Northwest Plateau																				
Bethany	Harrison	916	38	73.4	− 1.5	94	7	47	12	40	6.08	+2.13	2.05	0	8	18	9	4	se.	A. S. Cumming
Chillicothe	Livingston	779	21	75.7	− 0.4	106	8	46	12	44	3.38	−1.08	1.02	0	8	20	9	2	e.	Wm. J. Olenhouse
Conception	Nodaway	980	42	74 5	− 0.1	95	1†	51	30	39	8.10	+4.40	2.91	0	8	15	10	6	s.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	72.6[e]	− 2.5	94	1†	44	29	39	3.04	−0.18	1.26	0	10	23	2	6	s.	Fred L. Stiff
Grant City	Worth	1,134	27	73.5	− 1.4	93	1	49	29	39	4.58	+0.84	1.80	0	10	14	16	1	se.	W. P. Spillman
Kansas City	Jackson	963	42	76.0	− 0.6	97	7	56	11	27	3.45	−0.64	1.45	0	9	13	12	6	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	74.7	− 1.0	101	8	52	12	35	3.81	−0.06	1.25	0	10	14	10	7	se.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	4.73	+1.70	2.03	0	9	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	77.3	+ 1.3	100	7	53	12	36	3.42	−0.03	2.20	0	8	19	9	3	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	74.1	+ 0.5	95	1	45	29	45	3.70	−0.26	1.28	0	7	12	16	3	e.	J. R. Brink
Oregon	Holt	1,048	75	76.2	+ 1.2	95	6†	50	12	38	5.85	+1.84	3.05	0	7	21	7	3	se.	Mina Wright
St. Joseph	Buchanan	967	23	75.2	− 1.6	95	1	50	12	33	5.27	+1.86	1.73	0	8	17	8	6	se.	U. S. Weather Bureau
Tarkio	Atchison	916	28	73.5	− 2.1	92	1†	49	12†	38	3.86	−0 19	1.24	0	7	11	13	7	se.	Albert Volker
Trenton	Grundy	822	35	74.8	− 0.4	99	7	49	12	37	6.67	+2.98	3.08	0	9	19	8	4	s.	W. H. Estes
Section means and	extremes	.....	..	74.7	− 0.7	106	8	44	29	45	4.71	+0.95	3.08	0	8	17	10	4	se.	
State means and	extremes	.....	..	74.9	− 1.1	106	8	44	13†	45	4.77	+1.02	5.36	0	9	15	9	7	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used i determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for August, 1931

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville	Missouri			.03		.05	.35			.24	.93								.45	.06	.08								.03			2.68	4.90
Bowling Green	Mississippi			.04			.06			T	3.25								.74	.59						.12						.32	5.12
Brunswick	Grand	.12		.02			.05			1.20	.07								1.03	.05	.95						.25						1.80	5.54
Clifton Hill	Chariton		.01							1.66	.01								2.13	.02						.10						.75	4.68
Columbia***	Missouri		.37			.21				3.75								.28	.60	.02					1.61	T.		.38			.07	1.57	8.86
Downing	Mississippi		T.					.02	.53	.85									.01	.16					.13			.25			.10	.02	2.07
Edina	do			.10						.50	.70									.30	.80				T.							T.	2.40
Elsberry	do			.08						.60	.06							1.30	.11	.06	1.10					1.39		.07	.25			.16	5.18
Fayette	Missouri						.23			.63	.21							.24		.05	.02						.05		.38			1.27	3.08
Fulton	do		.29		T.	.09				.68	1.35							.03	T.	1.22	.15				.02				.42			.75	5.00
Gorin	Mississippi		.17			.02		.02		1.11								.03	.27	.12	.04										.12	.45	2.35
Hannibal***	do		T.			.05			1.61	.54								T.	.19	.15					.11			.06			T.	2.71
Hermann	Missouri	1.90		.47	T.				.05	.08	1.00								.60	.80	1.05					.70			.62			.55	7.82
Jefferson City	do		.50		.02	.62				.59							.05	.03	.09	.12					.20		.03	.30		1.10	.03	3.68
Kahoka	Mississippi			.15							1.15																	.28				1.58
Kirksville	do	.07	.23							.95									.12	.14					.10							.20	1.81
Knox City	do																																
LaBelle	do				.10				T.										.50		.45					.04			.05				1.14
Laddonia	do			.25			.30			.81	.33								.33	.55						.95			.63			.51	4.66
LaGrange	do																.42											.12				0.54
Louisiana	do		.25							1.90								.37	.15						.20			.30			.30	3.47
Lucerne	Grand	.08	.16								1.82								.25		.24				.16	.05						.08	2.84
Macon	Chariton	.28					.15			2.55	.04									.08	.02					.10			.12			.20	3.54
Memphis	Mississippi			T.					T.		.52								T	.35				.19	T.				T.				1.06
Mexico	do			.05		.38			.53	1.57	.33								.31	.38						1.20			.90			.63	6.28
Milan	Grand	.24	.04							.25	.41								.34							.05	T.						1.33
Monroe City	Mississippi									1.27									.18	.60					.45	.17			.20			.02	2.89
New London	do	.45		.29	T.		.47			1.58	.09								.04	.48						.62			.13				4.15
Pacific	Meramec			.45	.07		.27				.25							.05	.05	.12	.06					.40			.22			.31	2.25
Palmyra	Mississippi									.50									.54	2.15					.10		.77						4.06
Paris	do									2.26	.15								.58	.05									.90			.28	4.22
Perry	do									2.55										1.40					.46			.24			.35		5.00
Philadelphia	do																																
Plevna	do			.09						1.03	.15															.10			.09				1.46
St. Charles	Missouri		.24	.33						.45	.22							1.00	.77		2.07				T.			.17	.73			1.51	7.49
St. Louis (1)***	Mississippi		.29	.07	T.	T.				.32	T.	T.						.80	.66	T.	.41				.25	.12		.02	.26			.26	3.46
St. Louis (2)*	do		.15	.05	T.					.35								1.04	.81		.16				.18	.03		.04	.24			.29	3.34
Shelbina	do	.13		.01					.18	1.32	.16								.11	.43	.06					.24	T.		.45			.14	3.23
Steffenville	do		.10			T.		T.	T.	.75										T.					T.	.45		T.	.15				1.45
Troy	do			.11							1.80								4.40		.28					1.54			.08			.41	8.62
Union	Meramec			.39	1.48						.46		.03						.15	.19	.17					.17			.51			.42	3.97
Unionville	Chariton	.13	.05							2.00								T.		.15					.25								2.58
Valley Park	Meramec			.36	T.		.05				.36							T.	.06	18	.12	.08				.50			.45	T.		.51	2.67
Warrenton	Mississippi			.46		T.				.47	.93							.21	.22	.02	.94					.46		.11	.27			.48	4.57
West Ely	do								1.43	T.									.60						.55			.14			1.25	3.97
Winfield	do		.10							1.60									.20		.40				.50		.15			.35		3.30
Keokuk, Ia.***	do	T.	.03					T.	T.	.51					T.				.01	.11	.02				.06			1.29		T.	.17	.20	2.40
Southeast Lowlands																																	
Campbell	St. Francis				.01	.07	2.28	.28	.04		.08		.15						.01	.30	.35	.07						T.	2.43	.20			6.27
Cape Girardeau	Mississippi			.06	2.54	.06	.26	.46			.20								1.43	.15	.58	.14				.04	.05	.40	1.80				8.17
Caruthersville	do				.28	1.02	3.25	.95	.28											.12	.05	.50							.65	1.20			8.30
Dexter	St. Francis			.12	.68		.55	.30	.16		.08								.39	.68	.04									.60	.28		3.88
Doniphan	Black	T.		.82	.26	.43	3.62				.15	T.					.10	.05	.03	.20	.05			.05					2.20			T.	7.96
Fisk	St. Francis			.71	1.80		.27	1.41	.43	.31	.42	.11						T.	.01	.05	.11	.14							.84				6.61
Jackson	Mississippi			.96	.51	.49	1.67	.06			.09	.02						.17	.12	.38						.10	.40		1 06			.23	6.26
Marble Hill	do		.92	.60	.30		1.90	.20	.80	.22										.90	.36								.90				7.10
Morehouse	do			T.	.39	.02	.38	1.08	.21	.05	.13	.07							.28	.34									1.13				4.08
New Madrid	do				.46	.36	.83	.40	.04	1.15		.01								.27	1.10	.35							.81	.60			6.38
Parma	St. Francis					.38	.80	1.15	1.52	.22	.13								.05		.13								1.18	.15			5.71
Poplar Bluff	Black			.70	1.53	.04	.90		.55		.14		T.						.05	.14	.52	.22							.66	.10			5.55
Sikeston	Mississippi				.82	.10	.07	.07		12									.60	.18									.99	.30			3.25
Cairo, Ill.***	do			2.27	1.66	.18	.47	.16		T.	T.	.08							.76	.11	T.					T.	T.	T.	1.45				7.14
Ozark Plateau																																	
Arcadia	St. Francis			.05	.02		.17		.26	.12			T.						.82	.23	1.35	.08				.10	.50	.60					4.30
Aurora	Neosho		.20	1.56	T	1.75	2.15			.04								1.53	.03	T.							T.	1.50				8.76
Birchtree (near)	Black				1.32	2.15					.40							1.05	1.03	.45								1.55				7.95
Buffalo	Osage			1.73		4.51	.77			.43								1.71	.36									1.49				11.00
Caplinger Mills	do		T.	.60		2.60	.90			T.								.10	.39	.40					T.	T.			.75				5.74
Chaonia	St. Francis			.16	1.10		1.02	.13	1.20		.13								.05	.60	.46	.26				.04			.55	.06			5.76
Dean	Neosho		T.	2.10	.64	T.				T.							T.	.33	.63						.36	T.	T.				31	T.	4.37
Eldon	Missouri			.85		.55	.20				.37								.06	.04						.14	.03		.05			.32	2.61
Farmington	St. Francis		.16		.34						.32	.03							.46	.17	1.40	.19	.07			.21		.03	.58			.08	4.04
Fredericktown	do																																
Galena	White			.56	.43	.25	2.41				.39								.78	.12	.14							.49	.02	.35				5.94
Goodland	Black			.05		.13	.01	.05			.50	.08							.54	.02	.27								.18				1.83
Greenville	St. Francis			1.15	.35	.63	1.02	.40				.83							.50	1.15	.42	T.				.30	T.	.67					7.42
Hailey	White			1.70	.20	.12	.08				.42								.32	.05	.43							.85	2.50				6.67
Koshkonong	Black			.45	1.06	.56	.20			T.							.05	.50	.08	T.							.04	.72				3.66
Lebanon	Osage		1.22	.96	.21	1.96	.66			.24									.72	.56	T	.05				T.	.21		.32				7.11
Leeper	Black			.06	1.43		1.05		.29		.12									.36	1.07	.20					.06	.02		.39				5.05
Lockwood	Osage		.16	1.88		1.16	1.27			.07									.29	.17									1.27		.06		6.49
Mountain Grove	White			.20	T.	3.90	.03			.53							T.	.02	.16	.17		.22					.41	.10	.41				6.15
Neosho	Neosho			3.83	.01	.25					.51						T.	.91	.66							.15		.09	.28		.07		6.76
Owensville	Gasconade			.98	.15		.15				1.55											.65				.33			T.				3.81
Ozark Beach	White	.58	.53	.59	.31	.83	2.00												1 40	.55						.71			1.43				8.93
Rolla	Meramec			1.45	.15		.42				.83								1.15	.47	.30	.05				.35	.33		.08			.01	5.59
Salem (near)	do		T.	.77		.35	.02				.43	T.							.34	.48						.05		.02	.22				2.68
Seligman	Neosho			.90	2.14	.13				.02									.26	.22	.17					.37		.38	.40				4.99
Seymour (near)	White			.81	T.	4.20	1.02			.62							.05	1.30	.84	.11	T.							.06	.29				9.30
Springfield ***	do		.35	.84	T.	4.40	1.90			.04								.67	.83	.85					T.	.04	T.	.52	.24		T.		10.68
Steelville	Meramec			.97	.08		.16				.60		.14						.21	.32						.40			.34				3.22
Stover	Missouri			.29		.29	.30			.77									.11		.74					.05	.54	.02	.27			.12	3.50
Tuscumbia	Osage			.96	.40	.39	.13				.52								.19	.36	.46	.32				.21	.30		.11			.18	4.53
Williamsville	Black			.03	.68	.04	1.23	.02	.01	.36	.28		.08							.39	.37	.21					.14		.38	.08			4.30
Willow Sprgs. (near)	White	.06		.05	.74	.45	3.39				1.04								.22	.70		.40				.09	.09		.80	.06			8.09

Continued on next page

Daily Precipitation for August, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage	....	T.	....	.33	.92	.71	....	....	.77	....	....	....	....	....	....	....	T.	T.	.30	....	....	....	....	T.	T.	.14	....	....	....	.01	....	3.18
Clinton	do	....	.01	....	.12	3.23	.32	....	....	....	.72	....	....	....	....	....	....	....	.85	.15	....	....	....	....	....	....	....	....	....	....	....	....	5.40
Concordia‖	Missouri	....	....	....	....	.63	....	....	.64	.07	....	....	....	....	....	....	....	....	.26	....	....	....	....	....	....	.23	....	....	....	....	....	.46	2.29
Harrisonville‖	Osage	....	....	.02	....	2.48	1.21	....	....	.11	....	....	....	....	....	....	....	....	.09	.25	....	....	....	....	....	....	....	....	....	....	....	.01	4.17
Joplin‖	Neosho	....	1.70	1.09	.05	.25	.06	.10	....	....	....	....	....	....	....	....	....	.95	.25	....	....	....	....	....	....	T.	....	.08	.56	.04	....	....	5.13
Lamar‖	do	....	.35	.45	.15	2.05	....	....	....	.05	....	....	....	....	....	....	....	.10	.05	....	....	....	....	....	....	....	.08	.30	....	....	.10	....	3.68
Lamonte	Missouri	....	.02	....	....	.95	....	....	....	3.20	....	....	....	....	....	....	....	.01	1.05	.30	....	....	....	....	T.	.20	....	.05	....	....	T.	....	5.78
Marshall	do	....	.05	....	....	.44	....	.03	....	2.22	....	....	....	....	....	....	....	.11	.09	....	....	....	....	....	....	....	....	.05	.02	....	....	3.18	6.19
Nevada	Osage	....	T.	....	....	.65	2.07	....	....	3.10	....	....	....	....	....	....	....	.09	....	T.	....	....	....	....	T.	.05	....	.04	.17	....	....	....	6.17
Osceola‖	do	....	....	.14	....	1.22	2.13	....	....	....	1.23	....	....	....	....	....	....	.10	.13	....	.02	....	....	....	....	....	....	....	.80	....	....	.20	5.97
Warrensburg	Missouri	....	....	.04	....	1.80	....	....	.08	.40	....	....	....	....	....	....	....	T.	.32	.07	....	....	....	....	T.	....	....	....	....	....	....	....	2.71
Warsaw	Osage	....	....	.27	.07	4.82	....	....	....	1.15	....	....	....	....	....	....	....	.26	.03	1.20	....	....	....	....	....	.05	.36	.02	.22	....	....	....	8.45
Waverly‖	Missouri	.11	....	T.	....	.25	.25	....	....	2.10	.05	....	....	....	....	....	....	....	T.	.08	....	....	....	....	....	....	....	T.	....	....	....	.90	3.74
Northwest Plateau																																	
Albany‖	Grand	1.00	....	1.35	....	....	....	....	....	....	2.75	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	.11	....	....	....	....	....	....	5.21
Bethany	do	.89	.58	....	....	....	....	....	....	2.05	....	....	....	....	....	....	....	.36	.09	.10	....	.60	....	....	T.	....	....	....	....	....	....	1.41	6.08
Chillicothe‖	do	....	T.	.04	....	....	....	....	....	1.02	.07	....	....	....	....	....	....	....	T.	.03	.06	....	....	....	....	.53	.74	....	....	....	....	.89	3.38
Conception	Missouri	.91	2.91	....	....	....	....	....	T.	1.85	....	....	....	....	....	....	....	.35	.06	.50	....	....	....	....	T.	.95	....	T.	....	....	....	.57	8.10
Edgerton	do	.15	.16	....	....	.07	....	....	....	.93	.02	....	....	....	....	....	....	.01	.10	.32	....	....	....	....	T.	T.	T.	.02	....	....	T.	1.26	3.04
Gallatin‖	Grand	.68	.05	....	....	....	....	....	....	.45	.08	....	....	....	....	....	....	....	.08	....	.35	....	....	....	....	....	....	.51	....	....	....	2.35	4.55
Grant City	do	.72	1.80	....	....	....	....	T.	T.	.96	....	....	....	....	....	....	....	.06	.09	....	.04	....	....	....	.02	.05	....	.03	....	....	....	.81	4.58
Kansas City***	Missouri	.16	.16	T.	1.08	....	T.	.68	.77	....	....	....	....	....	....	....	....	T.	.46	.01	....	....	....	....	T.	....	....	.07	T.	....	....	.06	3.45
Kidder‖	Grand	.35	.09	.08	....	....	....	....	....	1.14	.11	....	....	....	....	....	....	....	.02	.06	.68	....	....	....	....	....	.03	....	....	....	....	1.25	3.81
King City	Missouri	2.03	.90	....	....	....	....	....	.03	1.06	....	....	....	....	....	....	....	....	.08	.09	....	....	....	....	....	.23	....	.03	....	....	....	.28	4.73
Lexington	do	.15	....	.13	....	.41	.16	....	2.20	....	....	....	....	....	....	....	....	.20	.12	....	....	....	....	....	....	....	....	....	....	....	....	.05	3.42
Maryville‖	do	.33	1.28	.16	....	....	....	....	....	.07	.95	....	....	....	....	....	....	....	....	.86	....	....	....	....	....	.05	....	T.	....	....	T.	T.	3.70
Oregon	do	.71	3.05	....	....	....	....	....	.23	1.13	....	....	....	....	....	....	....	T.	T.	.09	....	....	....	....	....	.44	....	T.	....	....	....	.20	5.85
St. Joseph***	do	.62	.84	....	....	T.	....	....	.54	1.20	....	....	....	....	....	....	....	.53	.09	T.	....	....	....	....	T.	T	....	T	....	....	.10	1.35	5.27
Tarkio	do	.84	1.24	....	....	....	....	....	.25	.78	....	....	....	....	....	....	....	....	.25	.38	....	....	....	....	.12	....	....	....	....	....	....	....	3.86
Trenton	Grand	.36	.06	....	....	....	....	....	T.	1.73	....	....	....	....	....	....	....	T.	.13	.45	.09	....	....	....	....	.70	.07	T.	....	....	....	3.08	6.67
		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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Thunderstorms.—Local, 1st, 3d, 4th, 6th, 20th, 24th, 28th, 29th, and 30th. More general on the 2d, 5th, 9th, 17th, 18th, 19th, 25th, 27th, and 31st.

WIND AND OTHER STORMS: There were no damaging windstorms, and only one local hailstorm reported; Sunday evening, August 30th, during a severe thunderstorm, large hail fell for a short time at and in the vicinity of Cameron, in the extreme northeast corner of Clinton County. The damage was confined to greenhouses, (over 2,000 panes of glass being broken), and some fruit orchards; $600 will cover loss to greenhouses, but fruit damage was not estimated as fruit this season is a glut on the market. The hail-streak crossed the southwest corner of DeKalb County but without damage.

ERRATA

Report for May, pages 22 and 23: Louisiana, monthly precipitation 7.44 inches. Poplar Bluff, page 22, days partly cloudy 7.

For June; Arcadia days partly cloudy and cloudy, 4, and 1. Koshkonong lowest temperature 51 on 2d.

For July: Arcadia days partly cloudy and cloudy, 3, and 2. Brunswick prevailing winds, SE. Kidder lowest temperature 50 on 21st.

Daily Temperatures for August, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	98	92	89	89	97	96	102	99	88	77	78	82	83	88	92	96	84	84	78	87	88	89	90	87	89	88	90	86	90	93	91	89.0
	Minimum	72	68	62	66	66	68	74	79	72	63	57	52	52	66	62	62	69	70	68	67	61	57	57	67	61	62	66	59	51	62	66	64.0
Columbia	Maximum	98	90	87	90	82	91	98	98	88	76	72	75	80	84	86	90	83	80	83	82	81	83	87	87	85	85	88	78	85	89	90	85.5
	Minimum	76	66	64	69	72	69	76	79	67	61	58	53	53	59	63	66	71	69	67	67	63	55	58	65	64	61	67	60	54	65	67	64.6
Fayette	Maximum	98	89	92	94	86	94	101	99	88	79	76	80	84	83	89	94	87	85	86	87	87	90	93	94	93	92	92	84	91	91	92	89.4
	Minimum	72	75	60	62	64	66	70	71	75	62	56	50	48	53	55	59	63	69	67	65	61	52	52	60	60	58	60	59	48	61	65	61.2
Hannibal	Maximum	96	88	88	90	86	91	93	100	82	76	73	77	80	83	87	91	87	81	80	83	82	85	88	84	87	[a] 85	83	79	84	85	88	85.2
	Minimum	75	71	67	66	73	71	74	75	69	63	58	53	53	56	66	64	70	68	70	66	60	55	58	66	67	62	66	60	54	63	70	64.8
Jefferson City	Maximum	95	85	91	84	92	97	97	95	94	76	81	83	86	91	94	83	87	84	87	88	88	93	94	90	91	90	83	89	90	91	85	88.8
	Minimum	75	65	67	71	68	73	76	76	61	57	53	51	54	59	66	61	68	63	67	61	56	56	62	63	60	63	62	55	60	65	63	63.1
Kirksville	Maximum	95	88	91	92	89	92	96	97	82	75	75	77	82	84	88	92	87	85	79	82	82	87	82	80	82	88	85	83	87	80	88	85.5
	Minimum	71	67	63	65	67	67	71	70	68	60	54	50	54	58	59	60	69	69	65	62	56	53	58	66	61	57	57	57	52	59	65	61.6
Louisiana	Maximum	97	92	84	90	87	90	95	100	92	74	70	75	74	82	85	90	85	83	83	80	83	84	87	85	83	85	86	85	83	80	90	85.1
	Minimum	75	75	65	60	66	68	70	73	70	65	58	48	48	60	63	68	60	67	63	55	50	50	60	60	56	60	56	48	56	67	60	60.9
Macon	Maximum	98	97	86	92	95	88	95	98	100	88	75	75	80	83	83	88	92	87	80	78	85	85	87	90	85	88	87	85	87	90	87	87.5
	Minimum	76	72	68	62	65	68	68	71	78	67	60	65	52	54	59	61	62	70	70	68	64	57	57	60	65	63	59	64	58	51	61	63.7
Mexico	Maximum	99	92	90	95	84	94	97	100	94	78	74	78	80	86	90	94	87	84	85	85	82	84	90	88	85	86	84	81	86	90	90	87.5
	Minimum	73	72	61	66	68	66	72	75	70	66	55	50	50	58	61	62	69	67	66	65	57	53	55	64	62	59	64	58	53	62	65	62.7
St. Louis(1)	Maximum	98	95	83	88	86	90	91	100	95	81	74	76	81	84	89	91	86	85	83	81	83	84	86	91	85	85	82	81	85	92	88	86.4
	Minimum	77	75	69	72	73	73	75	75	68	67	61	58	61	66	69	72	70	70	68	67	62	63	68	67	68	68	66	67	62	67	68	68.1
Unionville	Maximum	95	90	92	98	95	98	99	101	90	78	77	80	85	87	90	95	94	82	84	85	87	90	92	85	86	88	91	85	87	90	98	89.5
	Minimum	70	68	62	65	64	64	70	76	64	57	53	47	50	58	57	60	66	60	64	62	54	51	64	66	58	66	61	55	51	55	64	60.7
Warrenton	Maximum	100	97	88	91	87	94	98	102	99	78	73	76	80	88	90	92	87	83	55	81	81	84	86	90	85	85	82	80	85	90	89	87.3
	Minimum	74	75	61	71	70	69	71	75	72	62	56	53	53	59	63	67	72	68	66	67	59	57	62	66	63	61	65	63	57	64	65	64.7
Southeast Lowlands																																	
Campbell	Maximum	99	100	92	88	84	93	94	97	97	86	80	81	85	87	90	93	94	95	86	83	85	85	89	93	86	88	84	76	87	86	90	88.8
	Minimum	70	70	72	68	69	67	70	70	72	66	56	53	51	56	58	56	69	69	68	65	59	59	53	56	60	60	62	63	55	55	59	62.5
Caruthersville	Maximum	94	96	95	94	86	83	86	89	92	86	86	80	81	82	86	90	90	92	92	86	83	83	83	86	89	89	77	76	77	85	86	86.5
	Minimum	74	76	75	75	71	72	71	72	74	71	71	62	60	61	63	66	73	74	72	70	70	65	64	60	65	68	67	66	66	62	64	68.4
Doniphan	Maximum	97	98	87	87	83	91	95	98	99	89	88	82	83	84	87	89	89	83	88	84	85	86	90	92	88	88	91	77	88	85	88	88.4
	Minimum	71	73	71	71	73	69	72	74	74	65	59	55	53	56	59	59	70	71	70	68	61	60	55	58	63	59	60	56	60	55	56	63.7
Jackson	Maximum	91	91	87	79	79	83	86	88	91	83	77	74	77	80	85	86	82	83	80	75	77	79	83	84	84	81	80	73	77	79	80	81.7
	Minimum	71	72	69	68	67	69	70	57	63	52	57	52	51	58	56	61	70	67	65	63	64	55	51	57	63	59	63	61	52	58	62	61.2
Poplar Bluff	Maximum	95	90	93	87	80	90	91	93	95	87	80	82	84	84	88	87	87	90	83	83	85	86	86	88	84	86	82	78	88	85	86	86.5
	Minimum	71	72	72	70	71	69	72	72	73	65	60	50	53	58	60	69	71	68	70	67	61	60	55	59	63	62	62	65	57	58	63	64.5
Sikeston	Maximum	96	97	91	86	86	89	92	95	97	90	80	80	82	85	89	91	92	92	86	82	84	84	87	91	83	87	86	78	85	87	89	87.7
	Minimum	73	73	75	77	71	71	71	73	75	69	57	55	53	60	62	66	72	71	70	76	61	59	56	61	64	62	65	74	58	60	62	66.2
Cairo, Ill	Maximum	92	92	85	83	83	84	85	92	92	83	77	77	80	82	87	88	88	86	83	79	82	82	85	87	83	83	85	77	84	84	85	84.4
	Minimum	76	75	71	71	74	73	74	73	74	68	61	60	59	62	64	72	74	72	70	68	66	62	63	64	68	67	68	66	63	64	68	68.1
Ozark Plateau																																	
Arcadia	Maximum	94	94	82	89	82	91	91	91	95	87	73	77	78	81	85	87	84	86	80	80	80	79	84	87	82	82	78	77	84	85	86	84.2
	Minimum	69	71	68	70	65	70	65	71	73	65	57	51	45	49	51	63	66	66	64	63	57	52	52	59	63	61	60	65	53	59	65	61.5
Aurora	Maximum	89	89	79	83	82	87	91	91	88	..	..	..	..	..	82	81	80	80	79	80	80	81	83	84	78	83	83	78	82	80	86	[c]83.0
	Minimum	72	73	68	69	69	68	73	74	72	..	..	..	..	..	57	64	67	67	65	62	59	55	60	63	67	62	62	60	56	62	68	[c]65.2
Birchtree	Maximum	97	99	83	88	82	90	95	97	94	87	76	88	80	83	87	87	83	87	83	82	83	84	87	88	85	86	80	75	84	80	88	86.1
	Minimum	68	68	69	69	70	72	69	73	74	67	63	56	53	54	60	69	69	66	67	67	64	60	57	59	66	60	65	64	55	55	66	64.3
Eldon§§	Maximum	98	95	87	96	88	93	98	95	95	80	75	80	81	81	90	93	85	85	85	85	87	79	83	82	88	82	82	81	78	90	92	86.7
	Minimum	72	74	70	68	71	70	72	72	75	62	57	53	49	49	57	64	69	68	64	66	61	54	56	59	64	59	63	64	59	62	66	63.5
Farmington	Maximum	98	99	89	88	84	92	88	101	99	80	75	76	80	84	92	91	78	91	80	80	83	84	86	92	89	87	78	79	85	88	88	86.6
	Minimum	70	73	68	70	67	69	71	71	71	64	56	57	50	52	54	63	69	67	65	66	68	55	54	67	64	61	63	64	56	61	63	63.5
Koshkonong	Maximum	94	94	75	84	78	87	93	94	93	83	76	78	80	84	88	85	85	87	84	82	83	84	87	89	83	89	77	74	85	81	89	84.7
	Minimum	72	71	70	70	71	71	73	74	74	68	58	56	56	59	70	69	70	70	69	65	63	63	61	65	66	63	66	64	58	61	66	66.2
Lebanon	Maximum	95	91	78	90	79	91	93	93	93	79	75	79	81	85	87	88	77	82	84	82	83	85	87	86	84	87	86	79	83	81	88	84.9
	Minimum	68	68	66	66	66	57	70	70	69	60	63	48	46	52	52	61	67	64	62	64	55	52	53	60	65	59	65	62	63	59	65	61.2
Mountain Grove	Maximum	96	94	86	89	82	91	94	94	93	88	78	83	82	85	84	84	81	85	82	84	85	87	89	86	82	84	80	77	84	78	88	85.6
	Minimum	69	70	68	67	67	72	73	73	62	55	50	49	68	58	67	69	66	66	62	62	58	56	60	61	65	61	65	61	55	59	65	63.2
Neosho	Maximum	92	93	89	83	89	92	94	95	94	83	80	80	82	84	84	85	86	79	84	83	85	87	87	86	84	88	86	84	84	85	87	86.3
	Minimum	70	73	69	68	73	69	73	74	74	64	55	48	49	55	54	63	69	64	62	61	57	56	56	59	64	62	68	60	51	60	67	62.8
Rolla	Maximum	96	93	87	87	86	87	93	94	94	79	72	74	78	83	86	89	80	78	79	80	81	83	87	89	85	86	82	82	84	89	90	84.9
	Minimum	73	73	70	71	71	71	72	73	75	63	56	54	51	55	62	66	68	67	66	66	62	58	59	63	65	62	60	64	57	62	67	64.6
Springfield	Maximum	91	88	77	84	80	85	90	91	91	78	72	76	78	79	82	81	73	78	77	79	79	81	84	83	77	83	84	74	81	77	85	81.2
	Minimum	72	68	69	70	68	68	73	76	67	61	56	55	55	60	63	67	69	65	62	64	61	63	63	65	67	64	67	63	58	63	68	64.8
Southwest Plain																																	
Appleton City	Maximum	95	86	87	91	85	90	95	95	92	78	76	78	80	84	86	88	81	82	81	83	83	85	91	88	87	87	90	80	87	83	90	85.9
	Minimum	75	73	66	67	67	69	73	75	69	61	56	53	54	58	60	65	69	67	62	63	60	59	58	62	64	62	70	64	53	60	67	63.9
Clinton	Maximum	100	91	100	98	88	94	99	93	95	83	80	83	83	85	90	93	85	83	80	82	86	90	98	97	96	98	97	94	92	94	94	91.0
	Minimum	73	75	73	68	68	70	72	75	67	62	57	56	58	62	60	66	65	68	64	60	62	60	61	62	65	62	69	62	54	66	67	64.8
Harrisonville§§	Maximum	99	81	92	91	85	89	95	97	90	78	78	80	81	86	86	88	81	81	82	83	84	85	90	87	87	87	92	85	92	86	93	86.8
	Minimum	74	74	61	66	67	67	72	76	73	60	55	54	55	59	61	62	70	68	63	62	60	61	61	64	63	63	64	61	54	57	67	63.7
Lamar	Maximum	97	94	85	88	86	90	94	96	92	82	75	82	83	87	88	88	85	81	86	84	87	92	93	91	88	92	88	84	85	83	93	87.7
	Minimum	75	76	70	68	69	71	74	76	72	63	56	52	54	57	59	63	71	67	65	63	60	55	58	63	68	65	67	62	56	64	70	64.8
Lamonte	Maximum	101	86	94	96	84	91	95	96	90	74	73	81	83	83	86	90	85	82	83	85	85	86	90	87	90	85	90	82	86	87	86	86.8
	Minimum	75	68	61	64	67	69	74	77	69	61	56	52	52	59	63	63	70	68	64	65	61	57	56	64	61	60	69	60	52	63	67	63.5
Marshall	Maximum	98	94	92	93	91	91	100	97	94	75	73	78	80	84	88	92	88	81	83	82	83	84	89	89	88	88	91	88	88	92	91	87.9
	Minimum	73	69	62	65	70	69	75	79	70	64	55	53	53	54	63	62	70	69	65	62	61	55	55	58	62	60	66	59	54	65	63	63.2
Nevada	Maximum	93	87	84	90	86	88	93	95	98	78	75	80	82	86	86	86	81	81	81	81	82	84	87	87	84	86	88	81	84	80	90	85.3
	Minimum	77	75	70	68	68	68	75	77	71	69	55	51	57	59	63	62	69	65	63	63	58	54	58	62	66	66	55	70	64	58	65	70	64.7
Warrensburg	Maximum	100	93	96	100	90	93	98	98	88	75	74	80	83	89	90	93	92	84	85	83	85	88	93	90	93	89	90	84	90	92	95	89.5
	Minimum	73	70	62	65	66	68	74	75	69	59	55	52	53	59	61	64	64	68	63	64	59	56	58	65	62	59	68	61	64	54	67	63.1
Warsaw	Maximum	100	94	87	97	85	93	97	97	95	79	77	83	81	86	87	90	83	83	84	85	86	87	91	88	89	87	89	83	85	87	90	87.9
	Minimum	75	77	70	68	68	70	73	77	76	63	57	53	53	58	59	65	70	70	65	66	60	58	57	62	65	60	69	63	57	62	68	65.0
Northwest Plateau																																	
Chillicothe	Maximum	104	101	80	97	99	95	98	106	102	83	76	79	82	85	91	93	96	96	84	80	89	87	92	97	97	89	88	94	82	93	97	91.4
	Minimum	69	72	58	61	61	65	72	77	70	58	53	46	48	57	58	58	65	67	64	63	56	53	50	65	53	57	64	53	47	56	63	60.0
Grant City	Maximum	93	82	88	91	88	91	92	91	81	73	73	79	81	85	86	90	91	83	85	85	82	86	83	83	84	88	86	78	88	90	88	85.3
	Minimum	68	65	64	65	68	68	72	77	66	52	53	50	54	58	61	61	68	66	65	64	57	56	58	68	59	59	66	56	49	57	62	61.7
Kansas City	Maximum	95	84	90	93	87	87	97	96	82	74	73	78	79	86	85	87	85	78	77	81	80	84	89	79	88	86	92	79	88	88	92	85.1
	Minimum	72	66	68	73	69	71	77	73	66	61	56	57	61	65	68	69	71	69	66	66	63	64	68	69	64	66	71	63	61	69	71	66.9
Kidder	Maximum	97	95	84	90	93	90	94	101	93	85	74	74	78	80	85	86	90	91	83	81	84	82	86	89	80	85	82	90	79	88	92	86.5
	Minimum	68	70	60	66	70	66	73	78	70	60	53	52	54	59	63	62	69	68	66	62	60	58	58	67	61	57	66	55	53	61	66	62.9
Lexington	Maximum	98	90	97	98	91	93	100	97	86	77	78	82	85	89	90	93	89	82	79	87	87	89	92	85	93	92	94	87	91	93	93	89.6
	Minimum	72	67	63	67	70	70	75	79	72	62	56	53	55	61	63	65	71	71	67	65	62	58	58	68	63	61	69	61	55	68	68	65.0
Maryville	Maximum	95	85	91	94	91	92	92	92	83	74	77	81	84	88	89	91	93	84	85	85	84	87	89	84	87	89	87	80	90	94	94	87.5
	Minimum	68	65	61	64	65	65	72	75	72	56	51	46	57	57	59	57	68	65	63	61	58	53	56	66	59	58	66	50	45	57	67	60.7
Oregon	Maximum	94	84	92	94	92	95	95	88	80	77	81	83	85	87	90	93	94	84	86	89	90	91	92	84	89	92	85	81	89	93	94	88.5
	Minimum	69	66	64	70	72	68	75	75	67	59	51	50	55	62	65	63	71	68	66	64	62	59	64	67	63	63	69	55	51	63	69	64.0
St. Joseph	Maximum	95	80	90	92	87	92	92	89	75	75	76	79	82	88	87	90	90	80	83	84	84	86	90	81	88	89	88	78	87	90	93	85.8
	Minimum	69	66	65	69	72	69	76	75	64	60	55	50	54	64	68	62	71	67	66	65	63	57	64	62	68	58	54	65	68	69	64.5
Trenton	Maximum	98	88	93	97	94	96	99	98	85	76	76	83	84	87	93	94	94	80	82	85	84	89	92	80	88	87	88	78	86	92	84	88.1
	Minimum	70	68	61	63	68	66	68	76	68	60	55	49	51	61	61	62	68	68	66	66	60	52	54	56	58	60	62	54	51	59	61	61.4

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO St. Louis, 9-21-31—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., SEPTEMBER, 1931 NO. 9

GENERAL SUMMARY

September, 1931, was abnormally warm everywhere in Missouri, the warmest of record, being about 0.4° warmer than September, 1925, which up to that time was the warmest of record. In general, temperatures averaged from 6° to as much as 10° higher than normal in northern and central divisions and about 2° to 6° in all southern parts. During an 18-day period, beginning on the 5th, day temperatures equalled or exceeded 90° almost everywhere on nearly every day, and at 21 stations values reached or exceeded the 100° mark, on one day, generally the 17th. Previous maxima for September, however, were not broken nor equalled. It was the warmest September only when the monthly mean is considered for the State.

For the State, as a whole, the rainfall was a little more than the normal. But there were great contrasts between the northern half and the Ozark region along with the southeastern lowlands, and even between sections in the northern half of the State. Two stations in the northwest reported more than 10 inches, while eight stations including Springfield, Lockwood, and Joplin southward had less than one inch; 54 stations received less than normal and 38 more than normal amounts, the latter number being mostly in the northern section of the State.

Some general and heavy rains on the 1st, and 2d, and after the 21st, helped all late crops; but the dry, hot weather of the first 20 days caused rather marked damage in the western part of the Ozarks, and much of the southwest area having Henry County as the center. Considerable ground had been prepared for fall seeding by the end of the month; and the bulk of the corn and forage crops were safe from frost damage.

TEMPERATURE

The monthly mean temperature for the State, as shown by the records of 69 stations, was 75.0°, or 6.0° above the normal, and the largest excess for any September of record. The highest monthly mean was 79.6° at Lamar, and the lowest monthly mean was 72.0° at Clifton Hill. The highest daily temperature reported was 104° at Harrisonville on the 5th, and Unionville on the 6th. The greatest daily range was 46° at Arcadia, Goodland, and Greenville, on the 10th or 30th. The temperature reached 90° or higher on 15 to 17 days, and 100° or higher on one day.

PRECIPITATION

The average precipitation for the State, 122 stations reporting, was 4.16 inches, or about 0.32 inch more than the 60 years' average. The largest monthly amount was 10.80 inches at King City, and the least monthly amount was 0.46 at Dean. The greatest amount in any twenty-four consecutive hours was 4.19 inches, at St. Louis on the 1st-2d. More than 4 inches also fell at Fulton and Columbia; and more than 3 inches at Jefferson City, Unionville, Warrensburg, Oregon, and St. Joseph, on the 1st, and 2d, or 21st, and 22d.

MISCELLANEOUS PHENOMENA

Fog, dense.—Local 8th, 9th, and 22d.

Hail.—Small at Harrisonville on the 23d.

Halos, lunar.—2d, and 24th. Solar.—8th, 9th, 23d, and 24th.

Thunderstorms.—Local 2d, 3d, 5th, 6th, 11th, 14th, 15th, 17th, 20th. More general.—1st, 18th, 21st, 22d, 23d, 24th, and 25th.

Winds.—Thunderstorm squalls, with some small damage, except where specially noted, on the 19th, 20th, 21st, 22d, 24th, and 25th.

(Continued on Page 44)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	29.98	84	54	67	274	74	4,317	6.0	32	nw.	21
Hannibal	29.99	84	52	..	...	..	5,151	7.2	27	s.	22
Kansas City	29.95	72	48	54	299	80	5,243	7.3	31	sw.	25
St. Joseph	29.93	76	53	61	263	70	5,188	7.2	34	nw.	24
St. Louis	30.00	78	55	57	272	73	7,470	10.4	36	sw.	21
Springfield	30.00	82	54	57	316	85	6,088	8.5	26	s.	21
Cairo, Ill.	30.02	86	53	66	...	..	4,295	6.0	30	sw.	25
Keokuk, Iowa	29.99	81	53	63	282	76	4,139	5.7	30	sw.	14

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**69.0**	.....	**101**	**31**	**3.84**	.....	**4.86**	**0**	**8**	**18**	**7**	**7**
1888	65.2	− 3.8	97	28	1.11	−2.73	....	0	4	..	..	..
1889	64.7	− 4.3	94	31	4.66	+0.82	....	0	11	..	..	..
1890	63.7	− 5.3	98	34	3.98	+0.14	....	0	9	..	..	..
1891	70.6	+ 1.6	104	30	0.63	−3.21	....	0	6	..	..	..
1892	67.8	− 1.2	97	32	2.39	−1.45	3.00	0	4	19	6	5
1893	69.9	+ 0.9	107	26	3.92	+0.08	5.20	0	6	17	7	6
1894	68.5	− 0.5	101	34	4.93	+1.09	3.07	0	5	13	11	6
1895	71.8	+ 2.8	104	25	2.45	−1.39	6.21	0	4	19	8	3
1896	65.0	− 4.0	101	28	4.17	+0.33	4.40	0	10	11	10	9
1897	74.3	+ 5.3	105	27	0.74	−3.10	2.13	0	2	23	5	2
1898	70.9	+ 1.9	103	30	6.74	+2.90	6.10	0	9	15	9	6
1899	67.4	− 1.6	108	16	2.04	−1.80	3.01	0	4	20	6	4
1900	71.1	+ 2.1	100	29	4.81	+0.97	3.79	0	10	13	10	7
1901	68.9	− 0.1	103	27	2.31	−1.53	2.80	0	6	18	8	4
1902	63.2	− 5.8	95	30	4.78	+0.94	6.55	0	10	15	6	9
1903	66.4	− 2.6	98	32	4.41	+0.57	6.77	0	8	17	6	7
1904	69.6	+ 0.6	96	34	3.85	+0.01	2.46	0	3	16	8	6
1905	69.6	+ 0.6	98	41	7.67	+3.83	7.90	0	10	15	6	9
1906	71.9	+ 2.9	98	36	4.15	+0.31	4.28	0	11	15	8	7
1907	68.9	− 0.1	101	31	1.93	−1.91	2.25	0	6	18	7	5
1908	71.6	+ 2.6	99	28	1.80	−2.04	2.68	0	4	18	8	4
1909	68.7	− 0.3	105	28	4.62	+0.78	4.48	0	8	18	6	6
1910	69.5	+ 0.5	97	34	5.58	+1.74	4.63	0	10	14	6	10
1911	73.7	+ 4.7	105	39	7.13	+3.29	7.75	0	11	13	7	10
1912	68.6	− 0.4	105	27	3.06	−0.78	3.61	0	9	17	5	8
1913	69.4	+ 0.4	109	27	4.63	+0.79	4.08	0	9	13	7	10
1914	69.6	+ 0.6	99	35	6.27	+2.43	9.22	0	9	15	8	7
1915	70.6	+ 1.6	98	34	5.25	+1.41	5.91	0	7	16	7	7
1916	67.8	− 1.2	101	27	2.94	−0.90	2.80	0	6	19	7	4
1917	67.9	− 1.1	101	33	2.78	−1.06	4.13	0	5	19	6	5
1918	62.3	− 6.7	96	29	4.73	+0.89	6.61	0	7	17	6	7
1919	71.4	+ 2.4	104	38	3.29	−0 55	4.93	0	5	20	6	4
1920	70.0	+ 1.0	100	31	4.81	+0.97	4.10	0	9	17	7	6
1921	73.4	+ 4.4	104	34	7.08	+3.19	5.45	0	13	13	9	8
1922	71.7	+ 2.7	107	34	3.31	−0.53	5.36	0	5	21	5	4
1923	68.7	− 0.3	98	33	4.47	+0.63	5.26	0	11	12	9	9
1924	64.0	− 5.0	96	29	3.77	−0.07	3.72	0	8	14	8	8
1925	74.6	+ 5.6	110	45	6.46	+2.62	8.92	0	10	14	6	10
1926	69.3	+ 0.3	97	27	8.79	+4.95	5.83	0	13	12	7	11
1927	71.6	+ 2.6	102	29	3.71	−0.13	6.37	0	8	17	7	6
1928	65.0	− 4.0	95	28	2.61	−1.23	5.60	0	5	20	7	3
1929	67.4	− 1.6	98	38	3.20	−0.64	4.22	0	8	13	10	7
1930	71.3	+ 2.3	105	37	4.18	+0.34	4.00	0	8	16	7	7
1931	75.0	+ 6.0	104	36	4.16	+0.32	4.19	0	7	19	7	4
.....	....	.....	..	..	....	.....	....	..	..	..	..	..

Climatological Data for September, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	76.9	+10.2	99	15	45	27	33	2.59	−1.90	0.75	0	8	18	2	10	se.	O. K. Benecke
Clifton Hill	Randolph	731	32	72.0	+ 3.1	95	8	40	27	29	3.20	−1.25	1.09	0	9	17	6	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	75.2	+ 7.0	96	15	44	27	28	6.69	+2.34	4.15	0	7	15	12	3	s.	U. S. Weather Bureau
Downing	Schuyler	876	10	73.6	+ 6.0	97	6	43	27	31	5.72	+0.12	1.45	0	11	15	10	5	e.	James Taylor
Elsberry	Lincoln	449	0	75.1°	.....	97	15	38	29	39	3.15	....	1.23	0	6	16	4	10	s.	Ray E. Mills
Fayette	Howard	661	51	75.4	+ 7.1	100	15	40	27	37	3.00	−1.75	0.60	0	10	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	74.2	+ 5.3	98	8	42	27†	35	5.78	+1.49	4.15	0	8	18	10	2	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	9.13	+4.47	2.35	0	9	16	3	11	se.	J. W. Pulliam
Hannibal	Marion	534	39	75.2	+ 7.5	95	15	46	28	31	3.72	−0.25	1.66	0	10	14	10	6	sw	U. S. Weather Bureau
Jefferson City	Cole	557	43	74.4	+ 5.3	97	5	44	27	34	8.27	+4.74	3.04	0	8	15	9	6	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	74.2	+ 8.2	96	7	45	27	30	9.43	+4.97	2.00	0	9	16	6	8	sw.	Prof. J S. Stokes
Louisiana	Pike	469	37	74.7	+ 6.8	98	14	39	29	34	3.09	−0.99	1.12	0	7	18	6	6	s.	Stark Bros. Nurseries
Macon	Macon	875	32	76.0	+ 7.7	97	8	44	28	31	6.05	+1.75	1.45	0	9	20	6	4	sw.	W. C. Brown
Mexico	Audrain	800	42	76.1	+ 7.5	101	8	44	27†	34	3.45	−1.15	1.47	0	7	24	0	6	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	5.86	+1.85	1.47	0	11	13	10	7	ne.	J. S. Conway
St. Charles	St. Charles	456	43	76.3	+ 8.4	97	7†	46	27†	32	4.96	+1.65	1.98	0	4	15	9	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	76.9	+ 6.4	96	15	51	27	27	5.66	+2.20	4.19	0	8	20	7	3	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	76.2	+ 6.0	97	15	50	27	26	3.65	−0.59	2.47	0	7	18	8	4	s.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	3.18	−0.90	1.01	0	10	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	33	74.5	+ 5.4	97	7†	39	27	36	4.54	+0.17	1.40	0	9	17	9	4	s.	Frank Hall
Unionville	Putnam	1,062	38	74.7	+ 7.5	104	6	42	27	34	9.09	+4.16	3.00	0	9	19	4	7	sw.	Geo. W. Davis
Warrenton	Warren	816	49	76.3	+ 7.5	96	7†	47	27†	29	6.50	+2.48	2.05	0	8	13	12	5	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	74.0	+ 6.5	95	7	46	27	28	6.73	+2.89	2.76	0	12	15	9	6	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	73.6	+ 6.8	104	6	38	29	39	5.37	+1.20	4.19	0	9	17	7	6	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	76.1	.....	100	18	41	28†	45	3.09	.....	2.53	0	5	18	10	2	s.	Jeff. King
Caruthersville	Pemiscot	265	35	79.5	+ 6.1	97	17†	51	29†	33	1.60	−1.54	0.94	0	3	17	10	3	s.	Sam Smith
Doniphan	Ripley	344	27	77.3	+ 6.5	101	17	42	30	41	1.59	−2.13	1.10	0	4	17	13	0	s.	W. W. Martin
Jackson	Cape Girardeau	428	40	72.0	+ 2.1	92	17	38	28†	37	1.87	−1.91	1.14	0	4	11	11	8	s.	John G. Putz
Marble Hill	Bollinger	470	36	76.9	+ 6.5	101	17	39	29	41	1.47	−2.27	1.20	0	3	16	8	6	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	1.27	−3.49	0.54	0	4	20	9	1	s.	John A. Spence
Poplar Bluff	Butler	339	27	75.6	+ 4.3	97	18	42	30	41	1.87	−1.92	1.60	0	5	25	4	1	s.	J. H. Wolpers
Sikeston	Scott.	318	30	77.4	+ 6.8	100	18	44	28	37	1.45	−1.88	0.70	0	4	28	2	0	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	56	77.0	+ 5.5	95	18	50	30	31	1.19	−1.70	1.03	0	5	14	10	6	s.	U. S. Weather Bureau
Section means and	extremes	....	..	76.5	+ 5.4	101	17	38	28†	45	1.71	−2.10	2.53	0	4	18	9	3	s.	
Ozark Plateau																				
Arcadia	Iron	926	49	73.2	+ 5.6	96	17	36	29†	46	1.41	−2.33	1.11	0	3	25	1	4	w.	Arcadia College
Aurora	Lawrence	1,370	39	75.4	+ 4.7	94	6†	43	27	28	0.68	−3.16	0.23	0	5	24	5	1	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	74.2	+ 4.7	97	17†	43	27†	36	2.68	−0.95	1.46	0	5	23	5	2	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	74 6	.....	96	17	43	27	32	2.56	.....	1.47	0	5	22	6	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	1.77	.....	0.73	0	7	17	9	4	s.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	76.2	+ 5.5	100	17	38	28	43	0.46	−3.47	0.46	0	1	27	3	0	s.	H. E. Dean
Eldon	Miller	934	35	75.6	+ 6.3	99	7†	44	27†	35	7.25	+3.16	2.73	0	9	12	15	3	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	74.7	+ 5.4	100	15	39	28†	40	2.08	−1.29	1.39	0	4	18	10	2	sw.	Robert Forsyth
Goodland	Iron	1,000	37	73.6	+ 6.3	98	7	36	30	46	3.70	−0.12	1.25	0	5	20	5	5	s.	F. M. Adams
Greenville	Wayne	381	7	74.1	.....	99	17	36	29†	46	1.60	−1.54	1.60	0	1	21	9	0	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	0.57	−3.55	0.21	0	3	23	6	1	sw.	A. W. Madison
Koshkonong	Oregon	958	30	77.5[a]	+ 6.6	98	7†	48	27†	31	2.07	−1.61	1.61	0	4	21	6	3	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	74.8	+ 5.3	96	17†	38	27	38	2.95	−1.30	2.21	0	4	25	2	3	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	76.0	+ 4.7	95	17	45	27†	29	0.69	−3.87	0.25	0	5	22	8	0	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	30	75.4	+ 7.0	99	17	41	27	36	1.28	−2.96	0.57	0	7	19	8	3	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	76.5	+ 6.2	100	17	40	27	36	1.42	−2.97	0.72	0	5	26	4	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	75.9	+ 7.9	97	6†	43	30	36	3.24	−0.67	1.80	0	7	11	11	8	s.	F. H. Lane
Salem (near)	Dent	1,173	27	74.4	+ 4.9	98	17	38	28	37	2.43	−1.65	1.53	0	7	20	8	2	s.	A. C. Leech
Seligman	Barry	1,542	29	75.0°	+ 6.2	95	6	43	27	31	1.01	−3.36	0.44	0	5	24	6	0	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	73.3	+ 4.7	95	6	39	27†	36	2.20	−2.27	0.73	0	6	23	6	1	s.	Ira H. Hailey
Springfield	Greene	1,324	43	75.2	+ 6.3	94	6	47	27	25	0.92	−2.60	0.30	0	7	22	7	1	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	75.0	+ 5.8	100	15	36	29†	46	2.05	−1.76	2.73	0	5	21	7	2	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	77.0	+ 6.7	99	5†	46	27	32	3.09	−1.03	1.81	0	4	15	15	0	se.	W. G. Bigelow
Clinton	Henry	765	38	77.4	+ 7.2	103	5†	46	27	37	4.97	+0.91	2.00	0	7	19	11	0	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	77.2	+ 8.9	104	5	46	26	42	4.44	−0.14	2.00	0	10	14	2	14	s.	John H. Patterson
Lamar	Barton	980	44	79.6	+ 9.0	102	9†	43	27	35	1.44	−3.08	0.55	0	6	21	4	5	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	74.6	+ 4.5	98	22	44	29	35	4.84	+0.22	2.05	0	7	23	4	3	s.	J. E. Wheeler
Marshall	Saline	779	43	76.4	+ 8.1	99	15	45	27	30	1.63	−3.51	0.79	0	10	21	4	5	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	77.8	+ 8.7	99	8	43	27	31	1.62	−2.68	0.48	0	7	21	7	2	sw.	George A. Kaupp
Warrensburg	Johnson	878	44	77.5	+ 7.4	101	15†	45	28	33	6.00	+2.21	3.42	0	7	20	7	3	se.	E. A. Markey
Warsaw	Benton	687	30	77.4	+ 7.4	99	15†	47	27†	32	6.08	+1.36	2.85	0	6	18	3	9	e.	Everett Martin
Section means and	extremes	.....	..	77.2	+ 7.5	104	5	43	27	42	3.79	−0.64	3.42	0	7	19	6	5	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	73.6	+ 6.6	99	6	42	27	34	8.04	+3.88	2.18	0	9	21	5	4	s.	A. S. Cumming
Chillicothe	Livingston	779	21	75.1	+ 5.5	101	7	41	27	35	10.08	+4.40	1.96	0	10	17	10	3	e.	Wm. J. Olenhouse
Conception	Nodaway	980	42	74.1	+ 6.9	99	5	46	27	31	9.47	+5.35	2.90	0	8	14	9	7	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	72.3[a]	+ 4.4	92	5	42	27	29	6 06	+2.26	2 06	0	11	21	1	8	s.	Fred L. Stiff
Grant City	Worth	1,134	27	73.2	+ 6.2	97	6†	46	27	31	8.87	+4.61	2.36	0	10	16	12	2	s	W. P. Spillman
Kansas City	Jackson	963	42	77.5	+ 8.6	102	5	49	27	30	5.12	+0.56	2.35	0	10	16	9	5	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	74.5	+ 6.8	97	7	45	27	29	9.82	+5.25	2.13	0	10	17	5	8	se.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	10.80	+5.26	2.81	0	9	..	..	..	..	H. L. Yates
Lexington	Lafayette	688	46	78.6	+10.1	101	5†	46	27	32	4.93	+0.19	0.98	0	12	16	13	1	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	73.6	+ 8.2	103	6	42	27	36	5.57	+1.07	1.74	0	11	15	10	5	s.	J. R. Brink
Oregon	Holt	1,048	75	76.9	+ 9.9	101	5†	46	26	34	8.92	+5.01	3.23	0	9	20	6	4	se.	Mina Wright
St. Joseph	Buchanan	967	23	76.2	+ 7.5	101	5	45	27	31	7.88	+2.90	3.19	0	9	19	6	5	se.	U. S. Weather Bureau
Tarkio	Atchison	916	28	73.4	+ 6.8	101	6	43	27	35	6.32	+2.48	1.80	0	10	17	6	7	sw.	Albert Volker
Trenton	Grundy	822	35	74.1	+ 6.7	100	6	44	27	35	9.08	+4.55	2.90	0	9	22	3	5	s.	W. H. Estes
Section means and	extremes	.....	..	74.9	+ 7.2	103	6	41	27	36	7.93	+3.41	3.23	0	10	18	7	5	s.	
State means and	extremes	.....	..	75.0	+ 6.0	104	5†	36	29†	46	4.16	+0.32	4.19	0	7	19	7	4	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for September, 1931

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri	.60	1.10	T.	.15								.05			T.							1.05	.36	.27	.05						3.63
Bowling Green	Mississippi	.70	.58	.02																			.88	.26	.10	.15						2.69
Brunswick	Grand	.75	.08				.06															.17	.67	.24	.37	.25						2.59
Clifton Hill	Chariton	.64					.30									.05		.01				.44	.44	1.09	.15	.08						3.20
Columbia***	Missouri	4 15	T.	.14			T.					.01		T.					T.			1.28	.73	.31	T.	.07						6.69
Downing	Mississippi	1.40		.25								T.			.34	.02			.49		.04	1.45	.67	.28	.22	.56						5.72
Edina	do	2.10	.38		T.											.65		T.	.35			.90	.95	.90	.20	.88						7.31
Elsberry	do	1.23	.51													T.							.60	.71	.05	.05						3.15
Fayette	Missouri	.59	.43	.09				.08											.06				.60	.59	.39	.16	.01					3.00
Fulton	do	.60	4.15	.04									.04										.27	.32	.34	.02						5.78
Gorin	Mississippi	2.35	.33	.10											1.04				.72			1.53		2.29	.08	.69						9.13
Hannibal***	do	1.66	.07												.24	.02		T.	.12			1.09	.16	.21	.02	.13						3.72
Hermann	Missouri	.30	3.30									.11											.63	1.36	.94	.08						6.72
Jefferson City	do	3.04		.89								2.10										.70	.67	.62	.17						.08	8.27
Kahoka	Mississippi	2.90														1.46			.28			.37	.87	.68		.90						7.46
Kirksville	do	2.00	.82												.80				.65			1.52	1.65	.94	.18	.87						9.43
Knox City	do																															
LaBelle	do		2.01	.54												.50		.10	.49			.29	.51	.55	.24	1.00						6.23
Laddonia	do	.34	.33																				1.10	.23	.27	.15						2.42
LaGrange	do	1.75	1.41												.10		.05	.21				.32	.31	.27	.52							4.94
Louisiana	do	.97	.30													.10						1.12	.50	.05		.05						3 09
Lucerne	Grand	1.79	.07		.02											.57			.16			1.38	1.21	.48	.11	.94						6.73
Macon	Chariton	1.25					.30								.03	.55						.20	.80	.70	.77	1.45						6.05
Memphis	Mississippi	2.21				.30											.50		.86	T.			.90	.80	.61	.10	.50					6.78
Mexico	do	.75	.28		.11																		1.47	.37	.20	.27						3.45
Milan	Grand	2.36	.20												.16	.38			.12		2.10	1.08	1.02	.61	.12	1.04						9.19
Monroe City	Mississippi	1.47	.32												1.32	.62			.02		.01	.30	.87	.58	.09	.26						5.86
New London	do	1.07	.34	.22				T.								.29		.14		.05			1.10	.42	.22	.15						4.00
Pacific	Meramec	.20	2.30	.02																				.57	.17	T.	.18						3.44
Palmyra	Mississippi	1.51	.11									.06				.43		.04	.18			.26		1.25		.34						4.18
Paris	do	.90	.30				.17											.35					.30	.75	.71	.23						3.71
Perry	do	1.07	.31															.10				.16	.83	.35	.20							3.02
Philadelphia	do	1.51	.50														.37			.47		.05	.20	.49	.40	1.00						4.99
Plevna	do	1.57	.37													.35		.01	.05			.18	.65	1.28	.50	.84						5.80
St. Charles	Missouri	1.90	.80		T.											T.							.28	1.98		T.						4.96
St. Louis (1)***	Mississippi	4.02	.47		T.								.03		.04				.10				.64	.19		.17						5.66
St. Louis (2)*	do	2.47	.42		.01								T.						.08	T.			.41	.04		.22						3.65
Shelbina	do	.57	.10				.02									1.01	.26					.01	.35	.07	.41	.38						3.18
Steffenville	do	1.40	.16												.35				.18			.15	1.05	.50	.10	.65						4.54
Troy	do	.24	1.74																				.50	.62	.47	.03						3.60
Union	Meramec	.26	3.13		.13								.65	.07										.73	.21	T.	.26						5.44
Unionville	Chariton	1.77		.12											.65				.45			2.55	.45	1.75	.25	1.10						9.09
Valley Park	Meramec	.08	3.02	1.33	.27															T.				1.22	.23	T.	.24						6.39
Warrenton	Mississippi	1.59	2.05		.87								.10						T.				32	1.30	.20	.07						6.50
West Ely	do	.31	T.									T.			.63	T.			.23			.25	.10	.50	.10	T.						2.12
Winfield	do	1.80																						.35	.89	.23	.13						3.40
Keokuk, Ia.***	do	2.58	.20	.01											2.03	.02		.12	.05	T.	.01	.55	T.	.22	.06	.88	T.				T.		6.73
Southeast Lowlands																																	
Campbell	St. Francis		2.53	.10									.01												.05		.40						3.09
Cape Girardeau	Mississippi	.52	.68	.36																.09					.07		1.04						2.76
Caruthersville	do	.94	.61																								.05						1.60
Dexter	St. Francis		.78										T.											T.	T.		.43						1.21
Doniphan	Black		1.10		T.							.02							T.							.15		.32						1.59
Fisk	St. Francis		.80	.27									T.													.05		.23						1.35
Jackson	Mississippi		1.14																				.05	.28		.40							1.87
Marble Hill	do		1.20																					.12		.15							1.47
Morehouse	do		.51	.54									.05														.17						1.27
New Madrid	do		1.35	1.10									.10														.62						3.17
Parma	St. Francis		1.68	.18									.10											.26		.27						2.49
Poplar Bluff	Black		1.60	.05									.05											.09		.08						1.87
Sikeston	Mississippi	.70	.40										.22													.13						1.45
Cairo, Ill.***	do	T.	1.03		.01							T.							.02				.06		T.	.07						1.19
Ozark Plateau																																	
Arcadia	St. Francis		1.11																T.	.10					T.		.20						1.41
Aurora	Neosho	.23	.13									T.											T.	.03	.14	.15							0.68
Birchtree (near)	Black		1.46																				.50	.15	.15	.42							2.68
Buffalo	Osage	.17	1.47									.04												.17		.71							2.56
Caplinger Mills	do	.09	.73															.07				.45	.05	.15	.23							1.77
Chaonia	St. Francis		.65	.10																					.04		.46						1.25
Dean	Neosho																		T.				T.	.46									0.46
Eldon	Missouri	.02	2.73		.02								.48							.02			.78	1.40	1.73	.07							7.25
Farmington	St. Francis	.20	1.39																T.						.05	.44							2.08
Fredericktown	do		1.89																.47							.48							2.84
Galena	White		.38																					.18									0.56
Goodland	Black	.64	1.25										.65										.60			.56							3.70
Greenville	St. Francis	T.	T.																					T.		1.60							1.60
Hailey	White		.18																					.21		.18							0.57
Koshkonong	Black		.11																					.27	1.61	.08							2.07
Lebanon	Osage	2.21										.06											.04	.64									2.95
Leeper	Black		1.05										.03														.44							1.52
Lockwood	Osage	.08	.25	T.																			T	.19	.15	.02							0.69
Mountain Grove	White	.08	.57									.07	.08										T.	.10	.28	.10							1.28
Neosho	Neosho	.27	.20																T.				T.	.05	.72	.18							1.42
Owensville	Gasconade		1.80	.20																				.60	.60		T.						3.20
Ozark Beach	White		.29																						.44								0.73
Rolla	Meramec	.06	1.80		.02								.28											.85	.19	.04							3.24
Salem (near)	do	.25	1.28	.03									T.						.38				.15		.04	.30							2.43
Seligman	Neosho		.44																.31				.10		.05	.11							1.01
Seymour (near)	White	.04	.43									.23											.48	T.	.73	.29							2.20
Springfield***	do	.23	.01	T.								.06											.30	.11	.15	.06							0.92
Steelville	Meramec	.12	1.40		.53								.03											2.10	.30		.06						4.54
Stover	Missouri	.12	4.52	.01	.10								.38										.56	.28	1.74								7.71
Tuscumbia	Osage		2.23										.56										.22	1.07	.35	.12							4.55
Williamsville	Black		.54		.06								.09							.06				.05	.03		.39							1.22
Willow Sprgs. (near)	White		.37										.64											.67	.70		.35							2.73

Continued on next page

Daily Precipitation for September, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																
Appleton City	Osage	.35		T.	T.							T.							T.			.45	.48	1.81		T.							3.09
Clinton	do	1.39		.12			.05															1.03	.35	2.00	.03								4.97
Concordia‖	Missouri		1.97		.10																		.60	.54	.55	.12							3.88
Harrisonville‖	Osage	.03	.44		.07		.20									.02						.39	1.16	2.00	.07	.06							4.44
Joplin‖	Neosho	.35	.06																			.06	T.		.15	.14							0.76
Lamar‖	do	.55		.04															.08			.45		.25	.07								1.44
Lamonte	Missouri	1.73		.15			T.									.01						.75	2.05	.08	.07								4.84
Marshall	do		.08	.01			.02					.02						.02				.05	.79	.49	.09	.06							1.63
Nevada	Osage	.18																.25				.48	.20	.24	.25	.02							1.62
Osceola‖	do		1.13																				1.02		.70	.05							2.90
Warrensburg	Missouri	1.10		.08			T.															.58	3.42	.70	.05	.07							6.00
Warsaw	Osage		2.00	.05								.15											.86	2.85	.17								6.08
Waverly ‖	Missouri	.81	1.41		.02		.43															.50	1.10	.10	.60	.47							5.44
Northwest Plateau																																
Albany‖	Grand																															
Bethany	do	2.00													1.38	.05			.06		.37	2.18		.79	.29	.92							8.04
Chillicothe ‖	do	1.69	.28				.16								T.	.51				.11		1.96	1.75	1.31	.73	1.58	T.						10.08
Conception	Missouri	1.22		T.											.89						.33	2.90		1.59	.30	2.20					.04		9.47
Edgerton	do	1.74	.07	.07			.33								.05					T.	.46	2.06	.05	.66	.19	.38							6.06
Gallatin ‖	Grand	2.37	.34													.39				.50		2.00	1.15	1.13	.13	1.30							9.31
Grant City	do	1.08		T.											.44	.06			.07		.54	2.36		1.70	.75	1.80					.07		8.87
Kansas City***	Missouri	.82		.62		T.	.16								.01	T.		T.	T.		.05	2.30	.03	.27	.71	.15					T.		5.12
Kidder ‖	Grand	1.80	1.53				.12								T.	.19				.06		2.13	1.26	1.10	.21	1.42							9.82
King City	Missouri	2.15		T.											.39	.02		T.		.14	2.72	2.81		1.22	.21	1.14					T.		10.80
Lexington	do	.70	.57		.22	.05	.02									.09				.07		.78	.98	.12	.79	.54							4.93
Maryville ‖	do	.83	.01	.02											.16	.67				.03		1.74	.94	.72	.43					.02		5.57
Oregon	do	.62		.10											.53	.15		T.			.93	3.23		1.69	.32	1.35							8.92
St. Joseph***	do	1.78		.04		.01									.08	T.		T.	T.		2.20	1.44	T	.87	1.19	.27					T.		7.88
Tarkio	do	.42													.52	.10			.02	.05	.10	1.54		1.52	.25	1.80							6.32
Trenton	Grand	1.99													.41	.26				.75		2.90	.30	1.29	.33	.85							9.08

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Continued from Page 41

TORNADOES

On September 1, about 5.15 p. m. a tornado traveled northeastward in the southwest part of St. Louis County, in the vicinity of Eureka. The path was 300 feet wide, and about a mile long, where it struck into the Meramec River Bluffs and broke up. No lives lost but five persons were injured, none seriously. Property loss, $25,000.

Two tornadoes occurred on September 21. A report was received that a violent tornado had crossed into Missouri from Opolis, Kans., just south of Pittsburg, Kans, heading for Lamar, Mo. Lamar, Barton County, is in southwest Missouri. Reports failed to get on the trail of any tornado coming from Kansas, but later, at 5 p. m. a small tornado did strike just a little north of Lamar, traveling from southwest to northeast, and one mile wide. One barn, one silo, some small sheds and hoghouse were blown down, loss perhaps $2000. No lives were lost and no person injured. Strong line-winds were reported from the Kansas line to and beyond Lamar, but no damage, other than mentioned. Substantially on the continuation of this track, 150 miles northeastward, a small tornado struck the southern part of the city of Columbia, Mo., at about 7 p. m. This of course is counted a distinct storm.

The tornado traveled almost due west to east across the central part of the southern half of the city, taking in a part of the campus of the University of Missouri. The path of destruction averaged about two blocks or less, and about one mile long. The University suffered a loss in building damage of about $10,000; and the city about the same. One student was injured by flying limb of a tree, but no person was killed. The path crossed the campus a little south of the Weather Bureau building. The "tornado dip" on the barograph is quite pronounced—nearly 0.1 inch in as many seconds.

ERRATA

Report for August, page 37: Doniphan highest temperature 99 on 9th.

Daily Temperatures for September, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	86	86	81	90	96	94	95	96	96	95	95	94	96	97	99	98	92	90	96	97	92	91	82	71	77	70	70	77	79	80	..	88.6
	Minimum	69	68	60	63	63	74	71	70	68	71	69	64	73	77	75	75	76	68	71	75	66	63	65	57	59	51	45	49	50	51	..	65.2
Columbia	Maximum	80	78	78	88	91	91	94	93	93	92	90	88	91	94	96	94	91	85	93	93	92	90	82	66	79	61	68	74	75	79	..	85.3
	Minimum	66	63	59	64	65	73	73	70	71	69	69	68	71	73	79	74	75	71	74	73	66	65	65	59	56	49	44	46	52	51	..	65.1
Fayette	Maximum	81	85	81	92	96	95	97	97	95	96	91	94	96	100	96	94	90	95	96	94	91	84	74	80	70	74	77	79	61	..	88.3
	Minimum	65	67	57	58	59	63	70	65	66	66	64	63	63	70	76	71	72	72	71	73	70	64	64	59	60	50	40	42	48	46	..	62.5
Hannibal	Maximum	80	79	80	85	92	90	95	94	93	94	92	88	92	92	95	94	86	84	94	95	94	88	77	67	78	60	68	72	76	78	..	85.1
	Minimum	67	65	61	62	61	70	70	73	71	69	72	72	72	74	76	76	72	64	70	75	68	66	66	57	59	53	47	46	48	56	..	65.3
Jefferson City	Maximum	86	87	89	93	97	95	96	94	93	93	89	90	93	94	94	95	90	93	94	92	90	85	75	81	66	73	77	79	81	84	..	87.9
	Minimum	65	57	60	61	63	61	67	70	66	69	66	66	63	68	63	65	63	64	64	67	65	65	59	67	50	48	44	47	47	50	..	61.0
Kirksville	Maximum	82	82	83	87	94	95	96	94	94	95	94	91	95	85	90	94	88	83	92	94	84	86	77	65	73	71	70	74	77	79	..	85.5
	Minimum	65	64	62	60	64	72	69	70	69	69	68	63	72	70	70	74	72	60	65	72	65	62	64	51	55	49	45	48	49	49	..	62.9
Louisiana	Maximum	85	80	85	85	90	92	93	94	91	92	93	95	96	98	95	94	89	87	95	95	96	88	75	73	72	69	62	70	65	80	..	85.8
	Minimum	70	68	55	60	67	70	67	70	65	64	67	68	70	65	73	74	75	67	70	74	76	60	66	56	65	54	44	44	39	46	..	63.6
Macon	Maximum	89	83	82	83	89	96	93	97	93	96	96	95	92	96	95	96	96	91	87	94	96	90	89	77	66	76	66	71	77	78	..	87.5
	Minimum	65	66	65	60	63	65	70	68	68	70	69	69	64	72	74	72	73	74	65	68	73	67	62	65	55	60	49	44	48	49	..	64.4
Mexico	Maximum	80	78	84	87	94	92	96	101	95	95	94	90	94	95	98	96	91	89	95	96	95	91	82	70	82	70	70	76	76	82	..	87.8
	Minimum	69	66	58	64	62	71	69	70	70	67	70	68	69	72	76	72	74	68	72	71	75	64	64	56	61	50	44	44	49	48	..	64.4
St. Louis(1)	Maximum	77	75	83	87	91	96	94	90	92	93	91	87	92	94	96	95	96	86	93	94	93	88	87	72	82	62	70	70	75	81	..	86.1
	Minimum	68	64	62	66	68	73	72	71	71	73	75	73	70	74	80	77	77	71	72	73	77	69	68	60	61	55	51	52	55	54	..	67.7
Unionville	Maximum	90	82	80	90	98	104	98	98	97	100	97	95	98	90	90	95	92	88	95	94	78	86	75	68	62	80	74	75	80	78	..	87.6
	Minimum	65	58	60	62	64	70	68	68	66	66	65	64	70	70	70	72	70	58	64	70	60	62	64	48	55	50	42	45	55	53	..	61.8
Warrenton	Maximum	85	73	81	86	91	94	96	96	95	95	94	87	91	94	96	96	94	87	94	95	93	87	85	80	82	75	68	74	77	78	..	87.3
	Minimum	70	65	60	64	64	70	71	73	68	69	71	68	68	73	75	73	74	69	71	73	74	67	66	57	63	51	47	47	49	49	..	65.3
Southeast Lowlands																																	
Campbell	Maximum	90	83	85	90	94	96	97	91	95	98	90	90	93	95	97	97	98	100	97	95	95	97	100	90	97	69	75	77	80	86	..	91.2
	Minimum	66	63	56	58	59	59	63	66	58	64	66	66	62	66	69	68	68	67	68	69	67	69	67	66	63	49	44	41	43	41	..	61.0
Caruthersville	Maximum	90	91	81	81	88	89	94	93	87	92	95	94	88	93	93	95	97	97	97	95	95	96	95	96	87	96	78	77	79	84	..	90.4
	Minimum	64	71	68	64	65	67	68	70	70	66	73	72	70	70	71	75	74	75	76	76	75	74	76	75	72	71	55	52	51	51	..	68.6
Doniphan	Maximum	92	91	93	91	94	91	97	90	94	90	90	94	97	99	98	98	101	98	93	95	95	99	98	97	97	76	75	78	78	83	..	92.1
	Minimum	60	57	59	60	59	61	65	67	57	69	68	64	70	72	70	68	70	70	71	72	70	73	69	68	65	49	45	43	43	42	..	62.5
Jackson	Maximum	82	80	76	79	84	88	90	86	88	91	86	81	86	88	91	90	92	90	89	84	86	91	88	80	87	68	65	68	71	76	..	83.4
	Minimum	67	64	52	60	56	60	66	62	55	56	65	67	65	67	70	67	70	70	67	70	68	69	65	63	62	50	46	38	38	39	..	60.5
Poplar Bluff	Maximum	89	82	81	90	92	92	96	90	92	94	87	88	94	94	95	93	96	97	92	92	92	95	95	85	94	72	76	76	77	83	..	89.0
	Minimum	69	66	58	60	61	60	65	68	59	65	69	68	61	69	70	67	67	69	70	68	66	70	69	69	64	50	43	44	44	42	..	62.3
Sikeston	Maximum	90	85	86	87	91	95	97	93	95	96	90	87	93	95	97	97	98	100	97	95	93	96	96	88	87	82	73	75	79	84	..	90.6
	Minimum	66	67	58	60	63	64	66	67	61	66	70	69	67	70	72	71	72	72	72	72	71	72	70	69	66	51	47	44	47	47	..	64.3
Cairo, Ill	Maximum	87	80	83	84	90	92	92	86	91	92	88	85	89	91	93	92	93	95	92	90	92	91	90	80	93	65	69	70	74	81	..	86.3
	Minimum	72	66	62	67	69	68	72	68	66	70	71	72	71	71	75	74	76	75	74	75	75	72	72	69	64	57	52	52	51	50	..	67.6
Ozark Plateau																																	
Arcadia	Maximum	84	80	78	86	90	93	94	88	89	90	86	84	90	93	95	94	96	91	90	92	91	90	86	78	84	71	71	73	74	82	..	86.1
	Minimum	70	64	51	63	54	65	65	64	54	61	61	65	63	67	72	68	69	68	66	71	71	69	63	63	61	50	44	37	36	36	..	60.4
Aurora	Maximum	80	81	83	86	92	94	88	89	90	88	82	86	90	90	92	92	94	90	89	88	86	87	92	83	80	71	71	73	74	78	..	85.3
	Minimum	69	64	63	67	65	70	68	69	67	67	65	63	70	78	73	71	73	73	73	72	69	67	72	65	70	48	43	48	49	50	..	65.4
Birchtree	Maximum	80	82	83	87	89	94	95	92	90	91	84	88	90	92	95	93	97	97	90	91	93	90	91	80	85	71	70	74	74	79	..	86.9
	Minimum	55	58	55	61	58	60	62	68	59	66	68	66	67	68	70	69	68	68	68	70	71	71	68	66	62	49	43	43	49	43	..	61.6
Eldon§§	Maximum	75	81	80	92	95	95	99	99	99	95	92	91	94	95	96	95	99	93	95	94	93	85	85	75	80	66	74	78	78	81	..	88.3
	Minimum	67	65	52	59	63	63	70	69	69	66	65	64	66	69	69	71	72	72	72	71	75	67	65	60	60	50	44	44	45	46	..	63.0
Farmington	Maximum	82	74	77	88	92	96	94	92	95	94	89	88	92	98	100	96	99	85	92	94	93	92	90	78	78	70	70	75	71	81	..	87.2
	Minimum	72	65	52	61	64	68	68	66	58	64	66	67	65	68	67	70	72	71	69	69	72	71	65	61	62	49	45	39	39	41	..	62.2
Koshkonong	Maximum	85	83	83	91	94	95	98	95	95	96	89	88	93	95	96	96	98	98	92	93	91	95	94	81	89	..	69	71	72	68	..	*89.1
	Minimum	70	67	60	65	65	67	67	70	64	69	71	67	68	70	72	70	72	72	76	71	70	72	70	65	66	..	48	49	48	50	..	*65.9
Lebanon	Maximum	81	80	81	88	92	95	95	94	95	93	91	89	90	92	93	93	96	96	91	91	91	87	88	79	79	74	73	78	78	81	..	87.5
	Minimum	69	64	71	63	60	67	66	65	65	65	64	62	65	68	65	67	70	67	69	68	70	65	65	54	66	45	38	40	51	47	..	62.0
Mountain Grove	Maximum	82	84	80	90	92	97	95	94	94	91	89	88	91	93	95	95	99	97	91	90	91	91	95	78	78	69	76	78	75	79	..	87.9
	Minimum	70	64	53	63	60	68	65	68	66	67	65	65	65	67	68	68	70	70	69	68	70	70	69	62	68	48	41	42	49	49	..	62.9
Neosho	Maximum	88	83	82	90	94	97	99	93	95	94	93	92	94	93	94	96	100	96	94	93	89	92	94	91	87	80	76	79	80	83	..	90.4
	Minimum	71	65	58	68	60	68	64	62	62	64	59	61	59	74	71	71	69	69	62	72	75	64	69	67	68	49	40	43	47	48	..	62.6
Rolla	Maximum	92	78	79	81	91	97	96	93	94	92	90	88	91	93	95	94	97	92	92	92	91	88	84	77	79	76	67	72	74	79	..	86.8
	Minimum	72	66	56	64	62	70	70	66	66	68	67	66	69	72	75	73	73	73	72	73	78	69	67	61	69	51	47	46	45	43	..	65.0
Springfield	Maximum	79	79	80	86	92	94	89	89	91	88	87	85	88	90	91	91	93	92	88	89	87	87	89	80	79	66	68	73	74	77	..	84.7
	Minimum	71	66	62	66	67	71	70	71	71	70	67	65	69	71	72	72	73	74	73	71	73	68	67	64	56	49	47	51	52	53	..	65.7
Southwest Plain																																	
Appleton City	Maximum	84	84	81	92	99	90	99	94	98	94	93	92	98	95	98	97	97	98	94	94	92	91	87	76	80	71	71	76	78	82	..	89.2
	Minimum	70	67	61	63	61	76	69	68	66	66	66	63	69	74	77	71	73	72	73	73	65	65	67	62	66	48	46	48	52	51	..	64.9
Clinton	Maximum	90	90	80	92	103	88	96	97	98	96	96	92	103	102	103	98	97	102	98	98	98	90	89	72	82	73	70	62	74	83	..	90.4
	Minimum	70	66	60	62	66	72	68	68	65	65	62	62	68	65	75	75	76	72	72	75	66	65	65	61	66	50	46	46	50	50	..	64.3
Harrisonville§§§	Maximum	85	85	79	96	104	92	100	92	100	95	95	95	100	97	102	100	96	99	97	98	81	91	82	78	79	74	75	76	80	80	..	90.1
	Minimum	68	67	61	61	62	67	69	69	67	68	67	64	66	73	74	70	70	73	72	73	66	63	64	62	60	46	48	50	52	54	..	64.2
Lamar	Maximum	89	86	89	94	99	98	100	97	102	97	98	95	98	97	98	98	102	102	96	97	96	92	95	91	85	75	76	83	85	85	..	93.2
	Minimum	72	68	63	63	64	72	68	68	68	66	66	66	72	76	77	71	73	73	74	74	68	67	72	67	69	49	43	48	53	50	..	66.0
Lamonte	Maximum	80	81	74	88	86	86	90	89	88	87	85	89	86	92	86	87	86	89	88	88	85	98	85	72	74	65	73	78	78	81	..	83.8
	Minimum	67	65	60	63	64	76	71	70	70	68	68	66	76	74	75	73	78	73	74	74	65	63	65	60	61	48	44	47	50	53	..	65.4
Marshall	Maximum	86	80	80	88	95	94	95	95	96	95	94	91	95	97	99	98	94	89	95	95	93	91	80	69	77	66	69	77	78	82	..	87.8
	Minimum	64	60	61	64	65	74	79	70	68	69	69	65	72	77	78	73	75	70	72	74	68	64	65	57	52	50	45	49	50	53	..	65.1
Nevada	Maximum	83	83	84	90	97	98	96	99	96	93	92	91	95	95	96	96	98	96	93	93	90	90	90	84	79	69	72	77	80	80	..	89.2
	Minimum	70	68	62	63	66	74	70	72	69	68	68	66	73	78	78	72	76	71	76	74	65	65	70	64	67	49	43	47	54	56	..	66.5
Warrensburg	Maximum	84	78	78	89	97	94	97	96	97	98	97	93	99	98	101	99	95	101	96	97	93	90	86	75	76	68	70	78	80	79	..	89.3
	Minimum	66	66	60	58	65	77	72	71	68	71	69	70	71	75	77	71	78	73	73	73	64	63	65	59	58	47	60	45	52	54	..	65.7
Warsaw	Maximum	87	83	81	91	95	91	95	95	96	93	90	93	96	99	98	99	97	95	95	95	91	88	78	80	69	74	78	79	84	..	..	89.3
	Minimum	72	66	59	63	63	72	69	67	67	68	66	64	69	72	77	72	74	74	74	74	74	77	66	67	62	70	49	47	47	50	52	65.6
Northwest Plateau																																	
Chillicothe	Maximum	93	87	85	84	93	98	101	96	98	98	97	96	95	99	90	99	99	89	88	97	99	82	75	78	72	75	69	73	78	80	..	88.8
	Minimum	65	63	57	58	62	68	67	67	65	65	65	61	70	73	70	71	71	63	65	72	65	59	62	54	52	48	41	46	48	49	..	61.4
Grant City	Maximum	82	82	81	89	96	97	95	91	93	93	91	90	97	87	84	95	87	84	95	91	74	79	74	67	68	66	71	72	76	73	..	84.0
	Minimum	65	60	59	62	65	72	68	68	67	69	68	63	71	70	69	73	68	68	60	68	73	63	61	58	49	56	47	46	49	51	58	..	62.5
Kansas City	Maximum	81	80	79	92	102	98	98	96	98	95	93	93	97	95	99	98	87	95	95	95	72	88	79	77	78	67	69	75	79	79	..	87.6
	Minimum	68	67	65	66	72	75	75	76	75	73	70	68	75	78	82	78	75	71	77	69	65	64	62	53	54	50	49	55	57	59	..	67.4
Kidder	Maximum	91	82	80	83	83	96	97	93	93	92	92	90	89	95	90	93	95	87	87	93	95	74	83	75	62	74	65	68	74	77	..	84.9
	Minimum	67	64	61	63	68	70	72	71	67	66	67	64	73	70	72	73	71	65	68	75	66	62	64	56	59	48	45	50	52	55	..	64.1
Lexington	Maximum	84	85	80	94	101	99	99	98	99	98	97	94	99	98	101	100	95	100	96	97	89	93	82	70	78	70	75	78	82	81	..	90.4
	Minimum	68	67	63	62	69	78	73	74	70	71	71	66	73	77	76	75	77	69	74	76	68	64	65	59	64	49	46	50	52	55	..	66.7
Maryville	Maximum	80	86	86	94	99	103	99	96	98	98	94	95	100	87	85	98	89	89	98	90	70	79	76	61	70	71	75	78	81	77	..	86.7
	Minimum	64	57	57	59	63	68	67	66	64	65	64	60	73	69	69	71	67	60	67	68	63	56	57	49	54	45	42	48	49	56	..	60.6
Oregon	Maximum	98	86	86	96	101	101	99	98	97	99	95	95	99	89	92	100	94	98	97	89	69	84	74	66	71	73	79	81	83	80	..	89.0
	Minimum	65	59	63	63	70	77	73	72	71	73	72	66	75	62	72	75	71	64	74	67	65	61	61	52	57	46	47	53	58	61	..	64.8
St. Joseph	Maximum	75	82	80	91	101	99	98	96	97	95	94	93	98	90	95	99	89	94	96	92	70	82	71	74	71	68	73	76	80	78	..	86.6
	Minimum	66	63	64	61	70	80	74	74	74	73	72	66	77	73	78	78	72	65	75	67	64	61	61	53	54	48	45	53	56	61	..	65.9
Trenton	Maximum	78	79	88	93	97	100	94	95	95	94	92	91	97	88	98	96	87	88	93	94	80	86	80	63	77	71	71	76	78	78	..	86.6
	Minimum	60	62	60	59	65	72	68	65	60	66	67	64	62	73	71	71	71	63	63	68	65	61	63	52	55	50	44	47	50	51	..	61.6

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 10-21-31—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., OCTOBER, 1931 NO. 10

GENERAL SUMMARY

October, 1931, was marked by mainly high temperatures for the season, few local but no general killing frost, and rainfall quite regularly distributed as to both times and places. For Missouri as a whole it was the mildest October since 1924, though over the northern half of the State it was the mildest October since 1900.

During the first week to ten days the daily temperature excess ranged from 5° to 15°. Afternoon values ranged in the 90s at some 23 stations on one or more days from the 4th to the 10th, with the fifth generally the warmest day; and all other stations experienced temperatures in the 80s. From about the 20th to the 27th was another excessively warm period. The first touch of autumn came on the 17th-18th, when minima dropped in the 40s, and at a few low-lying stations in the 30s. The 31st was about the only general all cool day.

The State was very well watered, soil moisture being ample for present needs, with stock and domestic water supplies fully replenished. The weather was, on the whole, favorable for outdoor work and for crops. Wheat seeding was completed with soil in fine condition. Pastures generally sustained livestock without much additional feeding. At the end of the month Missouri's agricultural outlook was quite satisfactory.

TEMPERATURE

The monthly mean temperature for the State, as based upon the records of 68 stations, was 61.7°, or 4.3° above normal, and the largest excess since 1924. The highest monthly mean was 68.8° at Caruthersville, and the lowest monthly mean was 58.7° at Kidder. The highest daily value reported was 95° at Dean, and Doniphan, on the 5th; and the lowest was 27° at Dean on the 31st. The greatest daily range was 51° at Marble Hill on the 2d. Minimum temperatures were 32° or lower at a few stations, mostly in the Ozark region, on the 18th, and 31st.

PRECIPITATION

The average precipitation, 119 stations reporting, was 3.45 inches, or about 0.56 inch more than the 60 years' average. The largest monthly amount was 6.82 inches at Dean, and the least monthly amount was 0.99 inch at Arcadia. The greatest amount in any 24 consecutive hours was 3 02 inches, at Conception on the 11th; two inches or more fell within a period of 24 hours or less at Bethany, Dean, Hailey, Lamar, and Warsaw.

MISCELLANEOUS PHENOMENA

Fog, dense.—1st, 2d, 3d, 11th, 13th, 14th, 18th, 24th, and 28th.

Frost, light.—17th, 18th, 19th, 20th, and 31st. Heavy.—18th. Killing few stations in low places 18th, and 31st.

Hail.—light without damage, 7th, 14th, and 26th. On the 6th, moderate hail some large stones fell at Bethany.

Halos, lunar.—21st, 22d, 26th, 27th, and 29th.

Halos, solar.—6th, 22d, 23d, 26th, and 27th.

Thunderstorms, moderate.—4th, 5th, 6th, 7th, 8th, 10th, 11th, 13th, 14th, 15th, 26th, and 27th.

Winds.—No high or damaging winds reported.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	30.05	84	59	71	191	55	4,798	6.4	20	w.	29
Hannibal	30.06	84	56	..	...	..	5,737	7.7	23	w.	28
Kansas City	30.05	78	59	61	213	62	6,286	8.4	30	w.	29
St. Joseph	30.03	83	58	66	191	55	5,553	7.5	37	w.	26
St. Louis	30.06	76	57	61	181	52	8,299	11.2	31	sw.	23
Springfield	30.06	78	58	63	196	56	6,718	9.0	30	w.	29
Cairo, Ill	30.08	83	53	60	...	..	4,636	6.2	25	sw.	27
Keokuk, Iowa	30.05	79	58	67	210	61	4,807	6.5	28	w.	27

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**57.4**	.....	**93**	**20**	**2.89**	.....	**3.63**	**0.2**	**6**	**17**	**6**	**8**
1888	53.6	− 3.8	89	24	2.65	−0.24	....	....	7	..	..	..
1889	53.8	− 3.6	91	27	2.50	−0.39	....	....	6	..	..	..
1890	54.8	− 2.6	91	22	2.24	−0.65	....	....	6	..	..	..
1891	55.7	− 1.7	98	19	1.11	−1.78	....	....	3	..	..	..
1892	57.5	+ 0.1	95	16	2.28	−0.61	2.40	0	5	16	7	8
1893	56.7	− 0.7	95	16	0.99	−1.90	2.81	....	10	20	8	3
1894	57.6	+ 0.2	94	18	1.74	−1.15	3.52	T.	6	17	8	6
1895	54.2	− 3.2	89	15	0.35	−2.54	1.20	T.	2	21	6	4
1896	54.1	− 3.3	90	19	2.48	−0.41	2.68	0	5	19	6	6
1897	62.5	+ 5.1	99	23	0.71	−2.18	1.70	0	3	22	6	3
1898	53.5	− 3.9	94	19	4.23	+1.34	4.51	1.4	8	11	7	13
1899	62.4	+ 5.0	100	24	2.93	+0.04	2.53	0	5	20	6	5
1900	62.4	+ 5.0	92	25	4.18	+1.29	4.04	0	7	17	7	7
1901	60.1	+ 2.7	96	24	1.64	−1.25	2.98	0	6	18	8	5
1902	59.5	+ 2.1	88	28	2.52	−0.37	2.69	0	5	21	5	5
1903	57.2	− 0.2	90	19	2.85	−0.04	3.80	0	6	19	6	6
1904	57.6	+ 0.2	90	19	0.90	−1.99	2.46	0	3	20	7	4
1905	55.1	− 2.3	90	20	4.64	+1.75	7.47	0.3	5	17	6	8
1906	56.3	− 1.1	94	17	0.87	−2.02	1.50	0	10	15	7	9
1907	56.7	− 0.7	94	18	2.90	+0.01	3.46	0	7	19	5	7
1908	56.3	− 1.1	92	21	2.74	−0.15	4.90	0.8	5	18	6	7
1909	57.2	− 0.2	96	20	2.77	−0.12	2.57	T.	6	19	5	7
1910	59.4	+ 2.0	94	15	2.71	−0.18	5.50	0	5	22	4	5
1911	56.9	− 0.5	96	25	3.30	+0 41	5.12	0.2	8	11	7	13
1912	59.1	+ 1.7	97	21	3.83	+0.94	5.12	0.7	6	20	5	6
1913	54.7	− 2.7	93	11	4.46	+1.57	2.80	3.3	9	15	6	10
1914	59.2	+ 1.8	88	19	4.54	+1.65	5.40	0	7	14	6	11
1915	59.3	+ 2.4	95	22	1.19	−1.70	1.97	0	3	23	5	3
1916	58.0	+ 0.6	95	20	2.17	−0.72	3.90	0	6	18	5	8
1917	49.8	− 7.6	93	12	1.16	−1.73	2.00	0.2	6	16	8	7
1918	60.6	+ 3.2	95	28	3.37	+0.48	5.61	0	7	14	6	11
1919	58.4	+ 1.0	98	17	6.74	+3.85	4.91	0	11	10	7	14
1920	61.3	+ 3.9	93	18	2.89	0.00	2.45	T	7	17	6	8
1921	57.9	+ 0.5	92	24	2.19	−0.70	2.32	0	5	21	5	5
1922	59.9	+ 2.5	97	18	2.00	−0.89	3.00	0	5	20	5	6
1923	53.0	− 4.4	89	17	3.39	+0.50	2.76	0.1	9	15	5	11
1924	61.8	+ 4.4	92	21	1.22	−1.67	2.73	0	4	22	5	4
1925	48.6	− 8.8	92	− 3	4.85	+1.96	3.12	2.4	10	8	8	15
1926	57.3	− 0.1	93	21	4.67	+1.78	3.85	0	9	14	6	11
1927	60.9	+ 3.5	93	26	4.72	+1.83	8.85	0	5	22	5	4
1928	60.9	+ 3.5	94	22	3.83	+0.94	5.23	0	8	15	8	8
1929	57.2	− 0.2	91	23	5.54	+2.65	3.30	T.	10	15	6	10
1930	55.3	− 2.1	92	11	3.06	+0.17	4.25	T.	6	16	6	9
1931	61.7	+ 4.3	95	27	3.45	+0.56	3.02	0	8	15	7	9
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for October, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	61.8	+ 6.6	90	5	40	17†	35	2.53	−0.39	0.93	0	13	17	4	10	sw.	O. K. Benecke
Clifton Hill	Randolph	731	32	58 7	+ 1.5	83	2	34	17	32	1.61	−0.95	0.59	0	12	16	5	10	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	62.0	+ 5.4	87	6	40	18	29	3.15	+0.54	1.45	0	10	12	9	10	s.	U. S. Weather Bureau
Downing	Schuyler	876	10	60.3	+ 4.4	86	4†	37	17†	30	4.34	+1.49	1.18	0	15	14	8	9	s.	James Taylor
Elsberry	Lincoln	449	0	60.4	.....	87	5	30	18	40	3.52	.....	1.98	0	8	11	10	10	s.	Ray E. Mills
Fayette	Howard	661	51	61.0	+ 4.3	92	5†	34	18	43	2.65	−0.03	1.16	0	12	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	58.8	+ 1.1	89	5†	33	18	38	3.50	+0.41	1.66	0	10	15	7	9	. ..	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	4.78	+1.98	1.54	0	12	14	5	12	sw.	J. W. Pulliam
Hannibal	Marion	534	39	61.4	+ 5.4	88	5	37	18	27	3.16	+0.77	0.75	0	10	12	5	14	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	61.0	+ 4.3	90	4†	36	17	38	5.06	+2.27	1.64	0	12	10	9	12	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	60.5	+ 5.8	87	5	37	28	29	5.22	+2.24	1.45	0	10	9	6	16	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	60.3	+ 4.0	88	6	30	18	37	3.08	+0.19	0.93	0	7	19	3	9	s.	Stark Bros. Nurseries
Macon	Macon	875	32	59.8	+ 3.0	89	5	33	22	44	4.07	+1.07	1.05	0	9	14	5	12	w.	W. C. Brown
Mexico	Audrain	800	42	60.4	+ 4.0	90	5	38	17	34	3.02	+0.35	0.95	0	9	17	4	10	s.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	3.77	+1.08	1.08	0	9	13	6	12	ne.	J. S. Conway
St. Charles	St. Charles	456	43	62.2	+ 4.1	89	5	33	30	35	3.77	+1.05	2.14	0	6	13	8	10	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	62.9	+ 4.1	87	4	42	29	26	2.90	+0.18	1.50	0	10	13	6	12	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	62.0	+ 3.1	86	4	41	29†	28	2.57	−0.78	1.11	0	11	14	5	12	se.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	.	5.56	+2.66	1.69	0	12	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	33	61.0	+ 3.3	89	5	34	28	33	5.61	+3.17	1.75	0	11	14	6	11	s.	Frank Hall
Unionville	Putnam	1,062	38	60.8	+ 5.4	89	5	36	17	32	4.64	+1.81	1.55	0	11	16	6	9	sw.	Geo. W. Davis
Warrenton	Warren	816	49	61.8	+ 6.2	88	5	40	17†	30	4.51	+1.51	1.87	0	9	14	6	11	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	60.4	+ 5.0	87	5	40	31	28	4.05	+1.79	0.91	0	13	12	8	11	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	61.0	+ 4.4	92	5†	30	18	44	3.80	+1.05	2.14	0	10	14	6	11	s.	
Southeast Lowlands																				
Campbell††	Dunklin	314	5	62.8	.....	92	5	32	19	48	1.83	.....	0.95	0	4	16	11	4	n.	Jeff. King
Caruthersville	Pemiscot	265	35	68.8	+ 7.1	94	12	41	22	35	1.35	−1.75	1.10	0	2	14	10	7	s.	Sam Smith
Doniphan	Ripley	344	27	63.4	+ 5.0	95	5	30	19	49	2.79	−0.33	1.18	0	5	16	7	8	e.	W. W. Martin
Jackson	Cape Girardeau	428	40	58.4	+ 0.4	82	7	29	18	37	2.04	--1.20	0.75	0	6	10	2	19	s.	John G. Putz
Marble Hill	Bollinger	470	36	63.4	+ 5.4	94	5	29	18†	51	3.76	+0.84	1.80	0	4	14	5	12	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	.	..	..	..	2.31	−1.21	0.86	0	7	16	7	8	s.	John A. Spence
Poplar Bluff	Butler	329	27	62.8	+ 2.5	89	1†	33	18†	45	2.18	−0.98	1.61	0	5	18	7	6	s.	J. H. Wolpers
Sikeston	Scott	318	30	65.4	+ 6.6	90	5†	36	31	44	2.05	−0.77	1.15	0	3	21	6	4	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	56	65.0	+ 4.6	86	7	42	31	29	2.66	−0.10	1.10	0	8	10	10	11	s.	U. S. Weather Bureau
Section means and	extremes	....	..	63.9	+ 4.5	95	5	29	18†	51	2.39	−0.69	1.80	0	5	15	7	9	s.	
Ozark Plateau																				
Arcadia	Iron	926	49	58.6	+ 2.5	87	5	28	18	46	0.99	−2.13	0.46	0	4	20	1	10	w.	Arcadia College
Aurora	Lawrence	1,370	39	62.4	+ 3.9	86	4†	34	31	30	3.99	+0.61	1.16	0	8	18	4	9	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	62.2	+ 4.0	88	7	34	18†	39	2.73	−0.26	1.63	0	7	16	5	10	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	63.6	.....	88	10	36	31	31	4.29	.....	1.40	0	9	23	8	0	s.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	4.19	.....	1.80	0	6	12	11	8	s.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	63.0	+ 3.1	95	5	27	31	40	6.82	+3.01	2.05	0	7	19	5	7	s.	H. E. Dean
Eldon	Miller	934	35	60.4[b]	+ 2.7	90	5	37	18†	37	4.13	+0.87	1.70	0	10	7	9	15	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	60.6	+ 4.2	86	3†	29	18	42	1.55	−1.39	0.39	0	8	14	8	9	sw.	Robert Forsyth
Goodland	Iron	1,000	37	60.5	+ 4.7	90	5†	29	18†	46	2.08	−1.31	0.52	0	8	15	6	10	n.	F. M. Adams
Greenville	Wayne	381	7	60.2	.....	91	5	28	18†	50	1.65	−1.22	0.55	0	5	19	6	6	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	6.71	+3.11	2.00	0	9	14	6	11	sw.	A. W. Madison
Koshkonong	Oregon	958	30	62.3[a]	+ 2.3	87	7	34	31	30	1.28	−1.91	0.63	0	5	17	3	11	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	61.3	+ 3.3	88	4	28	31	39	3.23	−0.10	0.90	0	6	20	4	7	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	63.0	+ 4.4	88	4†	35	31	33	4.76	+1.24	1.83	0	8	16	9	6	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	30	62.3	+ 4.7	87	5	31	31	29	3.02	−0.23	1.02	0	9	12	9	10	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	64.6	+ 5.4	91	4	32	31	37	4.43	+0.95	1.45	0	8	19	6	6	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	62.4	+ 6.5	89	5	37	18	30	3.21	+0.16	1.65	0	11	6	9	16	s.	F. H. Lane
Salem(near)	Dent	1,173	27	....	.....	..	..	..	..	..	3.61	−0.12	1.23	0	5	15	0	16	.....	A. C. Leech
Seligman	Barry	1,542	29	62.4[a]	+ 4.1	87	3†	30	31	33	6.36	+3.01	1.57	0	9	19	4	8	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,612	25	61.9	+ 4.4	86	5†	35	28	37	2.51	−0.79	1.02	0	4	18	2	11	s.	Ira H. Hailey
Springfield	Greene	1,324	43	62.6	+ 4.4	85	10	36	31	24	2.53	−0.52	1.13	0	10	14	7	10	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	61.9	+ 4.0	95	5	27	31	50	3.53	−0.16	2.05	0	7	16	6	9	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	63.2	+ 4.1	90	6†	37	31	31	2.72	+0.15	1.13	0	6	10	16	5	se.	W. G. Bigelow
Clinton	Henry	765	38	63.0	+ 4.4	90	5†	38	18†	35	4.13	+1.08	1.85	0	9	13	10	8	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	61.2	+ 5.2	91	10	37	31	40	3.10	+0.27	0.70	0	11	8	7	16	s.	John H. Patterson
Lamar	Barton	980	44	65.0	+ 6.1	94	5†	36	31	38	4.69	+1.53	2.40	0	7	13	10	8	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	62.3	+ 4.3	86	3†	37	28†	30	3.64	+0.96	1.00	0	8	19	6	6	se.	J. E. Wheeler
Marshall	Saline	779	43	62.7	+ 6 1	90	5†	39	17	33	1.66	−1.20	1.10	0	5	18	5	8	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	64.0	+ 6 7	90	6†	38	31	30	2.96	−0.03	1.54	0	6	17	4	10	s.	George A. Kaupp
Warrensburg	Johnson	878	44	61.8	+ 3.7	89	6†	36	31	29	3.82	+1.10	1.18	0	7	20	3	8	sw.	E. A. Markey
Warsaw	Benton	687	30	63.7	+ 4.6	89	5†	39	18†	37	5.26	+1.79	2.05	0	7	15	3	13	e.	Everett Martin
Section means and	extremes	.....	..	63.0	+ 5.0	94	5†	36	31	40	3.55	+0.63	2.40	0	7	15	7	9	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	59.6	+ 4.9	88	10	36	17†	30	4.54	+2.09	2.16	0	10	15	10	6	se.	A. S. Cumming
Chillicothe	Livingston	779	21	59.3	+ 1.1	93	9	35	18	48	3.99	+0.26	1.52	0	13	20	5	6	s.	Wm. J. Olenhouse
Conception	Nodaway	980	42	60.6	+ 5.1	89	10	37	28	34	5.33	+2.63	3.02	0	8	11	10	10	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	57.4[b]	+ 1.1	81	4	33	17	24	3.62	+0.97	1.10	0	9	18	3	10	s.	Fred L. Stiff
Grant City	Worth	1,134	27	59.0	+ 3.6	85	10	36	28	35	5.35	+2.53	1.91	0	11	11	16	4	s.	W. P. Spillman
Kansas City	Jackson	963	42	62.5	+ 4.8	89	10	38	30	27	3.02	+0.10	0.79	T.	9	12	9	10	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	58.7	+ 2.3	87	11	38	18†	36	2.15	−0.76	0.94	0	7	15	6	10	se.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	3.16	−1.78	1.87	0	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	61.9	+ 4.4	91	9	40	17†	41	3.28	+0.30	1.03	0	14	17	7	7	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	59.8	+ 6.5	89	4†	32	28	34	3.95	+1.14	1.45	0	10	13	11	7	s.	J. R. Brink
Oregon	Holt	1,048	75	62.3	+ 7.4	91	10	37	30	33	4.24	+1.59	1.51	0	9	17	9	5	se.	Mina Wright
St. Joseph	Buchanan	967	23	60.8	+ 4.2	90	10	37	17	28	1.92	−1.02	0.85	T.	9	13	10	8	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	28	59.1	+ 3.6	89	10	35	17†	39	2.83	+0.23	1.41	0	9	13	3	15	nw.	Albert Volker
Trenton	Grundy	822	35	60.6	+ 4.3	89	10	39	17†	40	4.16	+1.24	1.48	0	9	14	12	5	s.	W. H. Estes
Section means and	extremes	.....	..	60.5	+ 4.5	91	9†	32	28	44	3.63	+0.62	3.02	0	9	14	9	8	s.	
State means and	extremes	.....	..	61.7	+ 4.3	95	5	27	31	51	3.45	+0.56	3.02	0	8	15	7	9	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for October, 1931

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri				.01	.07	.03	.05				.60	.37	1.36	.06								T.	T.			.02	.12					2.69
Bowling Green	Mississippi								.15				1.30	.50	.63									.05				.08	.05		.07	.05	2.88
Brunswick	Grand		.06		.10		.10	.08				.63	.06	.93	.07									.15	.03		.04	.25			.03		2.53
Clifton Hill	Chariton	.02					.10	.02				.59	.22	.35										.06			.06	.05	.05	.04	.05		1.61
Columbia***	Missouri	T.			.04	T.		.29				.78	.73	.77									.01	.04			.46	.01	T.	.02	T.	T.	3.15
Downing	Mississippi	.01			.06		.03	1.18			.10	.75	.26	.65	.03								.12	.49			.43	.03		.12	.08		4.34
Edina	....do		T.				.42	1.00			T.	1.15		1.50	.50									.30	.10			.40			.12	.10	5.59
Elsberry	....do	T.						.26	.30			.58	.27	1.98	.04												.06	.03		T.	T.		3.52
Fayette	Missouri	.01			.03			.11				.52	.26	1.16	.09	.01							.02	.05			.34	T.				.05	2.65
Fulton	....do				T.		.22	.58				.50	.29	1.66	.09								T.	.03			.07	.02			.04		3.50
Gorin	Mississippi	.01					.12	1.54			.07	.09	.46	.97									.10	.36			.72			.16	.18	T.	4.78
Hannibal***	....do	T.			T.	T.		.51			T.	.73	.20	.55		T.							T.	.13			.65	.13		.09	.11	.06	3.16
Hermann	Missouri					.02		.50	.40			.15	.77	1.20	.75													T.			.11	T.	3.90
Jefferson City	....do	.08			.03			.45			.12	1.58	1.64	.74												.08		.09	.12	.10	.03		5.06
Kahoka	Mississippi					T.		.93				1.18		1.23	.23								T.	.40				.55			T.		4.52
Kirksville	....do						.30	1.20				1.45	.34	.82										.15			.32	.42		.12	.10		5.22
Knox City	....do																																
LaBelle	....do							1.00			1.28			.97									.14			.51	.15			.20		4.25
Laddonia	....do								.53			.20	.65	.83											T.			.17			.10		2.48
LaGrange	....do						.92				1.04		.72	.33									.32				.82	.16		.27	.32		4.90
Louisiana	....do							.80	.20			.65	.30	.93													.15			.05			3.08
Lucerne	Grand	.10		.05			.22	1.71				1.25		.40										.11	.05		.51	.17			.07		4.64
Macon	Chariton							.50				.90		1.05	.05								.15	.12			1.00	.20				.10	4.07
Memphis	Mississippi					T.		1.16			T.	.74		1.07	.03									.15	.10			.54			.15		3.94
Mexico	....do							.87				.68	.15	.95										.02	.03		.18	.06				.08	3.02
Milan	Grand				T.		.26	.62				1.78		.76	.23									.23	.38			.57		.07	.10		5.00
Monroe City	Mississippi	T.						1.08				.67	.19	.62									T.	.20			.80	.07		.08	.06		3.77
New London	....do							.57	.06				.76	.86	.05								T.		.14			.46	.09		.05	.07	3.11
Pacific	Meramec					.05		.25	.46	.04		.21	.10	.88	.22													.05	.10		.04		2.40
Palmyra	Mississippi											.90	.61	.19										.17			.65	.07			.30	.07	2.96
Paris	....do							1.20				.75	.10	.83													.25	.09			.04		3.26
Perry	....do							.65				1.00	.45	.76										T.			.09	.25			.10	.05	3.35
Philadelphia	....do						1.30				1.00	.10	.65	.35											.10		.10	.40	.30		.10	.15	4.55
Plevna	....do							1.48				1.14		.59	.14									.34			.45	.47			.10	.08	4.79
St. Charles	Missouri				T.		T	T	.71			.38	.27	2.14	.26									T.			.01	T.		T.		T	3.77
St. Louis (1)***	Mississippi				.01	.14	.02	1.06	.44			.29	.28	.60									T.	T.				.02		.04	T.	T.	2.90
St. Louis (2)*	....do				.12	.07	.08	1.11	.01			.24	.30	.56	T.								T.	T.				.02		.05	.01	T.	2.57
Shelbina	....do		.05				T.	1.69				.78	.02	1.21	.56								.05	.10			.65	.35			.07	.03	5.56
Steffenville	....do	T.					T.	1.75	T.			1.15	.25	.78	.05								.08	.25			1.00	.05		.10	.15		5.61
Troy	....do							.35	1.37				.54	1.83	.83																		4.92
Union	Meramec								.63	.06		T.	.40	1.25	.23									T.	.01			.04	.05		.04		2.71
Unionville	Chariton						.30	1.25				1.00	.20	.60	.04									.30			.60	.20		.10	.05	T.	4.64
Valley Park	Meramec					.05	.73		1.15	T.	.11	.04	.26	.74	.25									T.	T.		T.		.05		.10	.03	3.51
Warrenton	Mississippi						.85	.15	.54			.56	.20	1.87	.19									T.			.07	T.		T.	.08	T.	4.51
West Ely	....do							1.10			.66	T.	.71	.06									T.	.16			.71	T.		.08	.12	.07	3.67
Winfield	....do						.50	2.70						2.10	.55																		5.85
Keokuk, Ia.***	....do	T.			T.	.10		.86			.21	.71	.11	.80									.02	.42			.36	.22		.18	.02	.04	4.05
Southeast Lowlands																																	
Campbell	St. Francis							.01		.04					.95														.83				1.83
Cape Girardeau	Mississippi								.01	.08					1.03		.01								.15				1.01				2.29
Caruthersville	....do														.25														1.10				1.35
Dexter	St. Francis					T.			.02				T.	1.09	1.00										T.				.52				2.63
Doniphan	Black								1.00					.15	.04										.42			1.18	T.				2.79
Fisk	St. Francis									.06					.89	T.	T.								.22				1.12				2.29
Jackson	Mississippi						.02		.20					.75	.25										.21			.61					2.04
Marble Hill	....do								.12					1.70	.14													1.80					3.76
Morehouse	....do								.02				.28	.62	.43										.01			.86	.09				2.31
New Madrid	....do					T.				T.				1.10	.75										.20				.75				2.80
Parma	St. Francis												.27		.37														.90				1.54
Poplar Bluff	Black						.08		T.	.10					.24										.15				1.61				2.18
Sikeston	Mississippi												1.15											.05				.85				2.05
Cairo, Ill.***	.do					.12	.10		T.				.14	.49	.57	T.								.13				1.10			T.	.01	2.66
Ozark Plateau																																	
Arcadia	St. Francis								.20	.20				T.	.46									T.					.13				0.99
Aurora	Neosho							T.	.17	T.		.50	1.16	.94	.23								.30	.64				.05					3.99
Birchtree (near)	Black								.25					.28	1.63	.17		.07					.10					.23					2.73
Buffalo	Osage					.31		.15	.33			1.40	1.32	.38	.33									.03					.04					4.29
Caplinger Mills	....do		T.		.15	.35			T.			1.80	1.20	.62		T.							T.					.07					4.19
Chaonia	St. Francis								.09	.03			.04		.51		.08								.25				.38				1.38
Dean	Neosho							T.	.46			1.70	2.05	.75									.71	.82				.33					6.82
Eldon	Missouri		.03			.06			.12			.68	1.70	1.25	.09								.05					.07			.08		4.13
Farmington	St. Francis					.20	.03		.28			.08	.24	.30	.03	T.													.39					1.55
Fredericktown	....do						.02	.28	.04					.08	1.36										.17				.48					2.43
Galena	White								.92				2.00	.35	.54								.33	1.16				.27					5.57
Goodland	Black						.16		.48			.22	.45	.52	.05								.05					.15					2.08
Greenville	St. Francis					T.							.25	.15	.35										.35			.55					1.65
Hailey	White							.35		.23		1.00	2.00	1.00	.20								.51	1.11				.31					6.71
Koshkonong	Black								.10						.63	.15							.16	T.				.24					1.28
Lebanon	Osage								.90			.83		.90										.24				.16		.20			3.23
Leeper	Black									.09	.02				.61										.16				.69					1.57
Lockwood	Osage								T.	.23		1.83	1.27	.77	.08	T.							.42	.08				.08					4.76
Mountain Grove	White							T.	.02			.66	.54	1.02	.28	.11							.19	.01				.19			T.	T.	3.02
Neosho	Neosho								.16			.30	1.26	1.45	.05								.69	.27				.25					4.43
Owensville	Gasconade								.65				.55	.85	.27																		2.32
Ozark Beach	White								T.	.22			.22	.10	.92								.40	.30					.25				2.41
Rolla	Meramec								1.65	.03			.55	.41	.25	.01							T.		.03		.18	.02	.06			.02	3.21
Salem (near)	....do								1.23	T			.65	.25	1.03								T.	T.						.45			3.61
Seligman	Neosho								.10	.05		1.46	1.57	.77	.09								.47	1.40				.45					6.36
Seymour (near)	White							T.	T.	T.		1.02	T.	.51	.61	T.								T.				.37			T.		2.51
Springfield***	....do					T.		.02	T.	.03	T.	.72	.24	1.0	.09	T.						.01	.14	.21				.03		T.	T.		2.53
Steelville	Meramec								.87	.03			.32	.07	.67									T				.17	.23		T.		2.36
Stover	Missouri					.29	.07		.08			.20	1.28	1.04	.01																			2.97
Tuscumbia	Osage					.26		T.	.45	T.		.21	1.01	1.91	.45								T.	.03						.10	T.		4.42
Williamsville	Black								.02	.07					.34		.07								.35			.40	.01				1.26
Willow Sprgs. (near)	White								.01	.08			.14	.05	.83								.26		.04				.41				1.82

Continued on next page

Daily Precipitation for October, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																																
Appleton City	Osage	T.	T.		.12				.30			.79	1.13	.26										T.			T.	.12					2.72
Clinton	do				.52	1.85			.10			1.06	.40	.03										.02			.05	.10					4.13
Concordia‖	Missouri				.19		.05					.95	.15	.80																			2.14
Harrisonville‖	Osage	.01			.35		.45		.01			.63	.54	.70	.02								.02	.14				.23					3.10
Joplin‖	Neosho							.64	.16			1.97	.99	1.82							.20	.18	.12					.13					6.21
Lamar‖	do					T.			.55		.16	.21	2.40	1.10	.04								T.					.23					4.69
Lamonte	Missouri				.44	.65		.05				1.00	.70	.60										.02			.18						3.64
Marshall	do				.08			.21				1.10		T.													.24	.03		T.			1.66
Nevada	Osage				.05							1.54	.87	.38		.07						T.						.05					2.96
Osceola‖	do					.34			.54			.85	1.05	1.55	.03																		4.36
Warrensburg	Missouri	.12			.50	.48						1.00	1.18	.40														.14					3.82
Warsaw	Osage		T.		.20	.48			.25			1.43	.80	2.05														.05					5.26
Waverly ‖	Misouri				.15		.77	.17				.81	.16	.97	.15									.09				.11			T.		3.38
Northwest Plateau																																
Albany‖	Grand					.60	.76				.38		1.76																				3.50
Bethany	do					.11	.30	.80				2.16	.09	.50										.10			.34	.12		.02			4.54
Chillicothe ‖	do							.54		T.	.51			.08	.88	1.14									.05		.01						3.21
Conception	Missouri	.07				.57		.21			T.	3.02	.14	.35								T.					.88	.09		T.	T.		5.33
Edgerton	do	.36	.01		1.05	.28	.01						1.10	.50	.02								T.	T			T.	.29		T.			3.62
Gallatin ‖	Grand						.30					1.18		.83										.13				.50					2.94
Grant City	do	.08			.09	.31	.09	1.91			.09	1.91	.10	.45										T.			.20	.12		T.			5.35
Kansas City***	Missouri	.26			.63			T.				.79	.23	.56								.02	T.	.14			.11	.28	T.	T.	T.		3.02
Kidder	Grand	T.					.03					.94	T.	.65										.10			.03	.38			.02	T.	2.15
King City	Missouri				T.	.11	.12	.04				1.87	.07	.53									T.				.24	.18		T.			3.16
Lexington ‖	do	.07	.11		.22	.02	.08					1.03	.22	.83	.10	.02								.15	.03		.18	.22					3.28
Maryville	do	.07			.05		.47	.48			.01	1.45	T.	.42													.78	.20		.02	T.		3.95
Oregon	do	.02				.80					.02	1.51	.21	.70								.05					.86	.07		T.			4.24
St. Joseph***	do	.02		.01		.08	T.				.25	.60	.08	.29								T.	T.				.51	.08	T.	T.	T.		1.92
Tarkio	do	.21				.19	.10	.19				1.41	.10	.46													.09	.08					2.83
Tren on	Grand	T.			T.	.75					.01	1.48	.11	.78								T.		.19			.38	.41	T.	.05			4.16

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Temperatures for October, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	71	85	87	85	90	89	76	68	74	88	61	56	64	71	69	69	68	70	72	79	80	80	74	79	74	81	78	67	49	47	49	72.6
	Minimum	61	59	57	61	62	63	70	54	49	53	54	48	48	50	47	47	40	40	42	51	49	50	63	56	45	51	52	40	41	41	41	51.1
Columbia	Maximum	77	81	84	82	87	87	81	65	69	87	75	57	68	68	63	68	60	64	70	77	77	76	71	81	69	79	72	64	50	44	47	71.0
	Minimum	62	63	60	64	67	68	61	54	51	62	56	49	54	52	46	46	41	40	44	50	52	60	63	61	50	50	49	40	42	42	41	52.9
Fayette	Maximum	80	85	88	86	92	92	80	71	72	90	63	57	68	70	69	72	68	68	74	80	80	77	73	85	75	81	69	68	46	42	54	73.4
	Minimum	58	59	54	54	61	64	67	53	45	47	55	47	47	49	45	43	37	34	36	40	43	46	59	56	45	46	55	37	39	41	40	48.5
Hannibal	Maximum	70	80	84	84	88	87	77	67	69	86	75	53	67	68	60	67	59	64	70	78	77	75	68	79	68	70	71	63	49	45	47	69.8
	Minimum	62	62	62	68	66	70	60	55	50	62	52	49	53	55	50	48	41	37	44	53	50	57	64	61	47	48	50	42	43	42	42	53.1
Jefferson City §§	Maximum	79	85	86	90	90	89	62	71	87	68	60	78	74	69	70	65	67	72	79	80	77	73	83	74	82	66	67	46	45	55	55	72.4
	Minimum	59	58	60	65	66	67	55	49	51	62	49	49	52	47	47	40	36	39	41	45	46	49	59	52	50	45	42	41	40	39	40	49.7
Kirksville	Maximum	73	83	85	84	87	81	77	65	69	85	74	68	65	65	63	67	63	65	70	73	76	76	74	77	73	72	70	59	55	42	45	70.4
	Minimum	60	60	56	65	65	61	60	50	46	60	52	45	46	52	48	45	40	40	45	47	50	60	62	60	45	48	49	37	38	38	39	50.6
Louisiana	Maximum	75	80	85	87	87	88	75	72	80	85	77	60	65	70	67	65	69	65	70	74	72	70	75	77	70	65	70	66	52	45	45	71.1
	Minimum	53	55	54	60	63	65	66	53	44	56	45	50	50	53	48	50	45	30	33	45	40	48	56	60	56	40	55	37	43	41	40	49.5
Macon§§	Maximum	73	82	87	85	89	88	74	67	72	87	62	56	65	67	64	69	64	67	71	77	78	77	72	78	72	75	63	62	44	43	45	70.2
	Minimum	49	59	63	63	63	63	62	51	47	53	52	46	47	50	47	44	38	40	45	50	48	33	59	58	45	47	48	38	41	39	40	49.3
Mexico §§	Maximum	81	80	86	86	90	89	81	65	70	82	64	58	66	70	62	67	63	65	71	77	77	75	70	80	68	77	64	65	45	45	48	70.5
	Minimum	58	59	56	62	64	66	68	53	47	48	54	46	47	50	47	46	38	39	43	47	48	53	60	59	45	48	51	40	41	39	39	50.4
St. Louis(1)	Maximum	80	77	85	87	83	84	85	64	70	85	75	54	67	72	63	67	60	65	70	77	77	70	73	81	70	74	71	65	52	48	49	71.0
	Minimum	60	64	61	65	69	68	64	58	52	59	54	51	54	59	54	51	46	47	45	51	54	54	61	63	56	53	52	47	42	42	43	54.8
Unionville	Maximum	74	80	85	87	89	84	80	70	70	88	80	68	64	66	64	65	66	68	70	80	78	75	75	80	74	73	70	60	57	46	48	72.1
	Minimum	52	58	56	62	60	60	60	50	45	56	50	45	46	53	46	46	36	38	45	53	50	55	56	55	42	48	47	40	43	40	40	49.5
Warrenton	Maximum	77	76	85	86	88	84	80	75	71	85	81	59	67	69	65	64	59	64	70	76	77	76	72	78	73	75	73	65	60	45	49	71.7
	Minimum	58	59	55	63	68	66	65	55	49	58	56	47	51	54	47	49	40	40	41	47	50	53	62	60	50	50	56	43	41	40	40	52.0
Southeast Lowlands																																	
Campbell	Maximum	83	85	90	90	92	86	91	71	65	79	90	84	85	81	73	75	66	69	76	76	79	80	84	85	79	81	79	72	60	55	50	77.8
	Minimum	42	44	42	54	60	61	63	60	54	53	63	56	53	58	49	43	40	34	32	34	36	38	54	63	55	40	48	41	41	39	34	47.9
Caruthersville	Maximum	86	85	87	87	88	90	86	90	81	77	88	94	86	86	80	73	74	69	70	75	80	81	80	80	86	79	86	80	71	63	57	80.5
	Minimum	52	55	56	62	65	69	70	70	66	61	69	69	64	65	65	56	47	49	43	43	48	41	52	61	67	58	51	58	50	43	42	57.0
Doniphan	Maximum	85	88	89	90	95	90	90	90	72	88	85	78	75	80	73	75	68	69	76	82	82	79	78	86	79	85	76	73	61	52	52	78.7
	Minimum	40	43	46	55	63	56	65	63	57	64	65	51	51	60	50	48	37	31	30	33	35	42	52	63	49	44	54	39	35	36	34	48.1
Jackson	Maximum	77	79	80	79	81	78	82	79	68	80	76	67	70	69	66	64	59	61	64	70	72	72	72	73	69	70	67	63	57	48	47	69.6
	Minimum	41	42	47	52	61	61	63	59	50	51	63	51	55	60	50	39	40	29	31	33	36	40	56	59	53	38	50	35	39	39	37	47.1
Poplar Bluff §§	Maximum	89	81	87	89	82	88	72	74	89	87	73	79	82	74	75	70	68	74	80	80	77	76	84	80	82	73	72	68	50	52	64	76.5
	Minimum	44	46	51	55	63	65	62	64	57	55	64	57	58	57	51	43	41	33	34	35	37	42	53	57	49	42	52	38	39	42	33	49.0
Sikeston	Maximum	85	87	87	88	90	85	90	84	78	88	86	75	85	79	76	73	64	67	72	84	78	84	80	84	77	81	78	70	64	55	50	78.2
	Minimum	49	50	55	60	65	65	67	64	59	55	67	66	59	64	52	44	42	39	38	40	43	45	58	64	55	44	55	44	41	41	36	52.5
Cairo, Ill	Maximum	81	83	83	85	86	82	86	73	72	84	83	70	83	76	67	70	61	63	70	76	78	77	78	80	74	79	76	68	58	50	50	74.3
	Minimum	58	59	61	66	69	69	70	61	58	58	65	57	60	63	54	49	47	42	43	50	52	54	63	65	56	50	51	44	45	42	42	55.6
Ozark Plateau																																	
Arcadia §§	Maximum	82	78	83	83	87	81	86	62	69	84	73	59	65	76	66	68	62	65	72	77	76	70	73	83	73	75	66	69	50	46	47	71.2
	Minimum	36	46	44	50	63	60	64	59	48	51	58	49	50	56	49	38	38	28	30	33	37	41	54	58	52	38	47	36	36	40	37	46.0
Aurora	Maximum	77	80	82	86	84	85	82	72	73	86	81	66	73	73	67	67	61	64	70	75	77	72	73	78	73	79	72	64	55	46	43	72.1
	Minimum	54	55	54	61	63	65	64	57	57	62	61	56	61	60	52	48	39	41	41	45	50	57	61	57	53	56	53	42	42	37	34	52.8
Birchtree	Maximum	80	79	82	86	87	81	88	75	67	86	76	68	69	67	69	69	64	65	71	77	77	72	78	81	78	81	75	68	60	48	48	73.3
	Minimum	47	50	53	59	63	65	63	63	57	58	63	55	60	60	55	42	42	34	35	38	41	48	60	62	55	49	54	46	34	39	34	51.1
Eldon§§	Maximum	81	82	85	89	90	81	88	65	67	88	55	62	71	76	66	70	65	69	74	59	80	..	..	83	73	82	67	66	43	41	52	[b]71.4
	Minimum	47	58	54	53	66	66	65	65	52	52	55	50	50	55	49	48	40	37	37	37	44	46	..	..	49	49	55	43	42	40	40	[b]49.5
Farmington	Maximum	83	84	86	86	84	83	85	78	72	84	76	59	68	76	66	60	59	67	73	80	78	70	76	83	73	81	66	69	57	46	47	72.7
	Minimum	46	51	49	56	61	62	66	57	48	54	59	49	52	56	49	43	38	29	31	43	40	49	59	58	52	42	53	37	38	39	37	48.5
Koshkonong	Maximum	79	80	81	..	82	85	87	79	67	86	79	69	69	74	66	69	62	62	69	74	76	73	70	79	75	81	74	67	57	48	49	[a]72.3
	Minimum	54	56	57	..	58	59	58	64	58	58	66	58	56	61	53	48	44	40	41	45	47	54	59	59	57	51	53	41	41	39	34	[a]52.3
Lebanon	Maximum	77	84	85	88	87	86	82	76	67	85	75	59	72	74	65	66	63	77	72	78	78	77	70	81	75	80	73	65	54	45	47	73.0
	Minimum	55	55	53	61	62	64	64	54	52	57	54	50	57	57	46	42	36	37	38	38	44	47	57	52	56	49	53	49	38	36	35	28	49.6
Mountain Grove	Maximum	80	81	83	86	87	83	85	77	68	86	78	64	71	78	70	70	66	64	69	76	76	74	72	80	78	79	71	65	56	44	46	73.0
	Minimum	55	56	56	60	63	65	64	57	56	58	62	55	57	56	49	43	38	40	42	47	49	53	61	58	52	51	51	39	39	36	31	51.6
Neosho	Maximum	83	84	86	91	90	87	87	87	79	88	86	71	75	79	76	70	72	73	75	77	78	76	76	83	80	80	80	69	63	48	48	77.3
	Minimum	52	53	53	59	63	65	68	58	59	63	63	57	63	59	52	42	36	37	38	44	47	58	61	58	48	59	54	34	40	36	32	52.0
Rolla	Maximum	75	79	84	85	89	87	83	80	66	85	80	58	68	70	67	65	62	63	70	76	72	74	72	79	74	77	76	64	59	45	45	71.9
	Minimum	55	56	68	73	68	67	73	56	52	60	57	50	54	58	50	45	43	37	40	48	43	60	64	59	53	49	50	40	38	39	38	53.0
Springfield	Maximum	73	79	82	85	84	84	82	65	66	85	73	63	73	74	66	66	61	63	68	74	77	72	71	80	75	80	70	64	48	43	45	70.7
	Minimum	59	61	60	64	66	67	65	57	58	61	56	57	61	57	53	50	43	43	45	51	55	57	61	58	57	58	50	43	40	38	36	54.4
Southwest Plain																																	
Appleton City	Maximum	81	84	86	87	88	90	83	67	69	90	81	63	73	68	69	71	63	70	72	79	77	75	74	84	74	82	76	65	58	45	47	73.9
	Minimum	61	59	56	62	63	65	66	54	56	61	53	51	61	49	49	48	41	41	42	48	49	58	62	54	49	57	51	49	40	40	37	52.6
Clinton	Maximum	84	85	88	82	90	90	82	67	64	90	80	60	72	72	62	73	70	70	75	74	75	71	73	75	75	78	72	58	58	46	45	72.8
	Minimum	60	60	60	64	62	66	68	53	54	60	54	50	60	56	48	46	45	38	40	48	52	58	62	58	50	55	52	45	42	41	38	53.1
Harrisonville§§	Maximum	73	85	88	88	89	88	75	69	70	91	57	58	73	69	71	74	64	70	74	80	74	72	76	88	72	83	67	67	46	48	49	72.4
	Minimum	54	59	58	57	63	64	66	54	50	51	55	49	49	50	46	45	39	41	42	42	49	51	57	55	48	51	49	39	39	39	37	49.9
Lamar§§	Maximum	82	90	90	92	94	94	88	63	75	91	68	73	74	79	71	73	69	74	75	80	80	80	76	85	82	86	70	69	54	46	49	76.5
	Minimum	60	58	60	60	68	68	69	56	56	61	63	56	60	54	54	47	42	43	42	42	48	56	60	57	53	54	55	40	40	41	36	53.5
Lamonte	Maximum	77	84	86	86	86	85	79	69	67	86	75	58	70	65	66	65	65	69	74	81	80	75	77	83	73	83	71	65	56	44	48	72.5
	Minimum	60	61	60	63	65	67	64	54	50	60	54	49	56	49	46	46	39	41	44	51	53	60	63	57	46	53	50	37	40	40	37	52.1
Marshall	Maximum	77	85	82	84	90	88	76	66	69	90	85	76	69	67	66	69	70	71	73	78	78	79	76	81	81	82	67	63	56	53	50	74.1
	Minimum	62	60	62	63	63	65	64	53	48	60	53	51	49	47	46	42	39	40	40	51	50	50	62	57	52	50	51	40	41	40	40	51.3
Nevada	Maximum	82	84	86	88	89	90	86	67	70	90	79	67	72	75	69	69	62	69	72	77	77	78	75	81	76	82	76	65	59	46	46	74.3
	Minimum	52	56	60	65	67	67	66	55	59	65	54	55	58	53	51	45	40	49	42	50	52	60	65	58	50	60	52	40	40	41	38	53.7
Warrensburg	Maximum	78	83	86	85	87	89	80	67	68	89	80	58	69	64	67	68	62	68	72	78	71	73	75	81	71	82	76	63	55	45	48	72.2
	Minimum	59	61	60	61	63	62	61	53	48	60	51	48	56	47	45	46	40	41	45	51	52	58	61	57	47	55	49	39	40	39	36	51.3
Warsaw	Maximum	83	82	86	88	89	89	86	69	66	89	83	60	73	73	68	69	68	70	75	79	81	77	74	83	76	82	79	67	62	48	49	74.9
	Minimum	58	59	59	64	65	66	67	55	55	60	55	51	59	53	49	45	40	39	41	42	47	60	63	57	49	55	53	40	42	40	39	52.5
Nrthwest Plateau																																	
Chillicothe §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Grant City	Maximum	70	79	81	83	79	81	77	69	68	85	72	56	57	62	65	63	62	64	68	72	72	68	73	77	71	78	74	58	52	43	48	68.6
	Minimum	59	57	59	63	57	61	59	48	47	50	47	47	46	50	46	47	39	40	45	53	52	53	60	51	47	44	52	36	38	38	39	49.4
Kansas City	Maximum	71	83	86	86	83	88	76	65	68	89	77	56	64	65	67	68	62	69	74	79	72	71	74	82	72	82	74	62	49	43	47	71.1
	Minimum	61	64	64	65	67	67	59	52	51	62	50	49	52	51	50	50	45	46	48	56	55	59	62	60	53	57	51	45	41	38	40	53.9
Kidder	Maximum	77	69	81	73	83	85	85	69	66	71	87	58	52	59	65	64	66	63	66	70	76	73	70	73	77	67	80	60	59	43	44	68.7
	Minimum	55	58	57	57	61	65	65	48	43	47	51	47	47	51	44	45	39	38	39	45	48	49	57	54	47	51	48	38	38	39	38	48.7
Lexington§§	Maximum	86	88	88	88	90	74	74	72	91	71	57	65	70	68	72	67	70	75	81	76	75	77	84	77	82	65	65	45	44	49	57	72.4
	Minimum	62	62	61	64	64	66	62	53	50	51	54	48	48	48	46	46	40	41	45	46	51	52	60	59	48	53	50	41	41	40	40	51.4
Maryville	Maximum	73	84	85	89	79	88	88	67	72	89	81	56	59	67	69	69	67	70	73	80	69	71	76	79	70	79	75	60	52	44	51	72.0
	Minimum	57	53	56	58	58	61	58	45	46	58	47	45	46	48	45	43	35	38	43	53	48	57	58	48	38	49	44	32	37	36	36	47.6
Oregon	Maximum	77	86	86	83	90	89	81	72	70	91	84	55	60	71	69	67	69	71	75	81	69	71	77	82	76	82	76	63	53	44	52	73.3
	Minimum	61	58	63	61	60	65	60	47	50	61	51	49	50	50	47	42	38	40	49	56	55	59	61	57	46	53	47	37	38	40	37	51.3
St. Joseph	Maximum	72	83	86	87	82	87	77	68	70	90	66	55	60	66	66	66	64	68	72	79	71	67	75	79	70	81	62	61	45	44	48	69.9
	Minimum	61	58	63	66	60	67	55	48	48	62	51	48	50	48	47	47	37	43	50	57	55	60	61	55	46	54	47	41	40	38	39	51.7
Trenton	Maximum	75	83	84	86	86	84	80	71	70	89	80	69	60	66	68	67	65	67	71	79	76	74	76	78	68	77	65	62	58	48	47	71.9
	Minimum	58	62	56	66	60	63	63	50	45	49	45	44	44	49	45	45	39	45	43	49	48	50	55	57	43	52	49	40	39	39	40	49.4

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., NOVEMBER, 1931 NO. 11

GENERAL SUMMARY

Over all the State of Missouri, November, 1931, was characterized by abnormally warm weather up to about the 24th, and general and heavy precipitation the last two decades. It was next to the warmest November of record extending back to 1888, and the wettest November since 1857.

By sections the monthly means averaged 8° higher than normal over the northeastern plain, southeastern lowlands, and most of the Ozark Plateau, 7° higher in the southwestern lowlands and about 6° over the northwestern plateau. From about the 7th to the 23d the daily plus departures ranged from 9° to as much as 25°.

At thirty stations, out of 68 stations, the first killing frost of the season occurred on the 6th, while at St. Louis and Springfield, and extreme southern stations not until the 25th, giving one of the longest growing seasons of record. Generally during the first 25 days moderate freezing occurred two to four mornings, and for the whole month temperatures were 32° or lower on only 7 days, as a state average.

Nearly all of the month's precipitation occurred during the last two decades. Some northern stations had rain nearly every day from about the 10th to the 25th. Precipitation was excessive in all counties, but the totals were unusually large—two to three times the normal—in the drainage basins of the Chariton and Grand Rivers of the north and these rivers with their small tributaries reached high flood stages, inundating the lowlands and the valleys with the usual damage and loss.

The first snow fell on Thanksgiving Day, being the first appearance of winter in northern and central parts of Missouri. There was little or no snow along the southern border from west to east. For the remainder of the State the total snowfall averaged about 1.4 inches, which is about three times the normal; however, all of it melted rapidly.

Up to about the tenth the weather rather favored outdoor occupations; but the last two weeks were too wet for field work, such as husking and cribbing corn. Winter wheat made fine growth and was fit for pasturing but the fields were, as a rule, too wet for turning on livestock. At the close of the month the ground was wet to a greater depth and the streams maintained at higher levels than at any time perhaps during the past twenty months.

TEMPERATURE

The monthly mean temperature for the State, 67 stations reporting, was 52.2°, or 7.8° warmer than normal, 6.4° warmer than the same month of 1930, and the fourth November since 1888 having a mean of 50° and higher. The excess of temperature was marked in all divisions. The highest local mean was 58.1°, at Caruthersville, Pemiscot County; and lowest was 45.0°, at Tarkio, Atchison County. The highest temperature recorded was 87° at Jefferson City on the 8th; and the lowest was 17° at Maryville on the 25th. Minimum values of 32° or lower on 5 to 9 days.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 5.46 inches, or 3.06 inches more than the 60 years' average, 2.53 inches wetter than last November, and also the outstanding wettest November of record. The greatest local monthly amount was 9.72 inches, at Kidder, Caldwell County; and the least was 3.42 inches, at Shelbina, Shelby County. The greatest fall in any twenty-four consecutive hours was 3.34 inches, at Poplar Bluff on the 20th.

The snowfall, quite general except over the southeastern lowlands and along the immediate southern border, averaged 1.4 inches, about three times the normal.

(Continued on Page 54)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.08	82	62	65	145	48	5,224	7.3	31	sw.	20
Hannibal	30.09	81	62	..	...	..	6,093	8.5	31	sw.	20
Kansas City	30.07	81	67	68	137	44	5,376	7.5	39	sw.	23
St. Joseph	30.05	86	68	75	139	47	5,221	7.3	30	nw.	9
St. Louis	30.10	80	61	64	140	46	8,472	11.8	44	sw.	14
Springfield	30.08	80	59	67	146	51	7,081	9.8	30	sw.	20
Cairo, Ill.	30.14	79	62	67	...	..	5,385	7.5	25	sw.	17
Keokuk, Iowa	30.10	81	62	67	132	44	5,015	7.0	27	s.	20

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**44.4**	.....	**83**	**6**	**2.40**	.....	**3.00**	**0.8**	**6**	**14**	**7**	**9**
1888	41 6	− 2.8	87	15	3.26	+0.86	....	....	11	..	..	..
1889	39.9	− 4.5	73	8	3.43	+1.03	....	....	7	..	..	..
1890	46 5	+ 2.1	80	20	2.31	−0.09	....	....	5	..	..	..
1891	39.6	− 4.8	82	− 2	3.60	+1.20	....	....	5	..	..	..
1892	40.1	− 4.3	79	9	2.60	+0.20	....	1.0	6	11	7	12
1893	40.9	− 3.5	79	− 1	1.59	−0.81	4.86	0.3	4	14	9	7
1894	41.0	− 3.4	80	3	1.58	−0.82	2.20	T.	4	15	9	6
1895	41.6	− 2.8	82	2	3.37	+0.97	2.98	3.2	8	10	7	13
1896	42.3	− 2.1	82	5	2.18	−0.22	4.00	0.2	6	11	7	12
1897	43.4	− 1.0	82	− 3	2.40	0.00	3.39	T.	6	13	8	9
1898	39.9	− 4.5	79	− 8	2.28	−0.12	2.75	2.3	6	14	8	8
1899	49.5	+ 5.1	82	16	1.90	−0.50	2.66	0.2	7	11	9	10
1900	43.7	− 0.7	84	7	2.58	+0.18	4.55	0.2	6	15	7	8
1901	43.6	− 0.8	84	9	1.38	−1.02	1.90	0.3	4	17	7	6
1902	50.1	+ 5.7	85	18	3.52	+1.12	2.14	0.4	9	8	9	13
1903	40.9	− 3.5	79	2	1.24	−1.16	2.44	1.1	5	13	8	9
1904	46.3	+ 1.9	83	11	0.22	−2.18	0.68	T.	2	21	5	4
1905	45.8	+ 1.4	83	2	1.94	−0.46	2.49	T.	6	18	6	6
1906	42.5	− 1.9	88	− 3	2.60	+0.20	3.60	5.0	8	12	6	12
1907	43.8	− 0.6	88	5	2.52	+0.12	3.00	T.	4	19	4	7
1908	47.6	+ 3.2	87	9	4.14	+1.74	4.00	0.2	8	15	7	8
1909	53.6	+ 9.2	87	11	4.43	+2.03	6.18	0.4	8	12	7	11
1910	42.0	− 2.4	83	11	0 38	−2.02	0.70	0.1	3	15	8	7
1911	39.1	− 5.3	93	− 3	2.55	+0.15	2.15	1.1	7	13	6	11
1912	45.9	+ 1.5	88	12	1.52	−0.88	2.37	0.1	3	20	5	5
1913	51.7	+ 7.3	80	11	2.73	+0.33	2.50	T.	7	10	8	12
1914	48.6	+ 4.2	89	2	0.65	−1.75	1.90	0.1	3	19	6	5
1915	49.5	+ 5.1	87	12	2.76	+0.36	2.62	0.1	5	16	7	7
1916	49.6	+ 5.2	85	3	2.49	+0.09	2.53	0.1	4	19	4	7
1917	46.1	+ 1.7	80	8	1.05	−1.35	3.26	T.	3	14	5	11
1918	44.9	+ 0.5	85	12	3.18	+0.78	4.60	1.2	6	15	4	11
1919	42.2	− 2.2	78	2	3.62	+1.22	3.36	1.0	6	15	5	10
1920	40.9	− 3.5	82	6	1 21	−1.19	1.89	T.	6	12	6	12
1921	45.6	+ 1.2	84	10	2.82	+0.42	4.29	0.4	5	13	7	10
1922	47.8	+ 3.4	84	15	3 82	+1.42	3.40	T.	7	16	6	8
1923	45.1	+ 0.7	79	14	2.15	−0.25	2.30	3.0	6	15	6	9
1924	46.7	+ 2.3	88	4	1.72	−0.68	1.68	0.5	4	15	8	7
1925	42.8	− 1.6	80	− 2	2.99	+0.59	3.20	2.0	6	16	6	8
1926	39.6	− 4.8	78	0	2.98	+0.58	2.25	4.2	7	11	7	12
1927	46.8	+ 2.4	89	12	3.55	+1.15	3.41	0.9	7	6	9	15
1928	44.6	+ 0.2	79	9	5.10	+2.70	6.52	0.5	10	13	4	13
1929	39.0	− 5.4	78	− 8	1.46	−0.94	2.45	2.1	6	11	8	11
1930	45.8	+ 1.4	83	8	2.93	+0.53	2.70	T.	5	18	5	7
1931	52.2	+ 7.8	87	17	5.46	+3.06	3.34	1.4	11	10	5	15
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for November, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	50.6	+ 9.1	81	8	25	25	44	7.00	+4.96	1.65	1.0	16	17	0	13	sw.	O. K. Benecke
Clifton Hill	Randolph	731	32	51.8	+ 8.0	77	16†	20	6†	50	3.54	+1.40	0.96	4.0	15	9	2	19	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	52.8	+ 9.5	80	8	26	25	31	3.94	+1.74	1.44	2.9	12	9	6	15	s.	U. S. Weather Bureau
Downing	Schuyler	876	10	48.6	+ 7.0	77	8†	20	25	37	6.13	+4.27	0.96	1.0	13	10	6	14	se.	James Taylor
Elsberry	Lincoln	449	0	53.0[b]	.....	81	8	20	6	43	4.19	.....	0.90	4.4	9	10	13	7	s.	Ray E. Mills
Fayette	Howard	661	51	51.6	+ 9.3	81	8	22	6	38	4.77	+2.64	1.52	3.0	15	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	50.8	+ 6.3	78	8	23	6	35	4.40	+2.04	0 99	3.1	13	11	8	11	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	5.86	+3.87	1.58	0.8	9	9	5	16	se.	J. W. Pulliam
Hannibal	Marion	534	39	52.6	+10.5	80	8	26	25	31	4.29	+2.23	2.45	3.0	12	8	6	16	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	53.2	+ 9.1	87	8†	24	24†	46	4.95	+2.58	1.26	1.0	13	12	15	3	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	49.2	+ 8.7	77	8	21	25	37	6.19	+4.28	1.45	0.8	9	9	3	18	s.	Prof. J S. Stokes
Louisiana	Pike	469	37	53.2	+ 9.0	80	14	20	6	40	3.74	+1.32	0.80	3.0	10	13	6	10	w.	Stark Bros. Nurseries
Macon	Macon	875	32	49.8	+ 6.4	79	8	24	26	34	4.89	+2.79	1.25	1.8	12	11	5	14	sw.	W. C. Brown
Mexico	Audrain	800	42	50.0	+ 7.0	78	8	23	6	42	5.36	+2.98	1.75	2.0	11	15	1	14	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	3.48	+1 35	1.42	1.0	9	9	6	15	ne.	J. S. Conway
St. Charles	St. Charles	456	43	54.0	+ 8.5	83	8	25	25	40	3 62	+1.10	1.00	1.0	9	9	5	16	sw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	54.8	+ 9.4	82	8	30	25	35	4.65	+1.82	1.33	0.3	13	11	7	12	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	54.2	+ 7.7	81	8	28	25	35	4.21	+1.59	1.47	1.0	12	12	4	14	se.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	3.42	+1.23	0.84	1.5	14	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	33	50.3	+ 6.5	80	8	20	4	43	3.73	+1.62	0.90	2.0	13	12	2	16	s.	Frank Hall
Unionville	Putnam	1,062	38	48.2	+ 8.0	80	8	20	25	33	8.18	+6.22	1.75	3.0	13	9	2	19	s.	Geo. W. Davis
Warrenton	Warren	816	49	53.8	+10.9	81	8	24	25	35	3.99	+1.30	1.05	6.0	10	8	8	14	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	51.0	+ 9.9	78	8	23	25	35	3.85	+1.91	1.55	1.0	13	11	3	16	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	51.7	+ 8.5	87	8†	20	4†	50	4.71	+2 51	2.45	2.1	12	11	5	14	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	55.1	.....	80	3†	25	6†	46	6.26	.....	2.00	0	11	11	4	15	n.	Jeff. King
Caruthersville	Pemiscot	265	35	58.1	+ 8.2	81	14	35	26	32	7.27	+3.31	1.95	0	8	7	7	16	n.	Sam Smith
Doniphan	Ripley	344	27	56.0	+ 8.4	82	3	25	6	48	5.70	+2.58	2.75	0	8	12	5	8	sw.	W. W. Martin
Jackson	Cape Girardeau	428	40	50.7	+ 4.0	73	16	24	6	35	5.48	+2.05	2.04	0	9	4	3	23	s.	John G. Putz
Marble Hill	Bollinger	470	36	55.3	+10.9	81	16	25	5	45	6.37	+2.74	2.18	0	11	6	1	23	w.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	7.47	+3.40	3.23	0	10	11	7	12	sw.	John A. Spence
Poplar Bluff	Butler	329	27	55 0	+ 7.6	80	8†	28	6	51	6.09	+2.47	3.34	0	9	12	4	14	sw.	J. H. Wolpers
Sikeston	Scott.	318	30	56.9	+ 9.5	79	8†	29	6	42	5.65	+1.91	1.95	0	9	11	9	10	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	56	56.6	+ 9.3	78	16	32	25	28	5.35	+1.67	2.08	0	10	9	5	16	s.	U. S. Weather Bureau
Section means and	extremes	....	..	55.5	+ 8.3	82	3	24	6	51	6.18	+2.52	3.34	0	9	9	5	16	sw.	
Ozark Plateau																				
Arcadia	Iron	926	49	51.8	+ 7.8	82	3	20	6	50	5.45	+1.83	2.80	0	6	14	2	14	s.	Arcadia College
Aurora	Lawrence	1,370	39	....	.....	..	..	..	..	..	....	....	....	....	..	..	..	..	.....	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	54.9	+ 8.4	81	3	25	6	42	5.94	+2.81	1.92	0	7	13	6	11	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	55.2	.....	81	3	24	27	37	4.97	.....	1.41	0	11	13	8	9	se.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	5.04	.....	1.95	T.	12	4	7	19	n.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	32	55.8	+ 6.1	80	3	21	25	36	5 91	+2.57	2.11	0	7	11	9	10	s.	H. E. Dean
Eldon	Miller	934	35	52.6	+ 7.4	81	3†	26	7†	52	3.87	+1 38	0 92	2.0	11	7	9	14	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	53.5	+ 9.2	82	8	24	25	38	4.80	+1.05	2.07	0.5	12	13	8	9	sw.	Robert Forsyth
Goodland	Iron	1,000	37	53.7	+ 9.1	82	3	20	6	51	4.27	+1.35	1.16	0	8	12	6	12	s.	F. M. Adams
Greenville	Wayne	381	7	54.0	.....	82	8	20	6	52	5.93	+2.25	3.00	0	7	11	10	9	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	4.33	+1.84	1.40	0	6	6	4	20	.....	A. W. Madison
Koshkonong	Oregon	958	30	55.5[a]	+ 6.1	79	8	28	25	35	4.61	+1.31	1.85	0	7	10	3	17	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	54.5	+ 8.5	82	3	21	25	47	4.64	+2.02	1.00	T.	8	12	4	14	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	54.2	+ 6.5	78	3†	24	25	34	6.17	+3.72	1.55	3.0	13	12	5	13	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	30	52.8[a]	+ 6.2	80	3	24	25	42	4.14	+1.38	0.78	0	11	10	11	9	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	55.6	+ 8.4	81	8	23	25	40	5.80	+2.64	1.44	0	12	15	5	10	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	54.6	+ 9.7	80	3	24	25	33	4.66	+2.14	1.65	T.	11	6	7	17	s.	F. H. Lane
Salem (near)	Dent	1,173	27	....	.....	..	..	..	..	..	4.13	+1.51	1.18	0	9	14	0	16	.....	A. C. Leech
Seligman	Barry	1,542	29	55.0	+ 7.8	77	3	24	25	33	3.98	+1.11	1.39	0	9	12	7	11	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	53.8	+ 7.7	78	3	24	25	37	4.26	+1.59	0.77	T	10	14	4	12	s.	Ira H. Hailey
Springfield	Greene	1,324	43	54.3	+ 8.6	79	3	26	25	28	4.08	+1.29	1.30	0.6	14	12	8	10	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	54.2	+ 7.8	82	3†	20	6	52	4.85	+1.88	3.00	0.3	10	11	6	13	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	53.0	+ 6.9	80	8	24	25	39	5 48	+3.24	2.17	1.5	11	8	10	12	sw.	W. G. Bigelow
Clinton	Henry	765	38	53.3	+ 6.0	78	3†	25	25	37	6.03	+3.96	2.21	2.0	11	12	7	11	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	50.0	+ 7.6	80	8	22	25	44	6.48	+4.41	1.96	2.0	13	10	1	19	e.	John H. Patterson
Lamar	Barton	980	44	53.4	+ 6.8	82	8	25	25†	42	6.09	+3.76	2.25	2.0	13	14	1	15	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	52.2	+ 7.8	81	8	23	25	36	5.24	+3.08	2.21	2.2	13	11	8	11	sw.	J. E. Wheeler
Marshall	Saline	779	43	51.4	+ 5.8	78	16	24	25	39	5.24	+2.98	1.60	1.0	13	13	4	13	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	53.4	+ 9.0	80	8	24	25	36	5.28	+3.25	2.06	2.0	11	9	8	13	s.	George A. Kaupp
Warrensburg	Johnson	878	44	52.0	+ 7.1	78	8	22	25	39	8.16	+6.16	2.38	2.0	12	12	3	15	ne.	E. A. Markey
Warsaw	Benton	687	30	54.5	+ 7.0	80	3†	25	6†	41	5.30	+2.71	2.28	2.0	13	13	2	15	w.	Everett Martin
Section means and	extremes	.....	..	52.6	+ 7.1	82	8	22	25	44	5.92	+3.73	2.38	1.9	12	11	5	14	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	48.2	+ 5 3	77	8	20	25	33	8.26	+6.43	2.19	2.0	10	9	8	13	se.	A. S. Cumming
Chillicothe	Livingston	779	21	47.5	+ 4.9	80	8	22	6†	42	9.10	+6.76	2.36	3.5	12	14	4	12	s.	Wm. J. Olenhouse
Conception	Nodaway	980	42	47.8	+ 6.4	78	8	20	25	32	7.11	+5.65	1.71	1.5	13	9	6	15	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	47.4	+ 5.6	75	8	23	25	31	8.04	+6.51	2.03	1.2	15	11	1	18	se.	Fred L. Stiff
Grant City	Worth	1,134	27	47.2	+ 4.8	76	8	19	25	29	8.08	+6.46	2.05	2.5	13	9	9	12	se.	W. P. Spillman
Kansas City	Jackson	963	42	50.6	+ 6.9	79	8	28	24	30	9.52	+7.69	3.13	2.0	14	10	3	17	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	47.4	+ 5.0	79	8	21	26	38	9.72	+7.81	1.73	2.0	12	12	4	14	s.	Roscoe L Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	8.33	+6.01	2.93	2.8	10	..	..	..	..	H. L. Yates
Lexington	Lafayette	688	46	51.0	+ 7.0	81	7	25	25	49	6.82	+4.75	1.65	3.0	16	10	6	14	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	47.3	+ 8.3	80	8	17	25	35	7.16	+5.53	2.35	2.5	16	9	6	15	se.	J. R. Brink
Oregon	Holt	1,048	75	49.3	+ 9.0	81	8	21	25	31	8.37	+6.64	2.31	3.0	11	10	6	14	se.	Mina Wright
St. Joseph	Buchanan	987	23	49.0	+ 5.7	80	8	23	25	32	8.35	+6.56	3.10	0.5	15	10	5	15	se.	U. S. Weather Bureau
Tarkio	Atchison	916	28	45.0	+ 4.4	80	8	19	25	33	5.48	+4.00	3.26	3.5	10	8	5	17	se.	Albert Volker
Trenton	Grundy	822	35	49.2	+ 6.8	78	8	22	25	34	8.91	+7.03	2.64	2.0	11	11	7	12	s.	W. H. Estes
Section means and	extremes	....	..	48.2	+ 6.2	81	7†	17	25	49	8.10	+6.27	3.26	2.3	13	10	5	15	se.	
State means and	extremes	.....	..	52.2	+ 7.8	87	8†	17	25	52	5.46	+3.06	3.34	1.4	11	10	5	15	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for November, 1931

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Total
Northeast Plain																																	
Boonville	Missouri										.12	.33	.05	.02	.65	.26			.50		.11	.04	.64	1.50	.31			.29		T.			4.82
Bowling Green	Mississippi											.23	.94	.02	.92		.20		.27		.86	.15		.35	.43			.22					4.59
Brunswick	Grand										.34	.22	.60	.02	.68	.20	.04	1.65	.25		.03	.30	.77	.56	.98			.32			.04		7.00
Clifton Hill	Chariton										.12	.42	.02		.15	.21		.96	.04		.33		.63		.40	.03	.04	.15		.02	.02		3.54
Columbia***	Missouri										.29	.07	.09	.65	.24			.49		.05	T.		1.44	.27	.02		.32		T.	.01			3.94
Downing	Mississippi										.15	.93	.75		.96	.20	.02	.96			.42		.35	.76	.43		T.	.18		.02			6.13
Edina	do										.15	1.40			.58	.25		.95	.65		.35		.65	.68	.40			.10		T.			6.16
Elsberry	do	.05									T.	.80			.90			.20	.16		.83		.03		.62		.60			T.			4.19
Fayette	Missouri										.20	.10	.03	.03	.44	.20	.05	59		.01	.11	.09	.85	1.52	.27			.28		T.			4.77
Fulton	do										.07	.73	T.	.01	.99	.19			.34		.21	.11	.75	.17	.49			.31			.03		4.40
Gorin	Mississippi										.14	1.10			.81			1.58			.52		1.27	.34			T.	.08		.02			5.86
Hannibal***	do										.10	.07	T.	.21	.24		T.	.20		.04	.47		2.45	.13	.06		.26	.06		T.			4.29
Hermann	Missouri											.90	06	.44	.46	.10			.24		.74		.02	.05	.68			.16		.02	.08		3.95
Jefferson City	do									.02	1.26	.03	.10	.20	.22			.20		.10		1.21	.46	.75		T.	.28		.12			4.95
Kahoka	Mississippi												1.87		.25	.26		.76	.76		.24		.25	.96	.40			.15					5.90
Kirksville	do										.20	1.45			.71	.26		1.33					1.33	.53				.20	.18				6.19
Knox City	do																																
LaBelle	do																																
Laddonia	do											.62			.83	.26		.18		.26			1.75	.31	.26			.26					4.73
LaGrange	do									.10		.64			.32			.42			.44	.88	.36					.31					3.47
Louisiana	do										.80	.20		.65	.20			.15	.10	.42			.47	.45				.30					3.74
Lucerne	Grand										.26		.84		1.17	.74		1.03	.25		.02	.12	.30	.61	1.30			.15					6.79
Macon	Chariton											.45	.60		.36	.10		1.25	.43		.21	.08	.46	.30	.45			.20					4.89
Memphis	Mississippi												1.27		.33	.47		.60	.57		.64	.10	.90	.36				.15	T.	T.			5.39
Mexico	do										.08	.51			.95	.20	T.		.27		.16	.34	1.75	.40	.30			.40					5.36
Milan	Grand											1.31			1.35	.62	.20					.33		1.48	1.12			.47		T.			6.88
Monroe City	Mississippi										T.	.35			.25	.22		.21	.03		.65		1.42		.19		.16						3.48
New London	do	.04									.14	.28	.02		.34	.27			.24		.29		* *	3.21	.21			.25			.19		5.39
Pacific	Meramec											.46		.74	.05	.08		T.	.52		1.10	.08			.25		T.	.50		.18			3.96
Palmyra	Mississippi																																
Paris	do										.14	.06			.33	.20			.21		.07	.05	.88	.67	.15			.26					3.02
Perry	do										.23	.25	T.	T.	.34			T.	.32		.17	.15	1.25	.42				.32					3.45
Philadelphia	do											.05	.35		.10	.18			.39			.20	.15	.83		.13		.15			.05		2.58
Plevna	do										.18		.93		.18			.51	.73		.15		.63	.28	.38			.17					4.14
St. Charles	Missouri	.19									.05	.78	T	.25				.51	.22		1.00		T.					.10	T.	T.	.52		3.62
St. Louis (1)***	Mississippi										.63	.17	.38	.38	.12			.64		.01	1.32		T.		.28			.42	.06	.01	.23		4.65
St. Louis (2)*	do										.52	.25	.34	.38	.03		T.	.47		.01	1.47		T.		.17			.30	.05		.22		4.21
Shelbina	do										.07	.11	.49	T.	.15	.16		.06	.50		.12	.18	.84	.32	.15			.26			.01		3.42
Steffenville	do										.15	.78	.05		.28	.10		.70	.10		.35		.90	.02	.10			.10	.10				3.73
Troy	do											.89			.45	.09		.32		.65					.55				.35				3.30
Union	Meramec											.53		.84	.04	.14			.56		1.58	.04			.39			.48		.15	.36		5.11
Unionville	Chariton											.95	.75		1.75	.40		1.10		.03	.60		.40	.80	.90	.15	.05	.30					8.18
Valley Park	Meramec	.03									T.	.47	.02	.78	.03	.04		.03	.48		.97	.04	T.		.26	T.		.55		.10	T.		3.89
Warrenton	Mississippi										T.	1.05		.30	.24	.05		.14	.22		.72		T.		.67		.40	.20		T.			3.99
West Ely	do											T.	T.	.20	.23	.18			.23		.24	.18	1.27	.88	.14			.40					3.95
Winfield	do											1.06	.11			.64	.12	.10	.47		.89				.66		T.	.65					4.70
Keokuk, Ia.***	do										.05	1.55	T.	.03	.19			.61		.07	.34		.74	.11	.03		.08	.02	T.	.03			3.85
Southeast Lowlands																																	
Campbell	St. Francis										.05					T.		.68	.02	.94	2.60	.02			.34		.25	.33		1.35	.28		6.26
Cape Girardeau	Mississippi											.45		.65	.01	.08			1.15		2.55	.20			.12	.18		.27		.58	.28		6.52
Caruthersville	do																		1.10		1.95	.46				.27	.24	1.05		.75	1.45		7.27
Dexter	St. Francis											.26		.03		.08			.67		2.48	.20			.28			.44		.68	.40		5.52
Doniphan	Black										T	.20	T.	T.		.07		.94			2.75				.40		.35	.09	T.	.90	T.		5.70
Fisk	St. Francis											.05						T.	.34		2.95	.15			T.	.25		.42		.33			4.49
Jackson	Mississippi										.90		.21	.18		.08		.62			2.04			.31			.35			.79			5.48
Marble Hill	do										1.09	.12		.32				.84	.14	.08	2.18				.34		.30	.28		.68			6.37
Morehouse	do										.29		.02	T.				1.30		.45	3.23				.67		.29	.26		.81	.15		7.47
New Madrid	do											.14		.02		.03	.07		1.57		1.50	.85			.01	.43	.01	.52		.50	1.02		6.67
Parma	St. Francis																		.82		2.95	.16				.39		.45		.57	.82		6.16
Poplar Bluff	Black											.04						T.			.05	.55			.35			.59		.55	.44		6.09
Sikeston	Mississippi										.45		.10						.85		1.95	.32				.45	.55		.55	.43			5.65
Cairo, Ill.***	do										.54		.03	.01		T.		1.09	T.	1.19	.89				.43		.28	.10	T.	.79			5.35
Ozark Plateau																																	
Arcadia	St. Francis										T.	.20	.60		1.00			T.		2.80			T.		.40					T.	.45		5.45
Aurora	Neosho																																
Birchtree (near)	Black											1.92						.92			1.12				.50		.21	.15		1.12			5.94
Buffalo	Osage										.40		.40	1.41				.16			.10			.03		1.24	.18	.31		.58	.16		4.97
Caplinger Mills	do										.11	T	.75	.28	.38	.06		.06			.02	T.	1.95	.58	T		.40	T.	.10	.35			5.04
Chaonia	St. Francis											.38	.09			.24		.04	.50		3.17	.15			.22	.12		.34		.70	.18		6.13
Dean	Neosho														.22	.12		.62					2.11	T.	1.47			.52		T.	.85		5.91
Eldon	Missouri											.69	.03	.39	.20	.32				.03	.09		.81	.14	.92		T.	.25					3.87
Farmington	St. Francis										.24	.02		.43				.50	.02		2.07		.02		.44		.12	.24	.02	.68			4.80
Fredericktown	do											.98		.82		.06		.64			2.46	.38			.22		T.	.16		.38	.25		6.35
Galena	White											.65			.29	.29		.12			.10	.12			1.28		.12	.28		.87			4.12
Goodland	Black											.20		.90				.60			1.16				.34		.10		.27	.70			4.27
Greenville	St. Francis										.45					.25		.75		T.	3.00				.28		.25	T		.95			5.93
Hailey	White										.90				.43					.30						1.40	.40				.90		4.33
Koshkonong	Black										.07							.77			1.85				.58		.27	.13		.94			4.61
Lebanon	Osage											T.	.12		.48		.71			T.	T.	.88	1.00	.80		T.	.45		.20			4.64
Leeper	Black											.80						.11	.52		1.78		.23		.21	.02		.35		.63	.16		4.81
Lockwood	Osage										.03	.05	.44	1.55	.22			.23			.10		1.35	.08	.95		.40	.11		.66			6.17
Mountain Grove	White											.28		.78		T		.42	.38		.58		.03		.54		.05	.25		.72	.11		4.14
Neosho	Neosho										.40	.07	.78	.10	.10	.03		.40			.02		1.44		1.05		.61		T.	.80			5.80
Owensville	Gasconade											.80		.90	.45							.20			.65		T.	.35		.15	.45		3.95
Ozark Beach	White										.05		.18			.18		.16	.04		.23				.76		.12	.25		.84	.13		2.94
Rolla	Meramec											.25		1.65	.12	.22			.25		.45	.07	.02		.68			.51		.44			4.66
Salem (near)	do											.25		.85	T				.75		1.18		.14		.18			.32		.34	.12		4.13
Seligman	Neosho										.63			T.	.21	.02	T.	.24			.11		.11		1.39		.37			.90			3.98
Seymour (near)	White										.12	.18	.58		T.	.42		.43		T.	.57		T.		.73		.28	.18	T.	.77			4.26
Springfield ***	do										.13		.85	.03	.43			.25		.03	.02	.01	.19	1.17	.13		.28	T.	14	.42			4.08
Steelville	Meramec											.45	.16	1.38					.57		.79				.47			.45		.29	.16		4.72
Stover	Missouri										.26	.21						.05	.80		.13		1.79		.49		.34	.15		.08			4.30
Tuscumbia	Osage											1.33		1.40	.06	.27			.38		.09		.45	.09	.79		.05	.30		.09	.10		5.40
Williamsville	Black											.38		.03		.03			.57	.01	1.70	.19	.01		.11	.08		.37		.70	.19		4.37
Willow Sprgs. (near)	White											.30		.03					.83		1.39				.67		.06	.32		.98	.13		4.71

Continued on next page

Daily Precipitation for November, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																
Appleton City	Osage	....	....	....	....	....	....	....	....	....	.49	.15	T.	.41	.41	....	....	.52	T.	....	T.	....	2.17	.04	.80	...	.38	.04	....	.07	T.	....	5.48
Clinton	do	....	....	....	....	....	....	....	....	....	.68	.11	.25	.45	.47	....	.51	....	....	.05	....	2.21	....	.75	....	....	.45	T.	.10	....	....	....	6.03
Concordia‖	Missouri	....	....	....	....	....	....	....	....	....	.70	.25	....	.33	.36	....	....	1.90	.24	....	.19	....	1.05	.53	1.10	....	.20	....	....	.38	....	....	7.23
Harrisonville‖	Osage	....	....	....	....	....	....	....	....	....	.42	.06	.02	.15	.96	.25	....	1.96	.03	....	.01	....	.51	.30	1.59	....	....	.22	....	....	....	....	6.48
Joplin‖	Neosho	....	....	....	....	....	....	....	....	....	.25	.01	2.60	.32	.15	....	....	.71	....	.04	....	.01	1.35	.98	....	....	.53	....	.10	.50	.01	....	7.56
Lamar‖	do	....	....	....	....	....	....	....	....	....	T.	.30	....	.95	.11	.25	....	.20	.09	....	.07	....	2.25	....	.70	....	.35	.15	....	.55	.12	....	6.09
Lamonte	Missouri	....	....	....	....	....	....	....	....	....	.35	.08	.02	.53	.25	....	....	.52	....	....	.04	....	2.21	.60	.05	....	.34	.10	....	.15	....	....	5.24
Marshall	do	....	....	....	....	....	....	....	....	....	.30	.16	....	.28	....	.17	T.	1.60	.39	T.	.16	....	1.36	.04	50	....	.10	.13	....	.05	....	....	5.24
Nevada	Osage	....	....	....	....	....	....	....	....	....	.28	....	.29	.43	.28	....	....	.43	....	....	T.	....	2.06	.48	.42	....	.44	.02	....	.15	....	....	5.28
Osceola‖	do	....	....	....	....	....	....	....	....	....	.28	.14	....	.32	.12	.30	....	.05	.08	....	.07	....	2.31	.22	.62	....	.24	.17	....	....	.12	....	5.04
Warrensburg	Missouri	....	....	....	....	....	....	....	....	....	.40	.12	....	.53	.34	....	.02	2.38	....	....	.08	....	1.86	.32	.81	....	1.02	.28	....	....	....	....	8.16
Warsaw	Osage	....	....	....	....	....	....	....	....	....	.26	.17	....	.20	.48	....	.02	.23	.06	....	.05	....	2.28	....	.50	....	.90	.05	....	.10	....	....	5.30
Waverly ‖	Missouri	....	....	....	....	....	....	....	....	....	.40	.09	.76	T.	.38	.30	....	1.80	.14	....	.12	.03	1.30	.50	1.20	....	....	.15	....	....	....	....	7.17
Northwest Plateau																																
Albany‖	Grand	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bethany	do	....	....	....	....	....	....	....	....	....	.37	.74	.10	....	2.10	.12	...	1.52	....	....	.08	....	.84	2.19	....	....	.20	....	....	T.	....	....	8.26
Chillicothe ‖	do	T.	....	....	....	....	....	....	....	....	.14	T.	1.58	....	.91	.87	....	1.06	.11	.01	T.	.02	.43	2.36	1.28	....	....	.33	....	....	T.	....	9.10
Conception	Missouri	....	....	....	....	....	....	....	....	.03	.32	.95	.05	....	1.71	.06	...	1.31	....	T.	.09	....	.62	1.60	.21	....	.10	.06	....	T.	....	....	7.11
Edgerton	do	....	....	....	....	....	....	....	....	....	.01	1.61	.01	.05	2.03	.02	T.	1.05	....	.02	.03	....	1.85	1.17	.05	....	.11	.02	....	.01	....	....	8.04
Gallatin ‖	Grand	....	....	....	....	....	....	....	....	....	.30	....	1.25	....	1.80	.70	....	1.32	.13	....	....	....	.85	.72	1.07	....	....	.30	....	....	....	....	8.44
Grant City	do	....	....	....	....	....	....	....	....	....	.46	.75	.24	....	1.42	.06	T.	1.81	....	T.	.24	....	.63	2.05	.13	....	.11	.14	....	.04	....	....	8.08
Kansas City***	Missouri	....	....	....	....	....	....	....	....	.15	.20	.77	T.	.43	2.80	....	1.00	.66	....	T.	.01	.52	1.19	1.47	....	....	.28	03	T.	.01	....	....	9.52
Kidder	Grand	....	....	....	....	....	....	....	....	....	.15	T.	1.46	....	1.73	1.14	....	1.52	.11	....	....	.08	.70	1.10	1.19	....	....	.24	....	....	.30	....	9.72
King City	Missouri	....	....	....	....	....	....	....	....	T.	.30	.68	....	....	2.93	.05	....	1.18	....	.01	.10	....	.91	1.89	....	....	.28	....	....	....	....	....	8.33
Lexington ‖	do	....	....	....	....	....	....	....	....	....	.33	.15	.42	....	1.65	.24	.03	1.25	.09	.04	.02	.02	.37	.58	1.23	....	....	.38	....	.02	....	....	6.82
Maryville	do	....	....	....	....	....	....	....	....	....	.30	.62	.03	T.	1.32	.05	.05	1.40	.02	.04	.08	....	.58	2.35	.02	....	.20	.05	....	.05	T.	....	7.16
Oregon	do	....	....	....	....	....	....	....	....	.10	.26	.64	....	....	2.31	....	T	1.86	....	....	.15	....	.61	2.13	....	....	.23	.04	....	.04	....	....	8.37
St. Joseph***	do	....	....	....	....	....	....	....	....	.19	T.	.82	.13	1.70	1.44	....	.77	.39	....	.03	.01	.32	.94	1.33	....	....	.23	.01	T.	.04	....	....	8.35
Tarkio	do	....	....	....	....	....	....	....	....	.03	....	.52	....	....	.39	....	....	.43	....	.32	.24	....	....	3.26	....	....	.15	.12	....	.02	....	....	5.48
Trenton	Grand	....	....	....	....	....	....	....	....	....	.28	1.06	....	....	2.64	.25	T.	1.28	....	....	.20	....	.75	1.40	.82	....	.11	.12	T.	T.	....	....	8.91
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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MISCELLANEOUS PHENOMENA

Fogs, dense.—Local on 11th, 13th, 14th, 18th, 19th, 21st, and 22d.

Frost, killing.—6th.

Halos, lunar.—16th, 18th, 19th, 20th, 21st, 22d, 23d, and 25th. Solar.—21st.

Sleet.—About a trace on several days beginning on 24th.

Thunderstorms.—10th, 11th, 12th, 13th, 14th, 16th, 17th, 19th, 21st, 22d, and 23d.

Wind.—About midnight of November 17th, a squall wind caused some small damage in the vicinity of Maryville, Nodaway County. A small barn was wrecked, a windmill blown over, and some hog sheds scattered about. No person was hurt. The newspaper of the locality reported this wind as a tornado, but no evidence could be turned up to support the statement.

ERRATA

Report for October, page 47: Jefferson City days partly cloudy, and cloudy, should be 10 and 11. Lexington prevailing wind direction South; page 49 omit precipitation of Chillicothe.

Daily Temperatures for November, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	53	69	70	64	65	62	73	81	77	50	67	70	60	75	75	79	65	58	60	64	61	65	70	38	40	37	38	41	42	41	..	60.3
	Minimum	35	36	38	33	35	26	29	50	54	43	44	49	44	46	51	52	59	49	50	49	43	44	58	32	25	26	31	32	35	32	..	41.0
Columbia	Maximum	51	68	71	60	59	58	74	80	75	65	73	72	56	78	75	78	68	59	61	64	65	72	73	57	42	33	34	37	39	42	..	61.3
	Minimum	36	41	46	38	34	27	47	52	60	46	49	53	50	55	55	58	51	49	51	49	44	52	57	30	26	32	32	34	36	35	..	44.2
Fayette	Maximum	55	70	74	65	63	60	76	81	77	51	70	71	59	79	76	80	66	58	61	61	63	61	72	44	44	33	35	37	40	45	..	60.9
	Minimum	38	34	44	33	30	22	41	46	55	44	44	51	49	57	50	56	60	48	48	55	39	48	62	33	23	29	31	33	35	32	..	42.3
Hannibal	Maximum	52	63	68	58	55	54	71	80	76	66	68	71	56	77	73	78	69	60	62	63	62	68	72	61	39	34	36	36	41	42	..	60.4
	Minimum	38	39	49	36	35	28	47	52	60	46	48	53	46	55	56	61	50	50	55	52	46	52	61	30	26	30	32	34	36	37	..	44.7
Jefferson City §§	Maximum	79	65	66	73	79	79	82	87	54	75	74	64	79	77	87	69	77	62	65	68	74	74	42	45	34	37	38	45	45	45	..	64.7
	Minimum	39	41	33	27	27	49	46	48	49	47	52	50	50	55	49	61	49	49	51	43	42	60	37	24	24	30	31	34	27	28	..	41.7
Kirksville	Maximum	50	65	65	59	56	54	70	77	73	69	55	55	59	71	68	76	72	68	57	58	56	64	66	64	37	33	39	36	39	40	..	58.4
	Minimum	34	36	47	35	39	27	41	50	59	41	45	48	37	51	40	48	49	43	46	45	40	47	57	27	21	23	28	30	33	30	..	39.9
Louisiana	Maximum	50	63	65	63	60	60	63	75	70	69	75	73	75	80	77	77	75	65	65	65	69	67	70	62	45	35	35	40	45	45	..	62.6
	Minimum	32	44	47	35	30	20	39	45	40	46	46	60	50	54	55	57	60	47	52	55	57	54	63	40	25	26	30	32	33	36	..	43.7
Macon§§	Maximum	51	67	69	62	58	56	71	79	75	51	66	67	59	74	71	74	61	55	60	61	60	64	70	39	38	32	34	37	38	40	..	58.0
	Minimum	35	37	43	35	38	27	37	51	59	42	42	46	41	52	51	55	58	47	48	54	41	44	58	31	25	24	30	30	32	31	..	41.5
Mexico §§	Maximum	54	65	72	54	59	54	56	78	75	59	70	72	63	77	72	77	68	68	62	61	63	69	72	39	41	33	34	37	43	44	..	59.7
	Minimum	34	37	39	34	34	23	24	36	49	45	44	57	48	48	53	53	59	46	46	53	41	45	54	35	24	24	30	30	33	34	..	40.4
St. Louis(1)	Maximum	52	64	77	60	62	55	75	82	75	66	76	72	57	78	77	78	69	59	67	66	65	69	74	68	42	35	36	37	41	48	..	62.7
	Minimum	40	44	49	44	42	36	40	54	57	54	57	56	50	56	61	62	55	50	55	50	47	54	61	34	30	32	33	33	35	38	..	47.0
Unionville	Maximum	53	67	65	60	55	55	70	80	75	70	56	65	60	68	68	75	70	56	60	54	50	60	65	55	35	34	35	38	38	38	..	57.7
	Minimum	33	34	45	31	40	25	42	50	55	40	45	44	35	50	50	54	45	35	43	45	40	42	55	28	20	22	23	30	32	30	..	38.8
Warrenton	Maximum	53	66	74	64	58	56	75	81	76	69	74	73	71	80	77	79	75	61	63	62	69	69	74	71	42	38	34	37	37	43	..	63.4
	Minimum	35	37	47	38	39	26	40	50	56	48	47	63	48	53	50	57	60	48	52	57	42	47	61	36	24	29	31	32	34	36	..	44.1
Southeast Lowlands																																	
Campbell	Maximum	57	59	80	69	69	59	71	80	74	71	77	73	79	80	74	80	74	66	66	66	59	79	79	71	69	46	42	40	41	53	..	66.8
	Minimum	31	32	38	40	34	25	25	40	40	45	49	57	61	50	60	54	58	52	54	55	45	49	53	51	28	33	35	35	36	37	..	43.4
Caruthersville	Maximum	54	59	65	78	70	71	62	70	79	74	76	78	79	81	80	76	80	73	65	65	67	65	79	78	73	51	48	44	44	45	..	67.6
	Minimum	37	36	42	47	50	41	36	38	48	50	54	58	61	65	61	66	61	55	56	51	59	48	58	59	48	35	38	39	38	42	..	49.2
Doniphan	Maximum	60	69	82	74	72	68	77	81	73	71	78	74	79	80	79	80	70	62	67	67	61	77	80	69	52	45	42	42	42	55	..	67.6
	Minimum	28	34	40	44	30	25	29	38	44	48	54	62	61	58	63	57	59	53	46	53	43	51	60	42	29	32	37	38	38	40	..	44.5
Jackson	Maximum	51	57	68	64	60	55	62	71	68	63	69	68	70	72	71	73	67	57	64	62	56	70	70	66	40	37	35	35	34	46	..	59.4
	Minimum	27	36	40	40	27	24	27	40	45	49	50	55	56	57	56	58	56	52	45	54	43	48	55	39	26	28	32	30	32	34	..	42.0
Poplar Bluff §§	Maximum	66	79	72	73	61	71	80	75	69	76	75	77	80	79	79	72	60	67	67	60	76	78	67	54	45	44	41	41	56	47	..	66.2
	Minimum	33	35	38	43	33	28	29	40	38	49	53	49	57	55	63	55	57	55	47	45	54	57	43	30	34	34	37	37	39	..	..	43.7
Sikeston	Maximum	59	64	77	77	75	68	69	79	78	72	77	74	79	79	77	79	77	62	67	66	62	75	75	73	64	63	48	41	40	40	..	67.9
	Minimum	35	40	43	43	33	29	33	38	44	47	54	59	61	56	62	60	60	53	55	59	45	55	58	47	31	34	34	35	37	36	..	45.9
Cairo, Ill	Maximum	54	61	75	64	65	55	66	77	72	67	75	76	78	77	72	78	72	62	67	68	65	76	76	68	46	43	42	41	41	50	..	64.3
	Minimum	37	44	48	46	40	35	39	50	52	53	58	63	63	61	66	63	58	56	52	55	48	60	62	40	32	36	38	36	38	39	..	48.9
Ozark Plateau																																	
Arcadia §§	Maximum	51	65	82	66	66	60	72	79	72	60	71	70	76	77	78	76	66	59	65	60	65	71	73	51	48	36	38	38	41	52	..	62.8
	Minimum	27	32	41	39	25	20	22	40	41	44	51	56	57	58	53	55	58	51	47	48	36	40	57	48	25	25	29	31	32	33	..	40.7
Aurora	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Birchtree	Maximum	58	66	81	71	69	63	71	74	80	74	65	72	71	77	76	77	70	67	63	61	65	69	74	68	69	43	39	39	44	49	..	65.5
	Minimum	28	38	50	42	33	25	33	35	44	50	54	56	56	59	60	62	62	52	51	50	39	50	61	37	27	34	34	34	37	37	..	44.3
Eldon§§	Maximum	56	70	81	65	55	63	78	81	77	56	74	72	65	78	75	78	66	66	62	62	67	74	74	41	45	33	34	37	38	44	..	62.2
	Minimum	49	36	38	37	35	36	26	48	56	49	49	55	52	53	53	53	61	49	47	47	40	39	57	36	26	26	32	33	34	37	..	43.0
Farmington	Maximum	51	65	72	67	64	58	73	82	72	64	68	71	66	76	76	77	66	61	69	61	65	72	73	66	45	57	37	36	38	50	..	63.3
	Minimum	32	36	42	38	26	28	35	53	47	54	54	62	59	57	56	59	57	52	48	54	40	48	54	38	24	32	29	31	31	36	..	43.7
Koshkonong	Maximum	54	65	78	69	68	60	74	79	73	67	74	71	76	76	77	78	68	58	..	63	65	69	73	68	49	44	40	40	41	59	..	[a]64.7
	Minimum	35	34	45	46	39	34	39	51	49	55	59	62	61	61	59	59	57	47	..	50	42	51	60	38	28	35	34	36	37	40	..	[a]46.3
Lebanon	Maximum	56	69	82	64	76	63	75	78	74	64	74	71	70	75	78	78	75	67	66	60	64	73	63	65	54	40	57	48	49	48	..	65.9
	Minimum	29	36	47	33	29	31	32	54	54	53	51	60	52	51	51	55	51	50	50	52	54	49	48	49	21	29	30	30	33	30	..	43.1
Mountain Grove	Maximum	57	66	80	70	70	61	75	78	73	64	73	69	73	76	76	77	61	..	66	60	65	69	70	41	50	37	38	40	42	47	..	[a]62.9
	Minimum	30	36	44	40	33	27	33	41	45	55	55	57	56	59	52	54	57	49	..	47	40	50	59	37	24	29	32	31	32	35	..	[a]42.7
Neosho	Maximum	60	73	80	76	69	69	75	81	73	70	72	71	74	74	75	75	71	69	65	60	70	74	73	72	45	44	39	43	44	44	..	66.0
	Minimum	26	37	50	44	32	32	45	54	57	52	59	60	58	59	50	58	57	50	47	45	37	54	64	32	23	33	35	36	39	34	..	45.3
Rolla	Maximum	51	66	80	68	63	58	74	79	76	67	74	71	66	77	74	77	71	65	63	62	63	70	72	68	42	40	36	37	38	44	..	63.1
	Minimum	33	58	47	38	30	26	45	51	56	58	56	62	56	59	53	58	60	51	50	54	40	50	62	35	24	32	32	33	35	37	..	46.0
Springfield	Maximum	53	66	79	63	66	60	74	76	70	64	71	69	71	72	74	75	66	67	59	59	62	72	69	51	44	38	37	41	43	42	..	61.8
	Minimum	38	41	52	45	44	37	46	55	56	59	60	59	62	59	54	61	55	51	50	46	45	51	51	30	26	32	34	34	37	35	..	46.8
Southwest Plain																																	
Appleton City	Maximum	55	71	77	64	66	65	76	80	74	67	73	68	59	75	74	74	69	65	59	57	66	71	71	68	44	39	36	38	38	39	..	62.6
	Minimum	34	40	49	38	36	29	48	53	59	43	45	56	51	56	48	56	56	49	47	45	39	50	63	29	24	31	32	32	35	31	..	43.5
Clinton	Maximum	60	70	78	64	64	65	62	78	70	65	74	72	73	76	74	78	72	64	65	56	60	68	71	67	36	36	36	37	39	40	..	62.3
	Minimum	32	38	48	38	50	28	47	58	55	46	47	50	52	56	48	56	60	50	48	48	40	50	66	31	25	30	32	34	36	30	..	44.3
Harrisonville§§	Maximum	57	70	75	64	65	64	77	80	74	51	70	67	63	73	74	72	61	60	61	56	63	67	65	40	45	33	36	38	38	41	..	60.0
	Minimum	34	35	40	38	36	31	33	48	55	41	42	49	47	47	47	47	56	47	48	49	38	43	57	28	22	23	30	31	32	29	..	40.1
Lamar§§	Maximum	58	73	81	64	68	69	77	82	74	58	73	75	69	75	76	76	64	68	63	60	70	73	74	44	45	37	38	44	42	45	..	63.8
	Minimum	32	33	43	40	34	34	35	51	58	48	47	58	54	54	46	51	59	50	50	51	39	41	59	32	25	25	33	35	35	34	..	42.9
Lamonte	Maximum	57	71	71	61	61	63	77	81	76	65	72	69	56	76	75	78	67	64	58	57	65	68	70	56	40	34	36	37	38	38	..	61.2
	Minimum	37	40	47	36	36	27	49	54	60	44	46	53	50	56	50	56	53	49	48	47	40	50	56	30	23	29	32	34	35	31	..	43.3
Marshall	Maximum	53	69	70	62	59	58	61	80	77	70	70	69	64	71	75	78	71	61	60	59	61	65	71	69	41	37	36	38	39	40	..	61.1
	Minimum	45	40	50	35	36	30	35	45	64	44	45	45	46	46	50	56	49	48	49	46	41	49	49	30	24	29	30	33	31	31	..	41.7
Nevada	Maximum	55	70	77	65	65	66	75	80	73	68	74	70	61	74	74	75	69	63	67	59	65	72	73	53	43	37	37	42	40	44	..	62.9
	Minimum	33	43	53	38	31	30	50	55	59	45	49	54	51	57	52	56	57	49	50	46	40	51	52	30	24	31	33	34	34	31	..	43.9
Warrensburg	Maximum	65	68	72	59	64	61	74	78	74	68	70	68	53	75	72	76	71	63	57	57	65	67	69	67	41	35	36	38	37	40	..	61.3
	Minimum	34	40	49	35	37	29	48	53	59	42	44	53	48	52	49	58	54	48	48	45	40	48	61	28	22	28	28	33	34	30	..	42.6
Warsaw	Maximum	57	70	80	68	66	63	76	80	75	69	75	71	62	78	75	78	75	66	62	63	67	73	74	72	45	40	42	40	40	43	..	64.8
	Minimum	33	39	50	34	31	25	49	54	61	46	48	49	52	56	57	59	58	50	48	48	41	51	68	31	25	31	33	34	36	33	..	44.2
Nrthwest Plateau																																	
Chillicothe §§	Maximum	56	69	68	61	58	58	73	80	76	53	66	60	62	71	72	76	61	58	59	58	56	62	63	37	41	32	35	38	42	40	..	58.0
	Minimum	32	33	36	31	31	22	31	45	47	40	41	46	36	39	47	47	56	45	45	50	36	40	50	26	22	23	27	28	31	28	..	37.0
Grant City	Maximum	50	63	63	58	53	51	70	76	73	62	57	62	56	62	67	68	65	56	55	52	48	57	64	52	36	30	34	41	37	37	..	55.2
	Minimum	32	44	45	36	43	29	47	47	61	41	44	47	34	51	47	50	47	34	42	44	37	40	52	25	19	25	27	30	32	27	..	39.8
Kansas City	Maximum	54	70	69	60	59	61	74	79	73	47	67	67	58	69	72	71	61	60	56	57	57	65	66	37	41	34	37	40	39	40	..	58.0
	Minimum	38	45	50	42	42	35	54	58	45	42	46	49	45	57	52	59	48	46	49	47	42	47	36	28	28	31	32	35	36	31	..	43.2
Kidder	Maximum	52	66	67	58	57	56	70	79	75	51	67	57	60	67	70	70	60	57	57	57	53	62	63	35	37	32	46	39	41	43	..	56.8
	Minimum	34	36	39	36	37	32	32	46	55	39	38	45	36	38	47	49	56	45	44	49	35	38	48	25	22	21	28	28	32	27	..	37.9
Lexington§§	Maximum	71	74	63	63	63	67	81	76	61	67	67	67	77	75	75	62	63	57	58	60	64	65	64	44	33	36	39	38	40	47	..	60.6
	Minimum	37	37	41	38	39	31	32	53	57	41	43	48	43	45	52	52	58	49	49	49	42	43	57	29	25	26	31	33	34	30	..	41.5
Maryville	Maximum	55	69	68	63	59	59	75	80	74	71	54	64	61	62	73	71	64	59	54	58	48	55	65	47	40	34	35	40	38	38	..	57.8
	Minimum	29	34	43	29	35	27	42	45	61	40	42	46	31	50	43	49	45	32	43	43	35	38	43	22	17	26	27	31	32	25	..	36.8
Oregon	Maximum	55	71	70	66	63	63	76	81	76	59	58	65	61	63	74	70	66	62	55	55	51	59	65	43	46	34	35	39	39	38	..	58.6
	Minimum	34	42	47	35	40	32	47	54	54	40	46	48	38	51	47	56	46	36	44	43	36	44	42	24	21	29	30	33	33	27	..	40.0
St. Joseph	Maximum	53	67	69	60	59	60	73	80	75	54	67	67	58	64	72	69	62	60	56	57	51	65	67	35	40	32	36	40	40	39	..	57.6
	Minimum	34	42	45	36	39	34	51	57	43	42	46	44	37	55	49	57	43	38	47	44	37	47	35	26	23	30	30	34	36	29	..	40.3
Trenton	Maximum	56	67	66	64	59	56	72	78	76	68	62	56	59	67	70	74	67	59	58	58	54	59	64	56	38	34	37	40	41	39	..	58.5
	Minimum	33	38	46	33	36	24	38	45	60	40	40	42	36	52	50	54	55	45	46	45	38	48	56	27	22	27	28	33	35	29	..	40.0

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 12-18-31—990.

551.05
UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., DECEMBER, 1931 No. 12

GENERAL SUMMARY

The outstanding feature of the weather during December, 1931, was the continuation of abnormal warmth, making the fourth consecutive month with abnormally high mean temperatures throughout the State of Missouri, the average excess for the 4-month period amounting to nearly 7°. As averages go it was the warmest December, but one, (1889) during the record of 44 years.

At 37 stations, out of 68 reporting daily temperatures, 20° or higher was the extreme lowest recorded during this month; and for the State, as a whole, less than one-half the days had freezing values. The absolute minimum was 11°; and this high minimum occurred but once before in December and that was in the year 1903. The minimum in December, 1889, was 2°. The highest temperature of the current December was 80°, on the 30th. In other Decembers during the past 44 years this value has been equaled three times and exceeded six times, 84° in 1915 being the highest.

In marked contrast to 1889, the other outstanding warm December, this month was wet, save in the western part of the Ozark area and the southwestern plain, from about Springfield to the western border and from the Osage River south, where the total monthly amounts were generally less than normal, some few counties receiving less than one inch as a total.

The snowfall for the State, as a whole, was unimportant but was quite heavy in the northern border counties, varying between 3 and 8 inches, but soon melted. South of the Missouri River there was none to speak of, a few flurries occurring in central-west counties.

At the end of the month winter wheat was in very satisfactory condition. It made good pasturage except the lower lands were too wet for livestock to be turned on. Owing also to wet ground about one-fourth of the corn crop was still in the fields. Pastures continued green affording considerable grazing, and rough feed was plentiful. As a parallel to the warm December of 1889, dandelions, roses, and other flowers and much green vegetation were noticeable during this December.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 42.7°, or 8.8° above the normal. Only one other December in 44 years (1889) was warmer than the current month. The highest local monthly mean was 50.4° at Caruthersville, Pemiscot County; and the lowest was 37.0° at Tarkio, Atchison County. The highest temperature recorded was 80°, at Marble Hill on the 30th; and the lowest was 11°, at Maryville on the 14th. The greatest daily range was 44°, at Goodland on the 26th. The minimum temperature fell to 32° or lower on 15 days.

PRECIPITATION

The average precipitation for the State, 119 stations reporting, was 2.57 inches, or 0.50 inch more than the 60 years' average. The current December was wetter than the same month in 1929 and 1930. The greatest local monthly amount was 9.32 inches at Caruthersville, Pemiscot County; and the least was 0.42 inch at Nevada, Vernon County. The greatest amount in any 24 consecutive hours was 4.00 inches, at Caruthersville on the 13th.

The snowfall averaged about 1.7 inches, about 3 inches less than the normal. The largest monthly amounts, about 8 inches, occurred in Worth, Harrison, and Putnam Counties. There was hardly any snow south of the Missouri River.

(Continued on Page 59)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.09	87	68	72	136	46	4,715	6.3	20	nw.	24
Hannibal	30.10	84	71	..	...	..	5,218	7.0	26	ne.	31
Kansas City	30.08	83	69	75	150	51	5,580	7.5	28	sw.	23
St. Joseph	30.06	88	71	78	142	49	5,156	6.9	23	nw.	11
St. Louis	30.10	80	66	69	101	34	7,262	9.8	28	sw.	11
Springfield	30.07	81	65	69	152	51	6,293	8.5	24	se.	26
Cairo, Ill.	30.12	86	71	74	...	..	5,259	7.1	25	s.	11
Keokuk, Iowa	30.11	85	72	78	119	41	4,737	6.4	21	e.	31

Beginning January 1, 1928 wind velocities are by 3-cup anemometers.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**33.9**	.....	**75**	**- 9**	**2.07**	.....	**2.70**	**3.6**	**6**	**13**	**6**	**12**
1888	35.9	+ 2.0	70	0	2.29	+0 22	....	....	6	..	..	..
1889	46.8	+12.9	78	2	0.96	−1.11	....	....	5	..	..	..
1890	36.0	+ 2.1	76	- 3	1.03	−1.04	....	....	3	..	..	..
1891	39.8	+ 5.9	72	- 1	1.90	−0.17	....	....	6	..	..	..
1892	29.4	- 4.5	75	-22	2.38	+0.31	3.08	4.8	6	8	7	16
1893	35.2	+ 1.3	76	7	0.95	−1.12	2.95	2.7	5	11	11	9
1894	36.7	+ 2.8	75	- 7	2.13	+0.06	3.01	1.3	5	14	8	9
1895	34.3	+ 0.4	69	- 8	6.13	+4.06	6.95	3.4	8	9	8	14
1896	38.6	+ 4.7	79	- 5	0.93	−1.14	2.25	T.	3	13	8	10
1897	29.3	- 4.6	74	-14	2.80	+0.73	2.70	6.3	7	8	8	15
1898	28.7	- 5.2	74	-20	1.69	−0.38	2.50	5.1	5	17	6	8
1899	30.4	- 3.5	72	-13	2.11	+0.04	1.70	6.6	9	12	9	10
1900	35.6	+ 1.7	68	- 3	0.69	−1.38	1.08	0.6	4	14	8	9
1901	28.5	- 5.4	71	-29	2.93	+0.86	4.43	6.9	8	11	7	13
1902	30.7	- 3.2	68	- 7	2.91	+0.84	2.50	3.1	8	10	4	17
1903	30.2	- 3.7	65	11	1.51	−0.56	1.80	2.3	5	16	7	8
1904	32.9	- 1.0	75	-10	1.50	−0.57	1.55	6.0	5	16	7	8
1905	33.3	- 0.6	66	- 2	1.45	−0.62	2.24	1.7	4	18	6	7
1906	36.1	+ 2.2	73	0	2.27	+0.20	2.85	0.6	8	8	6	17
1907	37.7	+ 3.8	76	3	1.84	−0.23	1.78	3.7	7	11	7	13
1908	38.4	+ 4.5	80	- 4	0.85	−1.22	1.35	T.	3	16	7	8
1909	24.9	- 9.0	76	-17	2.86	+0.79	2.50	7.7	8	12	6	13
1910	31.2	- 2.7	67	- 5	1.25	−0.82	2.85	2.4	4	16	5	10
1911	36.7	+ 2.8	74	-11	2.80	+0.73	2.00	5.1	7	13	6	12
1912	36.5	+ 2.6	72	2	0.59	−1.48	0.91	0.6	3	19	5	7
1913	38.3	+ 4.4	74	- 3	2.27	+0.20	2.25	6.6	7	9	4	18
1914	26.8	- 7.1	68	-18	2.48	+0.41	2.30	6.6	9	7	5	19
1915	34.7	+ 0.8	84	-13	2.77	+0.70	3.20	7.8	6	12	6	13
1916	31.3	- 2.6	82	-29	1.85	−0.22	3.40	4.4	6	15	6	10
1917	25.5	- 8.4	82	-23	0.74	−1.33	2.51	7.3	5	11	7	13
1918	40.0	+ 6.1	83	-12	3.21	+1.14	5.50	7.8	7	13	6	12
1919	28.5	- 5.4	74	-22	0.69	−1.38	2.65	0.7	3	12	4	15
1920	35.6	+ 1.7	77	-10	1.93	−0.14	2.30	2.3	5	13	7	11
1921	36.9	+ 3.0	74	- 8	1.86	−0.21	1.91	1.9	6	13	7	11
1922	38.3	+ 2.4	75	- 6	2.11	+0.04	3.04	0.2	6	15	6	10
1923	41.0	+ 7.1	82	- 4	3.06	+0.99	2.23	0.8	8	11	6	14
1924	27.7	- 6.2	80	-28	3.43	+1.36	4.20	4.6	7	13	6	12
1925	31.6	- 2.3	80	-10	1.45	−0.62	2.81	4.8	4	13	7	11
1926	32.6	- 1.3	75	-12	2.18	+0.11	2.00	2.4	6	11	5	15
1927	29.9	- 4.0	74	-11	2.68	+0.61	5.65	2.9	6	15	5	11
1928	36 2	+ 2.3	81	0	2.24	+0.17	3.10	1.4	5	14	6	11
1929	35.2	+ 1.3	76	- 9	1.66	−0.41	1.75	3.7	6	13	5	13
1930	34.2	+ 0.3	70	2	1.23	−0.84	1.62	1.9	5	15	6	10
1931	42.7	+ 8.8	80	11	2.57	+0.50	4.00	1.7	8	11	6	14
.....	....	.....	..	....	....	.....	....	....	..	..	..	..

Climatological Data for December, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	41.6	+11.0	67	30	21	14†	35	2.14	+0.49	0.80	2.5	9	13	0	18	ne.	O. K. Benecke
Clifton Hill	Randolph	731	32	40.2	+ 9.1	61	23†	15	14	37	2.10	+0.47	1.12	1.5	13	11	6	14	.....	Dr. A. J. Bradsher
Columbia	Boone	784	41	43.4	+10.2	65	18	25	14	25	2.52	+0.66	1.41	1.6	11	6	12	13	sw.	U. S. Weather Bureau
Downing	Schuyler	876	10	38.7	+ 9.1	60	18	13	14	28	2.88	+1.38	1.22	5.7	9	9	7	15	w.	James Taylor
Elsberry	Lincoln	449	0	42.0	.....	64	24	20	2	33	3.09	.....	1.39	0.9	7	7	15	9	se.	Ray E. Mills
Fayette	Howard	661	51	41.2	+10.0	65	23	20	2	39	2.31	+0.63	0.94	1.5	10	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	51	41.0	+ 7.3	65	18	19	2	37	2.31	+0.28	1.12	1.5	8	11	9	11	.....	Chamber of Commerce
Gorin	Scotland	700	42	....	.....	..	..	..	..	..	2.00	+0.34	0.86	6.1	9	11	3	17	sw.	J. W. Pulliam
Hannibal	Marion	534	39	41.6	+10.1	62	18	23	14	29	2.49	+0.95	0.66	4.0	12	10	6	15	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	43.4	+10.6	69	19	20	1†	37	2.88	+0.94	1.20	0	7	6	15	10	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	42	38.8	+ 9.2	57	19	16	14	23	2.31	+0.70	0.93	4.0	7	9	1	21	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	37	40.2	+ 8.7	60	18	18	2	30	3.80	+2.04	1.25	0.5	7	16	8	7	w.	Stark Bros. Nurseries
Macon	Macon	875	32	39.2	+ 8.8	57	20	18	14	29	2.34	+0.80	0.97	2.0	7	11	7	13	e.	W. C. Brown
Mexico	Audrain	800	42	40.6	+ 8.8	64	18	22	2†	32	2.24	+0.24	0.75	1.0	7	19	0	12	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	9	....	.....	..	..	..	..	..	1.78	+0.11	0.61	4.0	6	14	5	12	w.	J. S. Conway
St. Charles	St. Charles	456	43	42.1	+ 7.2	67	11	25	2	22	2.11	+0.23	0.66	0	7	10	9	12	se.	L. C. Saeger
St. Louis (1)	St. Louis City	568	57	45.2	+10.3	66	23	30	14	23	3.28	+1.07	0.87	0	10	7	7	17	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	19	44.4	+10.1	65	23	29	14	23	2.87	+0.39	0.76	0	10	7	5	19	w.	St. Louis University
Shelbina	Shelby	779	38	....	.....	..	..	..	..	..	2.00	+0.37	0.69	6.5	8	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	33	40.0	+ 9.4	60	19	18	14	29	3.32	+1.69	0.95	5.5	13	11	4	16	e.	Frank Hall
Unionville	Putnam	1,062	38	38.8	+11.4	60	19	12	14	25	3.65	+2.03	1.10	8.0	8	11	2	18	sw	Geo. W. Davis
Warrenton	Warren	816	49	44.4	+12.4	65	18	25	2†	26	2.22	+0.08	0.59	1.0	7	9	10	12	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	59	39.6	+10.0	60	18	20	14	24	2.01	+0.56	0.63	3.5	12	9	3	19	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	41.3	+ 9.7	69	19	12	14	39	2.55	+0.75	1.41	2.7	9	10	6	15	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	5	46.7	.....	73	11	23	7	30	4.32	.....	1.24	0	14	11	5	15	n.	Jeff. King
Caruthersville	Pemiscot	265	35	50.4	+10.4	72	12†	30	3	30	9.32	+5.04	4.00	0	14	10	5	16	n.	Sam Smith
Doniphan	Ripley	344	27	47.6	+10.2	75	11	19	15	39	5.45	+1.88	3.05	0	8	17	5	9	ne.	W. W. Martin
Jackson	Cape Girardeau	428	40	41.8	+ 5.2	64	23	18	15	26	5.53	+2.31	2.43	0	8	8	4	19	n.	John G. Putz
Marble Hill	Bollinger	470	36	46.0	+ 9.8	80	30	18	15	35	4.38	+0.87	2.32	0	8	9	5	17	n.	R. A. DeWitt
Morehouse	New Madrid	289	33	....	.....	..	..	..	..	..	3.66	−0.11	1.08	0	12	12	8	11	e.	John A. Spence
Poplar Bluff	Butler	329	27	45.8	+ 9.0	76	11	20	15	35	5.09	+1.15	2.20	0	10	12	6	13	w.	J. H. Wolpers
Sikeston	Scott.	318	30	48.6	+11.1	76	11	25	15	37	3.68	−0.17	1.20	0	12	13	1	17	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	56	47.8	+10.0	73	11	27	15	23	4.15	+0.75	1.72	0	11	4	9	18	ne.	U. S. Weather Bureau
Section means and	extremes	....	..	46.8	+ 9.4	80	30	18	15	39	5.06	+1.46	4.00	0	11	11	5	15	n.	
Ozark Plateau																				
Arcadia	Iron	926	49	42.0	+ 7.7	69	11	16	15†	36	2.19	−0.78	0.82	0	6	16	4	11	nw.	Arcadia College
Aurora	Lawrence	1,370	39	45.2	+10.1	69	23	21	2	32	1.22	−1.32	0.55	0	6	8	3	20	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	45.6	+ 9.8	70	23	20	15	32	3.61	+0.86	1.10	0	9	13	2	16	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	..	45.0	.....	67	23	23	2	35	0.98	.....	0.38	0	9	13	11	7	se.	B. H. Darby
Caplinger Mills	Cedar	750	3	....	.....	..	..	..	..	..	1.20	.....	0.57	0	4	2	16	13	s.	J. M. Atkinson
Dean II	McDonald	1,000	32	44.0	+ 6.6	70	23	15	15	40	0.50	−1.77	0.24	0	3	12	7	12	se.	H. E. Dean
Eldon	Miller	934	35	43.4	+ 9.1	67	23	23	2†	35	1.48	−0.60	0.66	T	5	6	10	15	sw.	E. H. Shepherd
Farmington	St. Francois	918	20	44.7	+ 7.7	70	11	19	15	33	2.86	+0.10	1.15	0	10	12	8	11	sw.	Robert Forsyth
Goodland	Iron	1,000	37	45.8	+11.4	71	11†	15	15	44	3.09	+0.54	1.20	0	7	13	5	13	s.	F. M. Adams
Greenville	Wayne	381	7	44.5	.....	73	11	16	15	35	4.83	+1.80	2.90	0	7	13	5	13	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	6	....	.....	..	..	..	..	..	1.21	−0.72	0.48	0	6	8	10	13	sw.	A. W. Madison
Koshkonong	Oregon	958	30	46.6	+ 9.0	71	23	24	2	25	3.98	+0.57	1.70	0	11	9	6	16	e.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	45.6	+10.6	69	23	19	2	33	2.74	+0.26	0.65	0	6	15	1	15	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	25	45.0	+ 9.5	68	23	22	2†	34	0.94	−1.12	0.35	0	7	12	11	8	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	30	43.8	+ 9.5	69	23	21	15	32	2.99	+0.51	0.92	0	8	14	7	10	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	44	45.4	+ 8.7	70	23	17	15	39	0.56	−1.93	0.18	0	6	9	11	11	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	30	44.8	+11.2	67	23	22	2	29	3.77	+1.61	1.05	0	10	5	11	15	w.	F. H. Lane
Salem (near)	Dent	1,173	27	45.4	+10.2	69	23	19	2†	36	3.69	+1.31	0.78	0	9	9	10	12	s	A. C. Leech
Seligman	Barry	1,542	29	44.6	+ 8.0	68	12	21	21	33	0.67	−1.83	0.19	0	7	15	3	13	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	25	44.0	+ 9.6	68	23	16	15	34	2.23	−0.08	0.73	0	6	13	3	15	s.	Ira H. Hailey
Springfield	Greene	1,324	43	44.8	+ 8.6	69	23	26	14	25	1.65	−0.66	0.82	0	8	13	6	12	se.	U. S. Weather Bureau
Section means and	extremes	.....	..	44.7	+ 9.3	73	11	15	15	44	2.21	−0.17	2.90	0	7	11	7	13	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	43.8	+ 9.5	65	30	21	14	31	1.12	−0.54	0.33	0.1	6	7	16	8	sw.	W. G. Bigelow
Clinton	Henry	765	38	42.6	+ 8.2	70	30	22	13†	28	1.62	−0.25	0.65	0	7	7	14	10	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	53	41.1	+ 9.9	66	30	20	14	31	1.37	−0.32	0.77	0	7	8	6	17	sw.	John H. Patterson
Lamar	Barton	980	44	44.2	+ 9.0	67	23†	22	15†	37	0.53	−1.45	0.35	0	3	15	7	9	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	42.3	+ 8.1	66	30	21	14	29	2.52	+0.77	1.00	T	9	9	10	12	sw.	J. E. Wheeler
Marshall	Saline	779	43	42.6	+11.0	67	31	22	14	28	2.03	+0.35	1.27	T.	4	14	7	10	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	38	44.6	+10.7	65	29†	22	2†	34	0.42	−1.41	0.20	0	3	11	10	10	s.	George A. Kaupp
Warrensburg	Johnson	878	44	42.6	+ 9.2	66	30	21	14	27	0.80	−0.96	0.55	0.5	5	12	8	11	sw.	E. A. Markey
Warsaw	Benton	687	30	44.8	+10.0	67	23	20	2†	34	1.74	−0.54	0.58	T	6	11	6	14	w.	Everett Martin
Section means and	extremes	.....	..	43.2	+ 9.5	70	30	20	2†	37	1.35	−0.48	1.27	0.2	6	11	9	11	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	38.4	+ 8.1	60	19	14	14	26	3.64	+2.39	1.61	8.0	7	15	2	14	sw.	A. S. Cumming
Chillicothe	Livingston	779	21	38.2	+ 2.6	59	19	15	14	33	3.17	+1.71	1.47	6.0	12	9	9	13	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	42	38.3	+ 9.0	58	18†	14	14	26	2.52	+1.58	1.59	5.5	7	9	5	17	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	11	37.4	+ 7.0	55	30†	18	14	23	2.85	+1.64	1.65	1.5	11	15	0	16	s.	Fred L. Stiff
Grant City	Worth	1,134	27	37.6	+ 9.9	54	19	14	14	23	3.28	+2.21	1.46	7.8	9	10	8	13	sw.	W. P. Spillman
Kansas City	Jackson	963	42	42.5	+10.0	66	30	24	14	21	2.54	+1.21	1.73	2.4	11	8	12	11	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	38	37.6	+ 7.9	60	19	15	14‡	34	2.45	+1.19	1.17	3.0	8	11	3	17	se.	Roscoe L. Terry
King City	Gentry	1,095	5	....	.....	..	..	..	..	..	2.90	+2.24	1.90	6.7	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	46	41.6	+10.1	68	29	22	14	35	1.84	+0.06	0.86	T.	10	10	12	9	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	41	37.8	+11.5	59	19	11	14	30	2.63	+1.63	1.35	5.2	7	10	3	18	e.	J. R. Brink
Oregon	Holt	1,048	75	40.6	+12.1	64	19	16	14	30	3.29	+1.92	2.10	5.5	8	14	5	12	sw.	Mina Wright
St. Joseph	Buchanan	987	23	40.0	+ 9.3	61	19	19	14	26	3.38	+2.27	2.27	3.9	11	13	5	13	se.	U. S. Weather Bureau
Tarkio	Atchison	916	28	37.0	+11.1	56	18	14	14	26	2.07	+1.19	1.56	6.0	3	11	3	17	se.	Albert Volker
Trenton	Grundy	822	35	39.8	+10.2	60	19	15	14	25	3.44	+2.05	1.64	4.0	10	12	6	13	s.	W. H. Estes
Section means and	extremes	.....	..	39.0	+ 9.2	68	29	11	14	34	2.86	+1.66	2.27	4.7	9	11	6	14	sw.	
State means and	extremes	.....	..	42.7	+ 8.8	80	30	11	14	44	2.57	+0.50	4.00	1.7	8	11	6	14	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for December, 1931

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri				.02					.59		.06		.13	.01							T.									.02	.49	1.32
Bowling Green	Mississippi									.47		.04			.27							.57									.92	.14	2.41
Brunswick	Grand				.03					.60		.20		.17	.15							.11		.06							.02	.80	2.14
Clifton Hill	Chariton				.04				.02	.36	.01	.08	.03	.21	.07					.01		.06		.01						.08	1.12	2.10
Columbia***	Missouri			.01					.57		.01	.04	.13	.11	T.				T.	.01	.03	.07		T.							.24	1.30	2.52
Downing	Mississippi				.08					.64	.02	.22		.23	T.							.04						.11			.32	1.22	2.88
Edina	do				.15					.50	T.	.12		.15	T.							T.							T.		.20	.65	1.77
Elsberry	do				T.				T.	.29		.28		.38	.06							.25									1.39	.44	3.09
Fayette	Missouri				.05					.66		.09		.15	.05					.02		.08	.02								.25	.94	2.31
Fulton	do				.03					.47		.02		.15	.04					T.		.20									.28	1.12	2.31
Gorin	Mississippi			.01						.57	.04	.13		.22								.06						.02			.09	.86	2.00
Hannibal***	do			.03	.03				.37	.29	.07	.05	.11	.21					T.	T.	.01	.15						T.			.66	.51	2.49
Hermann	Missouri			T.	.05					.57		.14		.40	.03					.03		.41									.55	.46	2.64
Jefferson City	do							.45		.20				.24	.12					.37										.30	1.20		2.88
Kahoka	Mississippi				.20					.68		.20			.14																.30	.70	2.22
Kirksville	do									.70	.01	.18		.24								.02									.23	.93	2.31
Knox City	do																																
LaBelle	do				.16				.25			.20		.10	.16							.10									.09	.50	1.56
Laddonia	do									.46				.12	.06							.76									.04	.58	2.02
LaGrange	do			.31					.65					.56								.23									.38	.56	2.69
Louisiana	do								.40		.10		.20	.15	T.							1.25								1.00		.70	3.80
Lucerne	Grand				.10					.61	.02	.28		.29		.27															.72	1.39	3.68
Macon	Chariton				.05					.46		.15		.35	.06																.30	.97	2.34
Memphis	Mississippi									.52	T.	.18		T.	.17					T.		T.	T.						T.	T.		.65	1.52
Mexico	do									.60		.25		.17						T.		.25		.02							.20	.75	2.24
Milan	Grand						.12	.35		.70		.58	.12	.43	.41							.12							T.		.78	1.03	4.64
Monroe City	Mississippi			.06						.61		.13		.26								.13										.59	1.78
New London	do				.08					.55		.10		.11	.28							.09	.06								.60	.34	2.21
Pacific	Meramec				.42					.55		.37		.24	T.					.05		.10									.45	.37	2.55
Palmyra	Mississippi			**	**				**	**	***	***	***	**						1.17		.10									.60	.15	2.02
Paris	do				.05					.65		.08			.25							.26									.03	.65	1.97
Perry	do			.05						.48	T.	.05		.15	.02							.19										.04	0.98
Philadelphia	do				.05					.55		.29		.10	.26								.05									.62	1.92
Plevna	do				.08					.65		.31		.16	.11																.17	.58	2.06
St. Charles	Missouri			.12	.15				T.	.36				T.						.45	.12		T.	T.							.66	.25	2.11
St. Louis (1)***	Mississippi			.18					.37	T.	.38	.01	.09	.24					T.	T.	.01	.73								T.	.87	.40	3.28
St. Louis (2)*	do			.13	.07				.35		.41	.01	.04	.24				T.		T.	T.	.34								T.	.76	.52	2.87
Shelbina	do				.09					.69		.21		.16		.16						.04									.01	.64	2.00
Steffenville	do		.10	.10	.22					.92	.05	.25		.23	.05					.05		.10		T.				.05			.25	.95	3.32
Troy	do									.40		.22		.30								.65									.75	.18	2.50
Union	Meramec				.26					.56		.44		.35	.06							.11									.82	.35	2.95
Unionville	Chariton				T.					.70	.45	.30		.50	.10							.10									.40	1.10	3.65
Valley Park	Meramec				.45					.53		.36		.19	T.					T.		.35									.66	.21	2.75
Warrenton	Mississippi			T.	.06				T.	.52		.15		.30	T.							.18									.59	.42	2.22
West Ely	do			T.					.97		T.		.06	.12					T.		T.	.09								.50	.43	.32	2.49
Winfield	do						.10		.45		.30			.23								.20								.90	.45		2.63
Keokuk, Ia.***	do			.18	.02				.32	.31	.09	.14	.01	.16	T.					T.	T.	T.						.05	T.	T	.28	.39	2.01
Southeast Lowlands																																	
Campbell	St. Francis			.22					.35	.10	.01	.33	.02	1.22	.06					.05	.29	.02	.02								1.24	.39	4.32
Cape Girardeau	Mississippi			.08	.20					.06		.18		.84	.04							.46	.01								1.38	.84	4.09
Caruthersville	do			.15	.15					.15		.40	.05	4.00	.10					.02	.06	.20	.04		.50						.80	2.40	9.32
Dexter	St. Francis			.11	.20					.30		.60		1.03	.16								.15	.01							1.49	.27	4.32
Doniphan	Black			.28	T.				.12		T.	.22		.78						.10		.28								3.05	.62	5 45
Fisk	St. Francis			.11	.24				.10	.13		.73		.72	.15			T.	.03	.02		.63	.04								1.72	.56	5.18
Jackson	Mississippi			.35					.16			.52		.72					.02			.98									2.43	.35	5.53
Marble Hill	do			.12					.12	.08				.68	.14							.62									2.32	.30	4.38
Morehouse	do			.25	.14				.11	.08		.33		1.08	.16			T			.01	.16	.01								.88	.45	3.66
New Madrid	do			.11	.41				.04	.34		.33	.03	1.44	.12						.12	.21	.03								.28	1.83	5.29
Parma	St. Francis			.15	.22					.25		.20		1.28	.10							.14									.48	.75	3.57
Poplar Bluff	Black			T.	.30				T.	.22		.36		.67	.11						.10	.47	.05								2.20	.61	5.09
Sikeston	Mississippi		.10	.20					.25		.42		1.00	.20				.03	.02		.16	.03									.49	.78	3.68
Cairo, Ill.***	do			.50	T.				.17	.01	.02	.29	.13	1.06	.01			T.	T.	T.	T.	.18	T.	T.				T.			1.41	.37	4.15
Ozark Plateau																																	
Arcadia	St. Francis									.14			.35			.25					.25										.82	.38	2.19
Aurora	Neosho								.42	.08	.04	.08		T.								T.									.55	.05	1.22
Birchtree (near)	Black			.28						.22		.62		.32						.12		.12	.11								1.10	.72	3.61
Buffalo	Osage			.02					.38	.09	.02			.22							.10	.07								.05	.08	0.98
Caplinger Mills	do								.27	T.	T.		.13	T.							T.	.23								.57		1.20
Chaonia	St. Francis			.05	.24				.05	.21	.02	.33		.59	.07						.13	.33	.04								2.25	.72	5.03
Dean	Neosho			T.					.24	.08	.18			T.					T.	T.	T.	T.	T.									T.	0.50
Eldon	Missouri									.51		.11		.10	T.																.10	.66	1.48
Farmington	St. Francis			.19	.05				.03	.14		.52		.25						.02		.10		T.							1.15	.41	2.86
Fredericktown	do			.36	.06					.27		.64		.44	.14							.22									2.00	.08	4.21
Galena	White									.65		.07										.06	.03								.38	.72	1.91
Goodland	Black			.12						.42			.50	.43								.20									1.20	.22	3.09
Greenville	St. Francis			.40					.20		.60			.25							.23										2.90	.25	4.83
Hailey	White						.13								.20		.48					.21						.11		.08			1.21
Koshkonong	Black			.20					.09		.04	.30		.27						.18	.08	.12	.17								1.70	.83	3.98
Lebanon	Osage							.65	.30	.16				.64						T	T.	T.									.45	.54	2.74
Leeper	Black			.10	.12					.28			.38	.28								.29	.09								1.82	1.08	4.44
Lockwood	Osage			T.					.35	.10		.02		.22								.04									.18	.03	0.94
Mountain Grove	White			.17	.06					.47		.92		.17							T.	.30	T.								.40	.50	2.99
Neosho	Neosho			.05					.18	.12	T.	.08		T.	T.							T.	.08								.05	T.	0.56
Owensville	Gasconade				T.					.62		T.		.45	T.							.12									.51	.82	2.52
Ozark Beach	White				.10					.42		.82		.11																	.29	.84	2.58
Rolla	Meramec				.17				.04	.65		.25		.15	.02					.08		.37									1.05	1.04	3.77
Salem (near)	do			.31	T.				.03	.44		.67		.43								.40	.05								.58	.78	3.09
Seligman	Neosho			.03					.19	.15	.06	.10		T.					.04			T.									.10	T.	0.67
Seymour (near)	White			.11						.71		.22		.19	T.				T.												.73	.27	2.23
Springfield***	do		T.	T.					.46	.01	.12	T.	.02	T.					T.	T.	.16	.03								T.	.82	.03	1.65
Steelville	Meramec			.07	.09					.52		.64		.36								.19									.43	.97	3.27
Stover	Missouri										.24	.18										.08									.04	.70	1.24
Tuscumbia	Osage									.43		.04		.28	T.					T.		.10									.34	.76	1.95
Williamsville	Black			.23	.05				.07	.29		.46			.50					.04	.03	.25									2.04	.96	4.92
Willow Sprgs. (near)	White			.30	.15					.45		.42		.30	.04						.09	.14	.02								.86	.41	3.18

Continued on next page

Daily Precipitation for December, 1931—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																																	
Appleton City	Osage			T.					.10	.18		.03		.20						T.		.28									T.	.33	1.12
Clinton	do			.04					.32			.10		.16								.33									.02	.65	1.62
Concordia‖	Missouri								.58					.12																	1.10	1.80
Harrisonville‖	Osage				.01					.35		.11		.05						.01		.07										.77	1.37
Joplin‖	Neosho								.38	.03	.03		.22	.05					.02												.10		0.83
Lamar‖	do									.35		T.		.15																.03			0.53
Lamonte	Missouri			.07					.14	.43		.20	.03	.20								.20								1.00	.25		2.52
Marshall	do									.60				.10								.06										1.27	2.03
Nevada	Osage								.20	.12		T.	T.	.10								T.										T.	0.42
Osceola‖	do				.04					.36		.03		.12								.25									.09	.50	1.39
Warrensburg	Missouri			T.						.09		.06		.07								.03										.55	0.80
Warsaw	Osage			T.					T.	.37		.10		.16								.46									.07	.58	1.74
Waverly ‖	Missouri				T.					.44		.14		.15						.11		.13	T.								.10	.50	1.57
Northwest Plateau																																	
Albany‖	Grand																																
Bethany	do			T.	.09				T.	1.00	T.	.14		.50								.08									.22	1.61	3.64
Chillicothe‖	do	T.			.09	.01	T.			.37	.01	.19		.25	.21					T		.01	.01		T.			T.	.01		.54	1.47	3.17
Conception	Missouri				.01				T.	.16	.06	.37		.14								T.								T.	.19	1.59	2.52
Edgerton	do			.03	.02				.11	.50	.01	.14	.10	.24							T.	.04							.01		T.	1.65	2.85
Gallatin ‖	Grand				.15					.56		.15		.25	.10																.30	.99	2.50
Grant City	do			.12	.20				.08	.48	.07	.52		.10						T.		.06									.19	1.46	3.28
Kansas City***	Missouri			.04	.02	T.			.44	.05	.04	.05	.04	.02					T.	T.		.07									.42	1.35	2.54
Kidder	Grand				.15					.12	.38	.18		.30	.08																.07	1.17	2.45
King City	Missouri				.05				.03	.45	.04			.31								.03									.09	1.90	2.90
Lexington ‖	do				.05					.32		.20		.18	.08					.01		.05	.03								.06	.86	1.84
Maryville	do				T.				T.	.40	.04	.39		.40								.04	T.	T.					T.	T.	.01	1.35	2 63
Oregon	do				.14				.06	.45	.06	.36		.07								.05									T.	2.10	3.29
St. Joseph***	do			.03	.03	T.			.52	.06	.17	.03	.17	.03					T.		T.	.02	T.							T.	.74	1.58	3.38
Tarkio	do									.41				.10																		1.56	2.07
Trenton	Grand				.08	.01				.42	.04	.21		.39	.04							.02						T.			.59	1.64	3.44

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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MISCELLANEOUS PHENOMENA

Fogs, dense.—3d, 5th, 6th, 10th, 13th, 15th, 16th, 18th, 19th, 20th, general and all-day on 21st, 23d, 24th, 25th, and 28th.

Halos, lunar.—16th, 17th, 19th, 21st 22d, 23d, 26th, and 27th.

Halos, solar.—6th, 7th, 12th, 14th, 19th, 23d, 26th, 28th, and 30th.

Sleet, light.—3d, 8th, 9th, 13th, and 31st.

Thunderstorms.—12th, 13th, 21st, and 30th.

No high winds.

ERRATA

Report for November page 52: Caruthersville, mean temperature 58.4. Clinton, days clear, partly cloudy and cloudy, 10, 8, 12. Doniphan, days cloudy, 13. Louisiana, days cloudy 11. Marshall, highest temperature 80° on 8th. Poplar Bluff date of highest temperature 7th. St. Louis University, days clear and cloudy 13, 13.

Daily Temperatures for December, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	51	50	50	42	43	50	49	43	44	57	58	46	42	45	54	55	60	59	64	57	60	61	66	47	36	54	55	42	51	67	46	51.7
	Minimum	26	24	28	30	35	28	26	26	33	33	43	30	33	21	21	26	25	27	35	27	39	37	37	37	29	33	36	34	34	41	40	31.4
Columbia	Maximum	44	46	43	43	46	46	44	40	45	55	59	50	42	41	50	49	54	65	58	57	58	60	63	56	51	55	50	45	54	60	54	51.1
	Minimum	29	26	33	37	31	30	29	33	33	43	42	35	28	25	26	29	29	42	47	42	42	38	47	38	30	36	38	35	39	51	43	35.7
Fayette	Maximum	48	47	44	42	43	50	45	42	44	57	59	52	40	43	51	50	58	64	60	60	56	59	65	59	54	57	51	45	53	63	45	51.8
	Minimum	26	20	21	33	36	25	25	26	32	33	39	29	33	21	23	23	24	25	35	38	40	33	35	38	26	26	30	34	35	41	41	30.5
Hannibal	Maximum	42	45	40	42	48	45	39	38	38	54	59	45	41	38	49	49	56	62	60	48	56	55	58	57	48	52	50	43	46	49	48	48.4
	Minimum	29	24	30	36	33	30	29	30	33	37	39	33	30	23	29	32	30	33	47	38	43	40	44	40	30	34	40	40	39	45	40	34.8
Jefferson City §§	Maximum	48	42	49	54	50	42	45	60	62	51	56	51	43	44	51	62	62	59	69	63	64	61	54	49	54	54	51	51	62	62	51	54.1
	Minimum	20	20	33	31	28	28	31	38	43	31	29	28	34	25	25	25	30	40	47	41	43	38	38	33	29	29	34	33	34	38	40	32.8
Kirksville	Maximum	48	43	43	39	41	44	41	35	36	49	55	48	39	39	45	51	54	54	57	54	49	55	50	49	47	50	48	44	45	45	45	46.4
	Minimum	28	25	29	30	28	27	25	27	30	33	44	28	30	16	24	29	29	32	44	33	39	36	40	37	27	32	36	30	34	35	34	31.3
Louisiana	Maximum	40	42	45	43	45	42	40	37	40	52	55	53	45	42	45	45	44	60	57	47	50	50	47	49	50	50	50	40	50	52	53	47.1
	Minimum	30	18	22	37	35	30	25	30	32	37	50	27	40	24	26	22	24	30	44	33	40	34	33	40	37	30	37	40	38	47	44	33.4
Macon§§	Maximum	45	42	43	39	42	44	39	37	42	56	52	43	36	39	45	48	51	53	57	53	53	55	55	43	49	52	52	40	48	51	43	46.7
	Minimum	29	26	27	33	32	27	26	28	31	32	41	30	32	18	19	19	28	30	45	35	41	36	37	37	29	33	35	35	35	39	37	31.7
Mexico §§	Maximum	44	45	42	42	49	45	42	40	43	56	59	47	41	40	47	49	55	64	59	54	60	56	62	45	50	52	54	40	49	54	48	49.5
	Minimum	27	22	26	34	35	28	26	26	30	34	41	29	31	22	23	25	26	32	37	37	39	37	38	43	28	22	34	35	35	37	40	31.6
St. Louis(1)	Maximum	42	45	44	48	49	46	46	39	45	55	66	54	46	42	48	50	53	57	59	56	61	57	66	64	46	51	54	45	50	54	57	51.5
	Minimum	34	31	35	39	38	32	32	31	36	44	47	41	35	30	31	35	37	40	51	46	49	44	46	41	37	34	38	40	37	48	44	38.8
Unionville	Maximum	38	45	50	43	40	48	40	40	38	50	52	45	40	36	45	50	55	50	60	56	48	56	52	50	50	53	54	47	42	45	45	47.2
	Minimum	30	24	26	30	30	26	24	26	30	33	40	30	26	12	22	26	30	32	40	31	34	36	40	40	26	30	34	30	35	40	32	30.5
Warrenton	Maximum	42	46	41	43	51	52	45	39	44	54	63	55	49	43	52	54	58	65	59	59	62	62	63	63	52	53	53	49	51	54	55	52.6
	Minimum	29	25	28	36	36	28	29	30	32	41	49	33	39	25	27	31	32	48	49	41	46	38	43	41	31	32	39	36	35	46	44	36.1
Southeast Lowlands																																	
Campbell	Maximum	46	49	46	54	53	55	53	45	48	56	73	62	61	56	51	48	50	57	56	59	63	57	72	64	54	58	61	57	63	61	57	56.3
	Minimum	35	24	35	32	24	28	23	35	38	42	49	41	51	29	24	25	37	46	47	52	47	38	52	50	28	28	32	30	33	50	44	37.1
Caruthersville	Maximum	51	48	53	47	55	53	54	53	48	47	59	72	72	61	59	44	46	52	66	66	62	62	58	70	70	65	53	60	60	68	65	58.0
	Minimum	41	40	30	41	36	35	34	32	40	41	46	53	45	52	35	31	35	43	49	53	52	55	43	58	55	35	38	45	39	44	55	42.9
Doniphan	Maximum	49	50	44	57	56	56	53	45	49	52	75	72	57	52	52	47	52	66	59	60	62	64	74	67	52	57	66	59	60	62	58	57.5
	Minimum	37	20	37	31	25	25	21	37	39	45	50	33	50	31	19	25	42	48	51	53	47	46	47	47	45	26	34	26	36	54	43	37.7
Jackson	Maximum	43	43	40	41	45	46	45	40	42	49	63	59	59	47	40	40	48	50	53	54	58	50	64	63	46	49	52	50	55	55	52	49.7
	Minimum	31	19	27	30	22	26	20	32	33	40	47	35	35	29	18	22	31	38	46	47	49	40	48	45	30	25	36	29	29	49	44	33.9
Poplar Bluff §§	Maximum	51	46	47	55	56	55	47	51	58	76	64	54	50	52	47	51	55	56	62	58	65	72	68	57	57	63	50	62	60	55	53	56.5
	Minimum	30	22	35	32	25	26	23	37	38	45	45	40	48	30	20	30	30	42	43	43	46	43	40	34	28	28	33	28	35	50	42	35.2
Sikeston	Maximum	53	47	48	48	52	52	53	50	48	55	76	74	60	54	50	50	52	55	57	58	58	58	70	71	68	55	58	58	62	62	57	57.1
	Minimum	36	26	34	34	31	32	33	37	38	44	51	43	50	33	25	31	39	47	50	52	55	41	54	54	31	31	38	32	37	54	48	40.0
Cairo, Ill	Maximum	42	48	46	47	50	51	50	42	47	59	73	59	61	43	48	44	52	55	57	61	62	58	70	65	50	54	57	50	63	59	58	54.2
	Minimum	38	28	37	38	34	36	32	37	42	44	55	46	43	35	27	35	40	49	53	54	51	44	58	42	39	36	43	38	42	53	44	41.5
Ozark Plateau																																	
Arcadia §§	Maximum	43	48	43	51	51	51	50	41	45	62	69	61	51	45	52	47	52	53	59	59	59	54	68	56	53	52	55	48	59	56	54	53.1
	Minimum	31	18	18	34	21	21	24	30	33	38	42	30	30	29	16	16	28	34	43	45	48	36	35	49	24	23	23	32	30	35	45	31.0
Aurora	Maximum	41	43	45	59	53	49	50	46	46	57	63	64	57	43	50	46	50	56	58	61	57	65	69	64	58	55	49	62	63	60	53	54.6
	Minimum	31	21	33	31	30	27	26	36	36	40	47	33	30	23	22	31	36	47	47	50	40	38	52	35	30	36	40	30	44	52	32	35.7
Birchtree	Maximum	44	49	45	54	56	52	53	44	45	52	67	65	58	46	52	45	47	57	57	55	57	58	70	66	57	55	59	55	58	57	55	54.5
	Minimum	34	21	34	41	27	29	23	37	37	43	48	37	42	32	20	27	40	43	47	48	34	40	48	43	27	29	40	27	46	53	41	36.7
Eldon§§	Maximum	45	52	45	42	54	50	50	41	45	60	68	54	40	45	53	53	60	64	59	60	60	63	67	50	56	57	51	51	61	63	52	53.7
	Minimum	30	23	23	33	30	27	27	27	34	39	44	33	32	30	26	25	30	29	44	42	42	36	36	43	27	27	32	33	33	44	44	33.1
Farmington	Maximum	40	48	43	45	52	49	51	40	46	51	70	59	50	44	52	49	53	58	62	60	61	57	69	62	51	55	54	47	59	57	54	53.2
	Minimum	30	20	27	34	24	29	29	32	34	42	48	36	42	30	19	27	32	40	49	48	51	38	48	45	32	28	37	36	36	53	46	36.2
Koshkonong	Maximum	43	49	42	45	55	52	50	44	46	50	69	67	60	44	51	44	50	52	56	57	59	57	71	64	56	57	71	64	56	57	56	54.1
	Minimum	35	24	35	38	31	30	31	35	37	43	49	53	43	31	28	33	40	47	49	51	46	37	49	47	32	32	40	32	40	53	38	39.0
Lebanon	Maximum	43	48	42	62	55	50	45	45	56	62	61	62	58	41	51	50	56	65	56	63	58	58	69	61	57	54	48	58	57	60	58	55.1
	Minimum	28	19	31	34	30	37	35	34	39	43	47	48	30	23	21	28	31	40	47	45	49	47	41	35	24	33	39	27	43	52	38	36.1
Mountain Grove	Maximum	46	51	38	55	55	52	54	42	46	58	64	63	45	47	52	45	52	52	59	59	57	59	69	55	55	53	55	54	56	55	47	53.2
	Minimum	31	25	30	32	30	26	28	35	35	37	42	36	40	28	21	25	33	37	45	47	50	36	37	42	28	32	34	30	31	41	39	34.3
Neosho	Maximum	44	43	43	55	56	51	51	47	48	56	67	65	63	41	48	46	52	56	62	62	60	64	70	66	65	59	61	65	63	65	58	56.5
	Minimum	33	19	31	27	26	24	21	38	37	42	45	30	33	20	17	30	38	47	47	50	35	36	52	38	26	30	44	26	47	51	27	34.4
Rolla	Maximum	41	49	44	49	53	51	50	47	45	55	60	59	55	40	46	50	57	55	56	59	62	58	67	64	51	53	51	52	60	57	56	53.3
	Minimum	31	22	31	36	29	28	27	35	35	43	49	35	36	29	24	29	31	41	53	46	33	38	47	43	29	33	43	34	42	54	43	36.4
Springfield	Maximum	43	46	41	53	52	47	50	42	45	57	62	60	50	41	47	50	53	54	57	60	55	63	69	54	54	52	48	55	58	58	43	52.2
	Minimum	32	28	36	34	30	28	31	36	36	41	44	39	29	26	28	35	40	47	47	50	43	38	50	40	34	38	38	32	48	43	36	37.3
Southwest Plain																																	
Appleton City	Maximum	39	46	42	41	36	50	49	44	45	55	60	56	53	40	49	51	55	59	58	61	58	61	64	58	59	50	49	55	57	65	58	52.4
	Minimum	29	24	32	31	32	25	27	38	37	41	48	35	30	21	23	28	31	40	47	42	46	36	47	38	31	36	39	24	43	54	38	35.3
Clinton	Maximum	35	37	40	46	35	44	42	40	43	56	58	56	50	38	45	38	54	55	53	58	63	62	60	60	55	58	56	50	55	70	56	50.6
	Minimum	28	23	28	33	31	25	25	36	37	38	46	35	22	22	22	27	32	38	38	45	46	46	50	38	28	30	41	25	43	55	40	34.6
Harrisonville§§	Maximum	44	47	46	35	33	49	47	42	45	57	57	50	34	44	50	52	57	50	60	57	56	58	61	53	56	56	50	49	58	66	44	50.4
	Minimum	26	24	25	32	31	24	26	27	33	35	41	33	31	20	21	25	29	31	42	40	41	37	39	36	30	33	35	25	27	46	41	31.8
Lamar§§	Maximum	43	46	43	53	40	48	52	44	51	66	61	62	44	45	49	49	57	61	61	65	56	64	67	54	61	60	54	65	65	67	49	54.9
	Minimum	32	23	23	31	31	26	25	25	38	40	47	35	38	23	22	22	33	35	48	48	42	39	41	37	29	31	36	28	33	49	33	33.6
Lamonte	Maximum	44	46	46	39	37	47	46	46	44	54	57	49	45	42	50	53	54	54	58	57	54	57	63	50	57	58	49	45	56	66	65	51.2
	Minimum	27	24	34	35	31	27	26	36	32	41	38	33	30	21	24	27	29	29	40	40	42	37	43	38	28	34	37	31	41	41	40	33.4
Marshall	Maximum	50	51	47	46	40	42	47	46	49	54	59	50	45	45	50	49	55	56	57	57	58	58	63	60	56	54	54	56	54	61	67	52.8
	Minimum	27	27	28	32	33	30	27	28	30	31	48	32	28	22	27	29	27	36	35	36	38	37	39	37	33	28	30	31	41	40	40	32.5
Nevada	Maximum	42	45	48	41	38	48	51	45	55	56	62	59	52	41	48	49	56	59	57	64	58	61	64	56	59	57	51	62	65	65	51	53.7
	Minimum	30	22	29	32	34	26	26	38	38	42	43	36	34	22	24	30	30	39	47	42	44	39	50	37	30	37	41	28	48	50	33	35.5
Warrensburg	Maximum	42	45	45	40	37	47	47	44	44	55	59	59	48	40	46	52	52	52	53	58	55	57	61	58	55	57	49	48	57	66	57	51.1
	Minimum	27	27	29	33	30	26	28	35	31	39	45	32	28	21	26	29	28	36	44	36	47	38	41	38	29	35	38	29	38	51	40	34.0
Warsaw	Maximum	46	48	44	45	39	50	51	47	45	57	63	57	56	43	51	53	61	63	60	64	63	62	67	65	58	58	51	54	54	66	60	54.9
	Minimum	29	20	31	34	28	26	23	38	37	41	50	30	31	23	20	26	27	35	49	38	49	38	44	40	26	32	43	27	44	55	41	34.7
Nrthwest Plateau																																	
Chillicothe §§	Maximum	48	45	49	36	37	46	39	41	43	55	52	42	33	40	51	51	55	52	59	55	51	57	49	45	53	54	47	42	49	52	39	47.3
	Minimum	26	21	23	32	31	25	23	23	30	31	41	29	29	15	18	24	23	23	34	30	32	35	36	35	25	31	39	30	33	40	34	29.1
Grant City	Maximum	42	44	46	42	31	42	38	39	42	48	52	42	32	37	42	44	47	52	54	52	49	48	47	46	49	51	46	35	46	43	42	44.2
	Minimum	27	26	26	29	29	26	25	30	31	34	39	29	24	14	23	27	27	34	42	32	42	37	38	35	28	34	35	31	34	41	32	31.0
Kansas City	Maximum	43	47	47	36	35	46	47	43	44	56	57	42	38	41	49	49	54	54	59	54	55	53	60	48	56	57	48	47	57	66	47	49.5
	Minimum	30	32	32	29	30	31	34	33	33	44	41	34	28	24	32	34	35	38	46	38	46	40	40	38	35	41	36	28	38	47	35	35.5
Kidder	Maximum	44	46	50	35	35	43	38	40	42	54	52	39	30	38	49	50	52	53	60	53	52	52	50	42	51	53	46	40	50	52	38	46.1
	Minimum	25	24	23	26	29	25	25	25	30	31	41	29	27	15	15	24	25	27	32	30	32	35	37	35	31	31	34	32	32	37	37	29.1
Lexington§§	Maximum	48	49	37	37	43	47	43	45	57	56	48	35	45	52	49	54	59	55	58	58	54	62	49	57	58	51	47	55	68	42	42	50.3
	Minimum	27	28	28	32	34	28	28	29	32	35	43	33	33	22	23	28	28	30	38	37	38	39	38	38	31	32	37	33	33	42	42	32.9
Maryville	Maximum	47	47	48	43	31	45	36	41	38	49	52	41	33	41	50	50	52	55	59	57	50	50	45	45	54	55	49	38	43	46	51	46.5
	Minimum	21	20	22	26	27	25	21	30	30	34	38	27	24	11	20	24	24	27	41	31	42	36	39	34	29	35	33	26	33	41	31	29.1
Oregon	Maximum	49	48	46	41	32	48	45	45	39	52	54	41	36	42	51	52	57	62	64	61	52	51	49	47	57	55	50	47	48	51	49	49.1
	Minimum	23	27	28	26	28	26	27	33	32	38	38	30	25	16	25	28	29	33	43	31	47	39	41	35	31	41	35	28	34	46	32	32.1
St. Joseph	Maximum	46	46	47	35	32	44	42	44	41	55	55	40	34	40	49	49	54	58	61	56	53	48	52	46	55	55	47	44	50	55	44	47.6
	Minimum	25	28	31	28	28	28	27	32	32	41	36	32	25	19	27	29	28	34	42	33	42	41	40	35	33	38	30	29	36	44	32	32.4
Trenton	Maximum	46	45	51	38	36	44	37	43	48	52	50	41	39	39	48	49	53	55	60	55	52	54	48	45	52	50	54	48	50	49	44	47.4
	Minimum	29	23	28	34	30	28	26	30	32	36	38	31	28	15	27	29	28	30	44	34	43	36	40	36	28	28	41	33	32	44	34	32.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

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UNIVERSITY OF ILLINOIS

GEORGE REEDER, Meteorologist

VOL. XXXV COLUMBIA, MO., YEAR, 1931 No. 13

GENERAL SUMMARY

The years 1901 and 1930, just thirty years apart, are distinguished in the climatological history of Missouri for their unprecedented dryness; and 1921 and 1931, just ten years apart, will stand out in future as the years of high average warmth. There is little difference in the average temperature values of these two years, the former being accredited with 58.2° and the latter just even 58°. This close agreement also is shown when the accumulated excesses in temperature are used. Using Columbia as an example, situated near the center of the State, the accumulated excess in temperature, for 1921 was 1490°, and for 1931, 1458°.

September was the warmest on record, and February and December were the second warmest on the records. January and February, and September to December, inclusive, six months, averaged 6.8° above normal temperature. March, April, May and August averaged cooler, and June and July warmer than normal. About 13 days in June, 18th to the 30th, made one of the hottest spells of average heat of record for June.

The precipitation for the first seven months was more than 4 inches behind the normal; but the rains of the last five months of the year more than equaled the accumulated deficiency of the preceding seven months, and brought the year to a close showing a small plus departure.

The rains of the last five months along with the unusually long growing season, killing frosts being delayed until the first week of November, greatly helped most Missouri crops, and in spite of some adverse summer weather, yields were fair to more than fair.

TEMPERATURE. The annual mean for the State was 58.0°, or 3.2° above the normal.

The highest annual mean was 63.3°, at Caruthersville.

The lowest annual mean was 54.7°, at Kidder.

The highest temperature recorded during the year was 110°, at Clinton on July 29th; and the lowest was −5°, at Goodland on January 15th.

PRECIPITATION. The average precipitation for the State was 40.36 inches, or 0.89 inch more than the 60 years' average.

The greatest annual amount was 52.27 inches, at Trenton; and the least annual amount was 29.89 inches, at Clifton Hill.

The greatest local monthly fall was 11.00 inches, at Buffalo, in August; and the least local monthly amount was 0.07 inch, at Fulton, in January.

The greatest fall in any twenty-four consecutive hours was 7.47 inches, at Joplin on July 20th.

The average number of rainy days for the year was 96.

The average snowfall for each section was as follows: Northeast, 19.0 inches; southeastern lowlands, 5.2 inches; Ozark Plateau, 8.9 inches; southwestern plain, 14.0 inches; northwestern plateau, 22.3 inches, and for the State, 14.8 inches. The greatest annual snowfall was 35.0 inches, at Unionville; and the least was 1.7 inches, at Caruthersville. The greatest local monthly snowfall was 22.2 inches, at Lexington, in March.

THE WEATHER BY MONTHS

JANUARY.—With a mean temperature of 36.0° or 5.5° above the normal, the first month of the year was unusually warm for winter. However, the Januarys of 1914, 1921, and 1923 were all considerably warmer. The highest temperature for the current January was 76° and not unusual; the lowest was −5° and other Januarys have had higher minima. There were no cold waves. The month was comparatively dry, and there was little snow. It was an ideal winter month for outdoor pursuits.

FEBRUARY.—Unusually mild and bright and the same brand of weather put out by the two preceding months. The mean temperature was 40.9° or 8.5° warmer than normal. The highest temperature was 75°, and the lowest 5°. There were no cold waves. The precipitation was slightly more than the normal, but the snows were of little importance. Oat sowing started early. General plowing and spring farmwork were well ahead; and winter grains looked well.

MARCH—Mainly colder than normal, averaging 4.4° below the normal, and actually 1° colder than than the preceding month of February. The highest temperature was 70° and lowest was 10°. The precipitation approximated the normal and was fairly well distributed. Heavy general snow on the 6th and 7th, and over the northern half on the 27th added greatly to the soaking qualities of the month's precipitation. Wheat made excellent growth; and oats germinated well. Fruits were normally advanced and in satisfactory condition.

APRIL.—Nearly normal as to temperature, 54.0°; but a little drier than usual, 3.07 inches as compared with a normal of 3.81 inches. The highest temperature was 90° and the lowest was 22°. There were four frosty nights during the middle of the month, but fruits escaped with little injury. There were outdoor workable intervals between the showers which were geographically well distributed. Grain and grass crops were favored and field work was well in hand.

MAY.—Mainly cool throughout the State; average temperature 61.0°, or 3.4° below the normal. The highest temperature was 96° and the lowest 29°. The precipitation was 4.51 inches, slightly under the normal. Showers came at favorable intervals and it doubtless was the best watered month in a year or more. Except a little too cool for rapid corn growth most crops make satisfactory growth.

JUNE.—Rather a hot, dry month. The hottest June since 1918, and the driest since 1922. The 13 days from the 18th to the 30th made one of the hottest continuous spells of record, although the maximum, 107°, has been exceeded. The precipitation was only 2.94 inches, poorly distributed and insufficient for needs, particularly for the Ozark Plateau and southwestern plain. By the last week of the month late planted crops and vegetation were showing the general effects of the dry and hot weather.

JULY.—Mainly a hot month over most of Missouri, though neither as warm nor as dry as July, 1930. The maximum temperature was 110° and higher than usual but 6° under the absolute maximum for this month, occurring in 1901. Wheat and oats gave fine yields. Other crops suffered more or less owing to whether they were on the lighter or heavier soils; and a general hot wind on the 28th added something to this.

AUGUST.—The opening days were hot and dry but the larger part of the month was cooler and wetter than normal. The mean temperature was 74.9°, or 1.1° cooler than normal. The

(Continued on Page 65.)

Climatological Data for Year, 1931

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain.																				
Brunswick	Chariton	652	51	58.8	105	June 25	5	Jan. 14	53	36.98	7.00	Nov.	0.77	Jan.	21.2	115	210	23	132	se.
Clifton Hill	Randolph	731	33	56.4	105	July 28	0	Jan. 14	23	29.89	4.93	May	0.54	Jan.	23.2	119	175	68	122	.....
Columbia	Boone	784	42	58.2	102	July 29	5	Jan. 14	42	43.30	8.86	Aug.	0.28	Jan.	17.2	110	141	99	125	s.
Downing	Schuyler	878	11	55.6	103	July 29†	1	Jan. 14	23	47.20	7.06	May	0.51	Jan.	27.2	119	172	97	96	s.
Elsberry	Lincoln	449	1	57.4	105	July 1	2	Jan. 14	1	36.09	5.58	May	0.38	Jan.	13.3	78	130	104	131	s.
Fayette	Howard	661	52	57.2	105	July 29	5	Jan. 14	49	32.16	4.77	Nov.	0.39	Jan.	15.9	106	...	...	...	.....
Fulton	Callaway	818	44	56.5	102	July 1†	6	Jan. 14	40	39.07	6.30	May	0.07	Jan.	18.5	107	174	94	97	.....
Gorin	Scotland	700	..	....	...	.....	....	.....	45	47.02	9.13	Sept.	0.09	Jan.	27.2	100	168	59	138	sw.
Hannibal	Marion	534	40	57.5	102	June 30	6	Jan. 14	48	36.93	5.72	June	0.24	Jan.	19.8	115	136	95	134	sw.
Jefferson City	Cole.	557	42	58.1	103	June 30†	4	Jan. 14	50	44.04	8.27	Sept.	0.49	Jan.	12.0	107	157	95	113	s.
Kirksville	Adair.	969	43	55.9	101	June 30†	1	Jan. 14	50	51.09	9.43	Sept.	0.53	Jan.	29.3	95	176	47	142	sw.
Louisiana	Pike	469	38	56.8	103	June 27	6	Jan. 14	51	40.70	7.44	May	0.25	Jan.	14.6	84	218	69	78	s.
Macon	Macon	875	33	56.6	103	July 29†	2	Jan. 14	39	38.87	6.05	Sept.	0.52	Jan.	19.9	96	196	47	122	sw
Mexico	Audrain	800	43	57.1	105	July 29	5	Jan. 14†	54	39.87	8.05	May	0.38	Jan.	16.8	102	245	5	115	sw.
Monroe City	Monroe	748	..	....	...	.....	....	.....	6	38.60	6.74	June	0.45	Jan.	20.5	92	169	88	108	ne.
St. Charles	St. Charles	456	44	59.1	106	June 30	6	Jan. 14	54	37.95	7.49	Aug.	0.43	Jan.	5.2	86	141	110	114	s.
St. Louis (1)	St. Louis City	717	58	59.9	104	July 1	9	Jan. 14	95	37.39	5.66	Sept.	0.40	Jan.	4.5	113	157	107	101	s.
St. Louis (2)	.....do	578	20	59.2	103	July 1	7	Jan. 14	21	32.07	4.21	Nov.	0.39	Jan.	4.2	116	189	71	105	w.
Shelbina	Shelby	779	..	....	...	.....	....	.....	39	36.19	5.56	Oct.	0.54	Jan.	27.1	113	...	...	...	.....
Steffenville	Lewis	650	34	56.6	105	July 29	2	Jan. 14	39	43.06	7.38	June	0.92	Jan.	22.0	98	167	94	104	s.
Unionville	Putnam	1,062	39	56.1	104	July 30	0	Jan. 14	39	51.59	9.09	Sept.	0.60	Jan.	35.0	98	193	51	121	sw.
Warrenton	Warren	816	50	59.1	104	July 1†	4	Jan. 14	42	38.65	6.50	Sept.	0.48	Jan.	20.3	90	117	146	102	sw.
Keokuk, Iowa	Lee, Iowa	574	57	56.6	104	July 29	6	Jan. 14	60	38.65	6.73	Sept.	0.54	Jan.	21.7	118	144	86	135	sw.
Section means and	extremes	.....	..	57.4	106	June 30	0	Jan. 14	..	39.89	9.43	Sept.	0.07	Jan.	19.0	103	170	79	116	s.
Southeast Lowlands.																				
Campbell	Dunklin	314	6	60.0	107	July 15	1	Jan. 15	6	43.98	6.27	Aug.	0.83	June	3.3	110	180	98	87	s.
Caruthersville	Pemiscot	265	36	63.3	105	June 29†	12	Jan. 15	40	45.24	8.30	Aug.	1.01	June	1.7	79	158	98	109	s.
Doniphan	Ripley	344	28	60.6	104	July 1	3	Jan. 15	28	48.92	7.96	Aug.	1.59	Sept.	7.0	71	195	106	64	sw.
Jackson	Cape Girardeau.	428	41	56.4	100	July 1	− 3	Jan. 15	42	40.41	6.26	Aug.	0.97	June	7.0	89	96	75	194	s.
Marble Hill	Bollinger	470	37	60.1	107	June 29	− 4	Jan. 15	39	43.82	7.10	Aug.	1.47	Sept.	7.0	76	137[c]	82[c]	143[c]	w.
Morehouse	New Madrid	289	..	....	...	.....	....	.....	21	47.43	7.47	Nov.	1.27	Sept.	4.2	101	196	78	91	sw.
Poplar Bluff	Butler	339	27	59.8	103	June 29†	1	Jan. 15	28	44.59	6.09	Nov.	1.43	Jan.	4.5	86	208	59	98	s.
Sikeston	Scott	318	25	61.5	102	June 29	3	Jan. 15	35	43.43	6.55	July	1.45	Sept.	4.4	87	216	48	101	s.
Cairo, Ill.	Alexander, Ill.	359	57	61.0	100	June 29†	9	Jan. 15	60	41.93	7.14	Aug.	1.19	Sept.	7.8	106	102	100	163	s.
Section means and	extremes	.....	..	60.3	107	June 29†	− 4	Jan. 15	..	44.42	8.30	Aug.	0.83	June	5.2	89	165	83	117	s.
Ozark Plateau.																				
Arcadia	Iron	926	51	55.8	98	June 29†	− 2	Jan. 15†	54	34.18	5.45	Nov.	0.55	Jan.	6.2	79	232	33	100	nw.
Aurora	Lawrence	1,370	31	58.9	96	June 30†	4	Jan. 14	44	36.80	8.76	Aug.	0.68	Sept.	3.4	84	...	...	...	sw.
Birchtree(near)	Shannon	1,000	37	58.7	101	July 1	0	Jan. 15	38	46.29	7.95	Aug.	0.43	July	9.0	84	221	50	94	s.
Caplinger Mills	Cedar	750	..	....	...	.....	....	.....	5	32.95	5.74	Aug.	0.58	Jan	8.0	79	157	110	98	s.
Dean	McDonald	1,000	28	58.8	103	July 2†	− 1	Jan. 14	33	37.41	6.82	Oct.	0.46	Sept.	7.0	64	...	...	...	s.
Eldon	Miller	934	37	57.7	104	July 29	6	Jan. 14†	33	40.51	7.25	Sept.	0.50	Jan.	15.6	95	95[b]	159[b]	109[b]	sw.
Farmington	St. Francis	918	21	58.2	103	June 29†	3	Jan. 15	35	33.91	4.80	Nov.	0.95	Jan.	3.8	113	159	118	88	sw.
Goodland	Iron	1,000	39	57.1	101	June 29†	− 5	Jan. 15	39	31.35	4.27	Nov.	1.51	Mar.	16.5	82	188	78	99	s.
Greenville	Wayne	381	8	58.0	106	July 1	0	Jan. 15	25	46.24	7.42	Aug.	1.10	Jan.	....	...	...	...	...	sw.
Hailey	Barry	1,350	..	....	...	.....	....	.....	6	37.19	6.71	Oct.	0.42	Jan.	6.0	75	188	76	101	sw.
Koshkonong	Oregon	958	31	60.3	102	July 1	5	Jan. 14	32	38.92	5.42	Mar.	1.12	June	9.0	90	178[a]	54[a]	132[a]	sw.
Lebanon	Laclede	1,265	44	57.3	103	June 30†	0	Jan. 14†	45	45.26	7.81	May	0.64	Jan.	11.5	81	209	41	115	s.
Lockwood	Dade	1,078	26	59.6	100	June 27†	7	Jan. 14	36	42.28	8.66	July	0.57	June	10.0	84	196	78	91	sw.
Mountain Grove(near)	Wright	1,463	31	58.1	103	July 1†	3	Jan. 14†	35	36.48	6.15	Aug.	0.78	Jan.	10.0	104	164[g]	103[g]	91[g]	se.
Neosho	Newton	1,011	45	59.8	100	June 29†	− 4	Jan. 14	49	39.57	6.76	Aug.	0.56	Dec.	8.1	100	215	76	74	sw.
Rolla	Phelps	1,099	32	58.8	99	July 1	4	Jan. 14	48	42.31	5.59	Aug.	0.62	Jan.	9.5	103	85	122	158	s.
Salem(near)	Dent	1,173	28	57.9	100	June 30†	2	Jan. 14	31	35.06	4.13	Nov.	1.17	Jan.	10.9	95	180	75	110	nw.
Seligman	Barry	1,542	31	58.7	99	July 2	1	Jan. 14	29	39.13	6.75	July	0.67	Dec.	7.5	...	...	...	...	sw.
Seymour(near)	Webster	1,642	26	57.6	98	July 1†	4	Jan. 14	26	39.75	9.30	Aug.	1.09	Jan.	9.2	92	204	59	102	s.
Springfield	Greene	1,350	44	58.5	98	July 1	5	Jan. 14	44	38.46	10.68	Aug.	0.63	Jan.	8.5	116	212	79	74	s.
Section means and	extremes	.....	..	58.3	106	July 1	− 5	Jan. 15	..	38.70	10.68	Aug.	0.42	Jan.	8.9	90	180	82	103	sw.
Southwest Plain.																				
Appleton City	St. Clair	853	37	58.8	102	July 29	7	Jan. 14	40	32.36	5.48	Nov.	0.66	Jan.	10.7	86	120	172	73	sw.
Clinton	Henry	765	39	59.0	110	July 29	7	Jan. 14†	45	39.37	6.03	Nov.	0.75	Jan.	13.2	100	163	123	79	sw.
Harrisonville	Cass	904	54	57.5	106	July 28	4	Jan. 14	57	34.23	6.48	Nov.	0.68	Jan.	15.2	102	105	73	187	s.
Lamar	Barton	980	44	60.3	104	June 27	8	Jan. 14†	51	34.96	6.09	Nov.	0.53	Dec.	6.0	80	200	67	98	sw.
Lamonte	Pettis	867	31	58.0	106	July 29	6	Jan. 14	46	39.46	5.89	May	0.36	Jan.	19.1	96	218	71	76	s.
Marshall	Saline	779	45	58.7	103	July 28	5	Jan. 14	42	32.70	6.19	Aug.	0.54	Jan.	17.0	92	208	77	80	sw.
Nevada	Vernon	862	39	59.3	100	June 27†	7	Jan. 14	40	35.61	6.17	Aug.	0.42	Dec.	8.0	78	179	72	114	s.
Warrensburg	Johnson	878	45	58.6	109	July 29	5	Jan. 14	52	38.62	8.16	Nov.	0.44	Jan.	20.0	92	199	65	101	sw.
Warsaw	Benton	687	31	59.9	107	July 29	6	Jan. 14	37	48.89	8.45	Aug.	0.79	Jan.	16.5	99	174	76	115	s.
Section means and	extremes	.....	..	58.9	110	July 29	4	Jan. 14	..	37.36	8.45	Aug.	0.36	Jan.	14.0	92	174	88	103	sw.
Northwest Plateau.																				
Bethany	Harrison	916	37	55.6	104	July 28†	1	Jan. 14	38	44.55	8.26	Nov.	0.17	Jan.	24.2	84	221	66	78	se.
Chillicothe	Livingston	779	23	56.2	109	July 29†	1	Jan. 1†	26	48.54	10.08	Sept	0.28	Jan.	28.0	108	204	81	80	e.
Conception	Nodaway	980	43	56.4	104	July 28†	− 1	Jan. 14	48	46.54	9.47	Sept.	0.22	Jan.	22.5	89	139	115	111	se.
Edgerton	Platte	856	12	55.9	100	June 25†	3	Jan. 14	21	36.54	8.04	Nov.	0.15	Jan.	8.9	116	231[c]	18[c]	109[g]	s.
Grant City	Worth	1,134	28	55.5	105	July 29	− 1	Jan. 14	40	44.13	8.87	Sept.	0.26	Jan.	26.8	99	160	143	62	sw.
Kansas City	Jackson	963	43	59.0	102	July 28†	7	Jan. 14	43	41.15	9.52	Nov.	0.56	Jan.	18.7	110	160	101	104	s.
Kidder	Caldwell	1,020	40	54.7	104	July 29	0	Jan. 14†	44	44.43	9.82	Sept.	0.52	Jan.	17.5	94	190	63	112	se.
King City	Gentry	1,095	..	....	...	.....	....	.....	5	45.64	10.80	Sept.	0.43	Jan.	26.2	97	...	...	...	.....
Lexington	Lafayette	688	47	59.2	104	July 28	5	Jan. 14	48	42.48	6.82	Nov.	0.49	Jan.	25.5	121	179	108	78	sw.
Maryville	Nodaway	1,036	42	55.7	106	July 28†	− 1	Jan. 14	38	36.59	7.16	Nov.	0.25	Jan.	29.7	101	164	109	92	s.
Oregon	Holt	1,048	76	58.4	105	July 28†	1	Jan. 14	76	46.28	8.92	Sept.	0.25	Jan.	21.5	89	210	75	80	sw.
St. Joseph	Buchanan	967	24	57.4	103	July 28	4	Jan. 14	60	44.74	8.35	Nov.	0.53	Jan.	17.2	102	188	81	96	se.
Tarkio	Atchison	916	29	55.1	105	July 28	0	Jan. 14	38	37.64	6.53	June	0.17	Jan.	28.5	83	152	86	127	se.
Trenton	Grundy	822	36	56.8	105	July 28	3	Jan. 14	37	52.27	9.08	Sept.	0.41	Jan.	17.5	109	197	76	92	s.
Section means and	extremes	.....	..	56.6	109	July 29†	− 1	Jan. 14	..	43.68	10.80	Sept.	0.15	Jan.	22.3	100	184	87	94	s.
State means and	extremes	.....	..	58.0	110	July 29	− 5	Jan. 15	..	40.36	10.80	Sept.	0.07	Jan.	14.8	96	175	83	107	s.

† Also on other dates.

[a], [b], [c], indicate the number of days missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Mean Temperatures for the Year 1931, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	36.6	+ 9.8	41.3	+12.2	40.0	− 1.9	55.7	+ 1.6	62.4	− 1.9	79.4	+ 6.2	82.4	+ 6.7	76.5	+ 2.7	76.9	+10.2	61.8	+ 6.6	50.6	+ 9.1	41.6	+11.0	58.8	+ 6.0
Clifton Hill	34.6	+ 5.9	39.6	+10.4	37.3	− 4.9	53.0	− 0.5	60.0	− 4.2	76.6	+ 3.6	80.0	+ 3.6	72.8	− 3.4	72.0	+ 3.1	58.7	+ 1.5	51.8	+ 8.0	40.2	+ 9.1	56.4	+ 2.7
Columbia	36.1	+ 6.9	41.0	+ 9.3	38.4	− 4.2	54.7	− 0.2	60.4	− 3.9	78.0	+ 5.2	81.0	+ 4.1	75.0	− 0.6	75.2	+ 7.0	62.0	+ 5.4	52.8	+ 9.5	43.4	+10.2	58.2	+ 4.1
Downing	33.8	+ 8.4	38.4	+ 6.1	35.6	− 6.0	52.0	− 1.2	58.7[a]	− 4.0	75.4	+ 4.0	78.2	+ 1.8	74.0	− 0.9	73.6	+ 6.0	60.3	+ 4.4	48.6	+ 7.0	38.7	+ 9.1	55.6	+ 2.9
Elsberry	35.0	.....	39.4	.....	38.6	.....	55.4	....	59.9	.....	76.6	.....	79.9	.....	73.8	.....	75.1[c]	.....	60.4	.....	53.0[b]	.....	42.0	.....	57.4	.....
Fayette	34.3	+ 7.1	39.2	+ 9.0	38.0	− 4.1	53.4	− 0.9	59.5	− 4.8	76.6	+ 3.3	80.4	+ 3.0	75.3	− 0.8	75.4	+ 7.1	61.0	+ 4.3	51.6	+ 9.3	41.2	+10.0	57.2	+ 3.5
Fulton	34.4	+ 4.7	38.4	+ 5.7	37.6	− 6.8	54.0	− 0.3	58.7	− 6.3	76.2	+ 2.6	79.8	+ 1.9	74.2	− 2.8	74.2	+ 5.3	58.8	+ 1.1	50.8	+ 6.3	41.0	+ 7.3	56.5	+ 1.6
Hannibal	35.1	+ 8.0	39.3	+ 9.6	37.6	− 3.4	54.4	+ 1.0	60.1	− 3.5	77.6	+ 5.1	80.4	+ 3.6	75.0	0.0	75.2	+ 7.5	61.4	+ 5.4	52.6	+10.5	41.6	+10.1	57.5	+ 4.5
Jefferson City	34.2	+ 4.4	40.0	+ 9.1	38.2	− 5.0	56.0	− 0.1	62.0	− 2.9	77.8	+ 3.8	80.8	+ 2.7	76.0	− 0.7	74.4	+ 5.3	61.0	+ 4.3	53.2	+ 9.1	43.4	+10.6	58.1	+ 3.4
Kirksville	34.6	+ 9.7	38.3	+12.4	36.5	− 3.0	52.4	+ 0.7	59.2	− 3.3	75.0	+ 2.8	78.9	+ 2.8	73.6	− 0.4	74.2	+ 8.2	60.5	+ 5.8	49.2	+ 8.7	38.8	+ 9.2	55.9	+ 4.5
Louisiana	34.0	+ 6.1	38.5	+ 8.8	37.9	− 5.4	53.4	− 0.2	61.0	− 2.8	76.7	+ 4.6	79.2	+ 2.8	73.0	− 2.0	74.7	+ 6.8	60.3	+ 4.0	53.2	+ 9.0	40.2	+ 8.7	56.8	+ 3.4
Macon	33.3	+ 4.8	38.4	+ 9.7	36.6	− 6.0	53.6	+ 0.5	60.0	− 3.9	76.2	+ 3.2	81.0	+ 3.6	75.6	− 0.7	76.0	+ 7.7	59.8	+ 3.0	49.8	+ 6.4	39.2	+ 8.8	56.6	+ 3.1
Mexico	33.6	+ 5.3	38.5	+ 9.2	37.0	− 5.0	55.4	+ 1.7	60.2	− 4.1	77.7	+ 4.0	81.0	+ 3.7	75.1	− 1.0	76.1	+ 7.5	60.4	+ 4.0	50.0	+ 7.0	40.6	+ 8.8	57.1	+ 3.3
St. Charles	37.0	+ 5.9	41.8	+ 9.3	40.4	− 4.0	56.9	+ 1.5	61.7	− 1.3	78.3	+ 4.1	82.0	+ 3.9	77.0	+ 0.8	76.3	+ 8.4	62.2	+ 4.1	54.0	+ 8.5	42.1	+ 7.2	59.1	+ 4.0
St. Louis(1)	37.8	+ 6.7	41.7	+ 6.9	40.6	− 3.5	57.3	+ 1.2	62.8	− 4.2	79.6	+ 4.6	82.2	+ 3.4	77.2	− 0.3	76.9	+ 6.4	62.9	+ 4.1	54.8	+ 9.4	45.2	+10.3	59.9	+ 3.8
St. Louis(2)	36.9	+ 6.7	41.0	+ 7.8	39.8	− 3.8	56.4	− 1.2	61.9	− 4.2	78.8	+ 3.9	81.5	+ 1.4	76.7	− 0.5	76.2	+ 6.0	62.0	+ 3.1	54.2	+ 7.7	44.4	+10.1	59.2	+ 3.1
Steffenville	34.3	+ 6.5	38.8	+10.4	37.2	− 5.2	53.0	+ 0.1	59.1	− 5.0	75.6	+ 2.4	80.4	+ 2.4	74.6	− 2.1	74.5	+ 5.4	61.0	+ 3.3	50.3	+ 6.5	40.0	+ 9.4	56.6	+ 2.8
Unionville	33.6	+10.1	38.6	+13.2	36.2	− 2.4	52.4	+ 1.7	59.4	− 3.0	76.0	+ 4.2	79.0	+ 2.4	75.1	+ 0.1	74.7	+ 7.5	60.8	+ 5.4	48.2	+ 8.0	38.8	+11.4	56.1	+ 4.9
Warrenton	37.2	+ 8.2	42.0	+12.1	39.8	− 2.4	56.2	+ 1.7	61.8	− 3.2	78.0	+ 4.4	81.8	+ 4.0	76.0	+ 0.4	76.3	+ 7.5	61.8	+ 6.2	53.8	+10.9	44.4	+12.4	59.1	+ 5.2
Keokuk, Ia	33.9	+ 9.0	38.8	+10.5	36.7	− 2.2	53.2	+ 0.9	59.4	− 4.4	76.5	+ 4.0	80.5	+ 3.6	74.6	− 0.4	74.0	+ 6.5	60.4	+ 5.0	51.0	+ 9.9	39.6	+10.0	56.6	+ 4.4
Section Means	35.0	+ 7.1	39.5	+ 9.4	38.0	− 4.1	54.4	+ 0.4	60.4	− 3.7	77.1	+ 4.0	80.5	+ 3.2	75.1	− 0.7	73.6	+ 6.8	61.0	+ 4.4	51.7	+ 8.5	41.3	+ 9.7	57.4	+ 3.8
Southeast Lowlands																										
Campbell	37.4	.....	43.0	.....	43.3	.....	57.6	.....	63.1	.....	78.5	.....	80.6	.....	75.6	.....	76.1	.....	62.8	.....	55.1	.....	46.7	.....	60.0	.....
Caruthersville	39.6	+ 0.6	45.2	+ 6.3	44.8	− 6.4	60.3	+ 0.1	67.8	− 1.7	82.5	+ 4.7	84.7	+ 4.1	77.4	− 2.3	79.5	+ 6.1	68.8	+ 7.1	58.4	+ 8.5	50.4	+10.4	63.3	+ 3.1
Doniphan	38.6	+ 2.4	44.4	+ 6.3	45.0	− 4.4	56.2	− 1.8	63.4	− 3.5	78.2	+ 3.4	81.0	+ 2.8	76.0	− 1.4	77.3	+ 6.5	63.4	+ 5.0	56.0	+ 8.4	47.6	+10.2	60.6	+ 2.8
Jackson	35.2	+ 1.2	40.8	+ 5.3	40.6	− 6.6	54.7	− 2.2	60.2	− 5.6	75.1	+ 1.0	76.4	− 1.0	71.4	− 4.8	72.0	+ 2.1	58.4	+ 0.4	50.7	+ 4.0	41.8	+ 5.2	56.4	0.0
Marble Hill	38.0	+ 3.2	42.9	+ 7.6	42.6[c]	− 4.8	58.2	+ 1.5	62.4	− 3.3	77.9	+ 4.0	81.4	+ 4.1	76.0	− 1.0	76.9	+ 6.5	63.4	+ 5.4	55.3	+10.9	46.0	+ 9.8	60.1	+ 3.7
Poplar Bluff	37.6	+ 1.0	43.4	+ 7.1	44.1	− 4.7	58.0	− 1.2	62.8	− 5.2	77.3	+ 1.9	79.6	+ 0.9	75.5	− 2.5	75.6	+ 4.3	62.8	+ 2.5	55.0	+ 7.6	45.8	+ 9.0	59.8	+ 1.7
Sikeston	39.2	+ 1.6	44.8	+ 8.2	44.1	− 4.3	59.4	+ 1.5	64.6[a]	− 4.0	79.6	+ 5.1	81.0	+ 2.9	77.0	− 0.6	77.4	+ 6.8	65.4	+ 6.6	56.9	+ 9.5	48.6	+11.1	61.5	+ 3.7
Cairo, Ill	39.0	+ 4.1	43.8	+ 5.3	43.4	− 3.8	58.8	+ 0.7	64.0	− 4.4	79.2	+ 2.9	80.9	+ 1.3	76.2	− 1.6	77.0	+ 5.5	65.0	+ 4.6	56.6	+ 9.3	47.8	+10.0	61.0	+ 2.8
Section means	38.1	+ 2.0	43.5	+ 6.6	43.5	− 5.0	57.9	− 0.2	63.5	− 4.0	78.5	+ 3.8	80.7	+ 2.2	75.6	− 2.0	76.5	+ 5.4	63.9	+ 4.5	55.5	+ 8.3	46.8	+ 9.4	60.3	+ 2.5
Ozark Plateau																										
Arcadia	33.4	+ 1.3	39.0	+ 5.5	38.3	− 6.5	52.1	− 3.2	58.6	− 6.0	73.4	+ 1.4	76.4	+ 0.5	72.8	− 1.7	73.2	+ 5.6	58.6	+ 2.5	51.8	+ 7.8	42.0	+ 7.7	55.8	+ 1.2
Aurora	39.0	+ 5.5	43.8	+10.2	41.6	− 4.0	54.7	− 1.0	60.9	− 5.0	76.0	+ 2.2	79.4	+ 1.6	74.1[e]	− 2.7	75.4	+ 4.7	62.4	+ 3.9	54.4	+ 8.4	45.2	+10.1	58.9	+ 2.8
Birchtree(near)	36.5	+ 2.1	43.0	+ 8.1	42.5	− 4.9	55.6	− 1.2	60.4	− 4.8	75.4	+ 2.7	79.2	+ 2.8	75.2	− 0.7	74.2	+ 4.7	62.2	+ 4.0	54.9	+ 8.4	45.6	+ 9.8	58.7	+ 2.5
Buffalo	.....	.....	.....	.....	41.4[g]	.....	55.8	.....	61.0	.....	74.6	.....	80.4	.....	75.2	.....	74.6	.....	63.6	.....	55.2	.....	45.0	.....	.....	.....
Dean	37.2	+ 1.0	43.2	+ 8.4	41.2	− 7.7	53.6	− 3.7	61.4[a]	− 4.4	76.1	+ 3.1	80.0	+ 2.4	73.9	− 3.6	76.2	+ 5.5	63.0	+ 3.1	55.8	+ 6.1	44.0	+ 6.6	58.8	+ 1.4
Eldon	35.0[b]	+ 3.6	39.7	+ 7.8	38.2	− 5.3	53.7	− 1.7	60.8[a]	− 3.7	77.6	+ 4.4	79.8[b]	+ 2.8	75.1	− 1.3	75.6	+ 6.3	60.4[b]	+ 2.7	52.6	+ 7.4	43.4	+ 9.1	57.7	+ 2.7
Farmington	36.6	+ 3.8	40.5	+ 4.9	40.6	− 6.3	56.0	− 0.9	60.9	− 2.9	76.6	+ 4.0	79.1	+ 3.8	75.0	+ 0.2	74.7	+ 5.4	60.6	+ 4.2	53.5	+ 9.2	44.7	+ 7.7	58.2	+ 2.8
Goodland	34.8	+ 2.2	40.6	+ 7.7	40.8	− 4.1	53.5	− 1.1	58.0	− 6.5	73.5	+ 1.4	76.8	+ 1.2	73.2	− 1.3	73.6	+ 6.3	60.5	+ 4.7	53.7	+ 9.1	45.8	+11.4	57.1	+ 2.5
Greenville	35.8	.....	43.0	.....	41.2	.....	55.8	.....	60.4	.....	75.4	.....	77.8	.....	74.3	.....	74.1	.....	60.2	....	54.0	.....	44.5	.....	58.0	.....
Koshkonong	39.4	+ 2.9	44.2[a]	+ 6.7	43.4	− 6.2	57.9[a]	+ 0.1	63.0	− 3.8	77.5[a]	+ 3.2	80.8[a]	+ 2.5	75.4	− 2.3	77.5[a]	+ 6.6	62.3[a]	+ 2.3	55.5[a]	+ 6.1	46.6	+ 9.0	60.3	+ 2.3
Lebanon	34.9	+ 1.9	40.2	+ 6.3	37.6[a]	− 7.8	52.0	− 3.7	59.4	− 6.2	75.0	+ 1.9	79.4	+ 2.5	73.0	− 3.3	74.8	+ 5.3	61.3	+ 3.3	54.5	+ 8.5	45.6	+10.6	57.3	+ 1.6
Lockwood	39.0	+ 5.7	45.3	+ 9.8	43.4	− 4.5	55.9	− 0.1	62.0	− 2.6	78.1	+ 4.1	80.3	+ 2.7	73.6	− 3.6	76.0	+ 4.7	63.0	+ 4.4	54.2	+ 6.5	45.0	+ 9.5	59.6	+ 3.0
Mountain Grove(near)	35.9	+ 2.7	40.8	+ 7.0	39.6	− 6.4	55.4	− 1.2	60.4	− 3.5	75.6	+ 4.0	80.3	+ 4.3	74.4	− 0.7	75.4	+ 7.0	62.3	+ 4.7	52.8[a]	+ 6.2	43.8	+ 9.5	58.1	+ 2.8
Neosho	38.8	+ 3.7	44.8	+ 8.2	43.2	− 5.0	55.0	− 3.0	62.8	− 3.4	76.5	+ 2.6	79.6	+ 2.0	74.6	− 2.3	76.5	+ 6.2	64.6	+ 5.4	55.6	+ 8.4	45.4	+ 8.7	59.8	+ 2.6
Rolla	37.2	+ 5.9	42.6	+ 7.4	40.7	− 4.3	56.2	+ 1.2	60.8	− 3.7	76.2	+ 3.4	79.4	+ 2.0	74.8	− 1.0	75.9	+ 7.9	62.4	+ 6.5	54.6	+ 9.7	44.8	+11.2	58.8	+ 3.8
Salem(near)	35.8	+ 2.9	41.4	+ 6.9	40.3	− 6.6	54.2	− 1.2	59.6	− 5.7	75.1	+ 2.3	78.0	+ 1.1	73.6	− 2.5	74.4	+ 4.9	62.3	+ 4.3	54.8	+ 8.0	45.4	+10.2	57.9	+ 2.0
Seligman	39.9[d]	+ 5.2	43.5	+ 6.8	42.6[a]	− 3.6	54.0	− 1.8	60.6[d]	− 4.3	75.7[e]	+ 3.2	78.4[b]	+ 1.8	72.4	− 3.2	75.0[e]	+ 6.2	62.4[a]	+ 4.1	55.0	+ 7.8	44.6	+ 8.0	58.7	+ 2.5
Seymour(near)	36.8	+ 2.5	42.9	+10.5	40.4	− 4.8	53.6	− 1.8	59.4	− 4.7	74.3	+ 2.3	78.2	+ 2.7	72.2	− 2.8	73.3	+ 4.7	61.9	+ 4.4	53.8	+ 7.7	44.0	+ 9.6	57.6	+ 2.5
Springfield	38.1	+ 4.6	43.2	+ 8.0	40.3	− 4.4	54.3	− 1.8	59.8	− 4.7	76.4	+ 3.9	79.3	+ 2.5	73.0	− 2.7	75.2	+ 6.3	62.6	+ 4.4	54.3	+ 8.6	44.8	+ 8.6	58.5	+ 2.8
Section Means	36.9	+ 3.4	42.2	+ 7.7	40.9	− 5.4	54.6	− 1.5	60.5	− 4.5	75.7	+ 2.9	79.1	+ 2.3	74.0	− 2.3	75.0	+ 5.8	61.9	+ 4.0	54.2	+ 7.8	44.7	+ 9.3	58.3	+ 2.5
Southwest Plain																										
Appleton City	37.2	+ 5.9	42.8	+10.5	40.3	− 4.3	54.7	− 1.1	61.0	− 4.1	77.1	+ 2.3	80.8	+ 2.5	74.9	− 2.9	77.0	+ 6.7	63.2	+ 4.1	53.0	+ 6.9	43.8	+ 9.5	58.8	+ 3.0
Clinton	33.9	+ 2.5	41.5	+ 9.6	38.6	− 5.7	54.6	− 1.1	62.2	− 3.0	79.5	+ 6.1	83.8	+ 6.3	77.9	+ 1.1	77.4	+ 7.2	63.0	+ 4.4	53.3	+ 6.0	42.6	+ 8.2	59.0	+ 3.5
Harrisonville	34.8	+ 7.6	40.1	+10.4	38.2	− 2.7	53.1	− 0.7	60.2	− 3.8	77.2	+ 3.8	81.2	+ 3.4	75.2	− 0.6	77.2	+ 8.9	61.2	+ 5.2	50.0	+ 7.6	41.1	+ 9.9	57.5	+ 4.1
Lamar	38.5	+ 6.1	44.0	+ 9.5	41.6	− 4.6	57.0	+ 0.4	63.1	− 2.8	78.8	+ 4.4	81.7	+ 3.2	76.2	− 2.3	79.6	+ 9.0	65.0	+ 6.1	53.4	+ 6.8	44.2	+ 9.0	60.3	+ 3.7
Lamonte	35.8	+ 7.1	41.5	+ 9.9	38.7	− 5.0	54.1	− 1.0	60.1	− 4.6	77.6	+ 3.3	82.0	+ 2.5	75.2	− 1.5	74.6	+ 4.5	62.3	+ 4.3	52.2	+ 7.8	42.3	+ 8.1	58.0	+ 3.0
Marshall	36.7	+ 9.1	41.6	+12.1	39.2[a]	− 3.3	55.4	+ 1.0	62.2	− 1.9	78.8	+ 4.9	81.8	+ 4.5	75.6	0.0	76.4	+ 8.1	62.7	+ 6.1	51.4	+ 5.8	42.6	+11.0	58.7	+ 4.8
Nevada	38.4	+ 6.7	43.4	+12.5	41.7	− 2.6	54.8	− 0.3	61.5	− 3.1	77.5	+ 3.9	79.6	− 0.6	75.0	− 1.9	77.8	+ 8.7	64.0	+ 6.7	53.4	+ 9.0	44.6	+10.7	59.3	+ 4.1
Warrensburg	36.2	+ 7.3	41.6	+10.3	38.8	− 4.8	54.2	− 1.9	61.6	− 3.7	78.2	+ 4.0	82.6	+ 3.8	76.3	− 0.7	77.5	+ 7.4	61.8	+ 3.7	52.0	+ 7.1	42.6	+ 9.2	58.6	+ 3.5
Warsaw	38.0	+ 5.2	43.2	+ 9.4	41.2	− 5.7	55.8	0.0	62.4	− 3.4	78.6	+ 4.9	82.8	+ 4.5	76.4	− 1.0	77.4	+ 7.4	63.7	+ 4.6	54.5	+ 7.0	44.8	+10.0	59.9	+ 3.6
Section Means	36.6	+ 6.4	42.2	+10.5	39.8	− 4.3	54.9	− 0.5	61.6	− 3.4	78.1	+ 4.2	81.8	+ 3.3	75.9	− 1.1	77.2	+ 7.5	63.0	+ 5.0	52.6	+ 7.1	43.2	+ 9.5	58.9	+ 3.7
Northwest Plateau																										
Bethany	33.2	+ 8.6	38.6	+11.6	36.5	− 3.5	52.0	+ 0.8	59.0	− 3.6	76.0	+ 3.6	79.0	+ 3.0	73.4	− 1.5	73.6	+ 6.6	59.6	+ 4.9	48.2	+ 5.3	38.4	+ 8.1	55.6	+ 3.7
Chillicothe	32.6	+ 3.8	39.0	+ 6.5	36.0	− 5.6	52.7	− 0.6	60.2	− 6.9	76.8	+ 2.6	81.1	+ 0.9	75.7	− 0.4	75.1	+ 5.5	59.3	+ 1.1	47.5	+ 4.9	38.2	+ 2.6	56.2	+ 1.2
Conception	33.6	+ 8.8	39.1	+12.0	36.6	− 2.9	54.0	+ 2.1	61.0	− 1.0	77.2	+ 5.6	80.2	+ 3.8	74.5	− 0.1	74.1	+ 6.9	60.6	+ 5.1	47.8	+ 6.4	38.3	+ 9.0	56.4	+ 4.6
Edgerton	36.0[m]	+ 9.1	39.4[a]	+ 5.1	37.5[c]	− 5.7	54.0	+ 0.2	60.3	− 2.7	77.1	+ 5.2	79.5	+ 3.4	72.6[c]	− 2.5	72.3[a]	+ 4.4	57.4[b]	+ 1.1	47.4	+ 5.6	37.4	+ 7.0	55.9	+ 2.5
Grant City	32.6	+ 7.7	38.6	+11.3	36.6	− 4.7	52.4	+ 0.9	60.0	− 2.1	76.4	+ 5.1	79.2	+ 3.0	73.5	− 1.4	73.2	+ 6.2	59.0	+ 3.6	47.2	+ 4.8	37.6	+ 9.9	55.5	+ 3.7
Kansas City	38.2	+10.0	42.2	+11.0	39.2	− 3.5	55.3	+ 0.5	62.0	− 2.8	79.7	+ 6.1	81.7	+ 3.6	76.0	− 0.6	77.5	+ 8.6	62.5	+ 4.8	50.6	+ 6.9	42.5	+10.0	59.0	+ 4.6
Kidder	31.2	+ 4.3	35.4	+ 7.6	33.4	− 7.8	52.0	− 0.4	58.3	− 4.8	75.2	+ 2.8	78.0	+ 1.1	74.7	− 1.0	74.5	+ 6.8	58.7	+ 2.3	47.4	+ 5.0	37.6	+ 7.9	54.7	+ 2.0
Lexington	37.2	+ 9.7	41.7	+12.3	39.6	− 3.3	56.0	+ 1.9	63.5	− 0.9	79.6	+ 6.8	83.0	+ 5.9	77.3	+ 1.3	78.6	+10.1	61.9	+ 4.4	51.0	+ 7.0	41.6	+10.1	59.2	+ 5.4
Maryville	32.9	+10.5	38.0	+13.9	36.2	− 1.0	52.4	+ 2.3	60.0	− 1.1	76.6	+ 7.0	79.3	+ 3.7	74.1	+ 0.5	73.6	+ 8.2	59.8	+ 6.5	47.3	+ 8.3	37.8	+11.5	55.7	+ 5.9
Oregon	36.4	+12.5	41.2	+13.0	39.0	− 0.3	55.4	+ 1.5	62.6	− 0.6	79.2	+ 6.9	82.2	+ 6.6	76.2	+ 1.2	76.9	+ 9.9	62.3	+ 7.4	49.3	+ 9.0	40.6	+12.1	58.4	+ 6.6
St. Joseph	35.8	+ 9.3	40.1	+ 8.4	38.0	− 4.7	54.2	+ 0.1	60.8	− 3.2	78.7	+ 5.2	80.6	+ 1.9	75.2	− 1.6	76.2	+ 7.5	60.8	+ 4.2	49.0	+ 5.7	40.0	+ 9.3	57.4	+ 3.5
Tarkio	32.3	+ 9.4	37.4	+ 9.4	36.4	− 4.2	52.6	+ 0.4	59.0	− 4.3	76.4	+ 3.7	78.6	+ 1.6	73.5	− 2.1	73.4	+ 6.8	59.1	+ 3.6	45.0	+ 4.4	37.0	+11.1	55.1	+ 3.3
Trenton	34.6	+ 7.9	39.2	+10.7	37.7	− 3.5	53.8	+ 1.2	61.0	− 2.8	77.0	+ 4.4	80.0	+ 3.1	74.8	− 0.4	74.1	+ 6.7	60.6	+ 4.3	49.2	+ 6.8	39.8	+10.2	56.8	+ 4.0
Section Means	34.4	+ 8.6	39.2	+10.2	37.1	− 3.9	53.6	+ 0.8	60.6	− 2.8	77.4	+ 5.0	80.2	+ 3.2	74.7	− 0.7	74.9	+ 7.2	60.5	+ 4.5	48.2	+ 6.2	39.0	+ 9.2	56.6	+ 4.0
State means	36.0	+ 5.5	40.9	+ 8.5	39.5	− 4.4	54.8	− 0.3	61.0	− 3.4	77.1	+ 3.9	80.3	+ 3.0	74.9	− 1.1	75.0	+ 6.0	61.7	+ 4.3	52.2	+ 7.8	42.7	+ .8	58.0	+ 3.2

Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days, etc.

Monthly and Annual Precipitation for the Year 1931, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Boonville	0.22	−1.65	2.42	0.00	2.61	−0.42	2.02	−1.89	4.98	−0.25	2.57	−2.90	1.75	−1.98	4.90	+1.04	3.63	−1.08	2.69	−0.43	4.82	+2.50	1.32	−0.56	33.93	− 7.62
Bowling Green	0.25	.....	2.37	.....	2.46	.....	1.01	.....	6.89	.....	3.33	.....	5.58	.....	5.12	.....	2.69	.....	2.88	....	4.59	.....	2.41	.....	39.58	.....
Brunswick	0.77	−0.86	1.57	−0.28	2.35	−0.21	2.61	−0.87	3.77	−1.12	2.74	−2.75	3.37	−0.98	5.54	+1.70	2.59	−1.90	2.53	−0.39	7.00	+4.96	2.14	+0.49	36.98	− 2.21
Clifton Hill	0.54	−1.06	1.69	+0.36	2.45	−0.20	1.94	−2.42	4.93	−0.21	0.97	−3.92	2.24	−1.16	4.68	+0.67	3.20	−1.25	1.61	−0.95	3.54	+1.40	2.10	+0.47	29.89	− 8.27
Columbia	0.28	−1.64	3.19	+1.15	2.97	+0.03	1.42	−2.35	6.45	+1.99	1.30	−3.46	2.53	−0.96	8.86	+5.26	6.69	+2.34	3.15	+0.54	3.94	+1.74	2.52	+0.66	43.30	+ 5.30
Downing	0.51	−1.22	0.77	−0.63	2.38	+0.02	6.23	+2.48	7.06	+2.65	6.00	+0.54	3.11	−1.38	2.07	−1.65	5.72	+0.12	4.34	+1.49	6.13	+4.27	2.88	+1.38	47.20	+ 8.07
Edina	0.52	.....	1.08	.....	2.77	.....	3.86	.....	5.15	.....	6.30	.....	2.49	.....	2.40	.....	7.31	.....	5.59	.....	6.16	.....	1.77	.....	45.40	.....
Elsberry	0.38	.....	1.77	.....	3.00	.....	2.24	.....	5.58	.....	0.83	.....	3.16	.....	5.18	.....	3.15	.....	3.52	.....	4.19	.....	3.09	.....	36.09	.....
Fayette	0.39	−1.60	3.24	+1.34	2.48	−0.33	2.11	−1.43	4.23	−0.39	2.41	−2.38	1.49	−2.11	3.08	−0.18	3.00	−1.75	2.65	−0.03	4.77	+2.64	2.31	+0.63	32.16	− 5.59
Fulton	0.07	−2.28	3.01	+1.12	3.29	+0.25	1.46	−2.87	6.30	+1.53	1.11	−3.56	2.84	−1.01	5.00	+1.53	5.78	+1.49	3.50	+0.41	4.40	+2.04	2.31	+0.28	39.07	− 1.07
Gorin	0.09	−1.46	0.82	−0.67	2.40	−0.06	3.62	−0.38	4.57	−0.04	7.60	+3.31	3.80	−0.11	2.35	−0.77	9.13	+4.47	4.78	+1.98	5.86	+3.87	2.00	+0.34	47.02	+10.48
Hannibal	0.24	−1.48	2.17	+0.31	2.36	−0.24	2.18	−1.01	5.26	+0.91	5.72	+1.82	2.63	−0.46	2.71	−0.63	3.72	−0.25	3.16	+0.77	4.29	+2.23	2.49	+0.95	36.93	+ 2.92
Hermann	0.43	−1.72	2.42	+0.19	2.78	−0.23	1.76	−2.18	5.60	+1.22	2.47	−1.85	1.78	−1.86	7.82	+4.62	6.72	+2.74	3.90	+0.96	3.95	+1.18	2.64	+0.79	42.27	+ 3.86
Jefferson City	0.49	−1.73	4.04	+1.95	4.13	+1.31	1.38	−2.16	4.01	−0.54	1.14	−2.88	4.01	+0.56	3.68	+0.43	8.27	+4.74	5.06	+2.27	4.95	+2.58	2.88	+0.94	44.04	+ 7.47
Kahoka	0.52	.....	1.13	.....	2.92	.....	4.31	.....	5.05	.....	7.25	.....	2.28	.....	1.58	.....	7.46	.....	4.52	.....	5.90	.....	2.22	.....	45.14	.....
Kirksville	0.53	−1.00	0.85	−0.97	2.92	+0.15	5.11	+1.47	4.87	−0.34	5.48	+1.21	6.37	+2.30	1.81	−1.70	9.43	+4.97	5.22	+2.24	6.19	+4.28	2.31	+0.70	51.09	+13.31
Knox City	....	.....	....	.....	....	.....	3.12	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....
LaBelle	....	.....	....	.....	....	.....	3.00	.....	5.69	.....	7.56	.....	2.15	.....	1.14	.....	6.23	.....	4.25	.....	....	.....	1.56	.....	....	.....
Laddonia	0.32	.....	2.49	.....	2.92	.....	1.28	.....	6.31	.....	1.39	.....	1.91	.....	4.66	.....	2.42	.....	2.48	.....	4.73	.....	2.02	.....	32.93	.....
LaGrange	0.73	.....	0.85	.....	2.97	.....	2.52	.....	5.20	.....	7.92	.....	2.60	.....	0.54	.....	4.94	.....	4.90	.....	3.47	.....	2.69	.....	39.33	.....
Louisiana	0.25	−1.77	2.68	+0.33	3.32	+0.42	1.58	−1.80	7.44	+2.88	4.60	+0.65	3.65	+0.41	3.47	−0.35	3.09	−0.99	3.08	+0.19	3.74	+1.32	3.80	+2.04	40.70	+ 3.33
Lucerne	0.29	−0.69	0.50	−0.96	2.36	+0.53	4.98	+1.04	3.65	+1.51	2.93	−3.61	2.63	−0.49	2.84	−0.56	6.73	+0.85	4.64	+1.14	6.79	+4.93	3.68	+2.36	42.02	+ 6.05
Macon	0.52	−1.13	1.31	−0.64	2.86	+0.17	3.13	−0.06	5.01	+0.44	3.21	−1.20	1.94	−1.43	3.54	0.00	6.05	+1.75	4.07	+1.07	4.89	+2.79	2.34	+0.80	38.87	+ 2.56
Memphis	0.34	.....	0.45	.....	2.49	.....	5.27	.....	5.84	.....	6.36	.....	4.95	.....	1.06	.....	6.78	.....	3.94	.....	5.39	.....	1.52	.....	44.39	.....
Mexico	0.38	−1.67	2.61	+0.40	3.56	+0.77	1.41	−2.26	8.05	+3.29	1.05	−3.73	2.46	−1.14	6.28	+3.04	3.45	−1.15	3.02	+0.35	5.36	+2.98	2.24	+0.24	39.87	+ 1.12
Milan	0.34	−0.77	1.43	+0.02	1.86	−0.53	5.28	+1.36	5.50	+2.47	5.75	−1.10	2.79	−0.13	1.33	−2.47	9.19	+4.01	5.00	+1.19	6.88	+4.30	4.64	+3.23	49.99	+11.58
Monroe City	0.45	−1.58	1.96	+0.47	2.87	+0.15	1.97	−1.74	4.17	+0.56	6.74	+1.67	2.66	−1.07	2.89	−1.68	5.86	+1.85	3.77	+1.08	3.48	+1.35	1.78	+0.11	38.60	+ 1.17
New London	0.25	.....	2.23	.....	2.74	.....	1.61	.....	6.58	.....	3.36	.....	4.95	.....	4.15	.....	4.00	.....	3.11	.....	5.39	.....	2.21	.....	40.58	.....
Pacific	0.40	−2.01	2.24	−0.10	2.66	−1.05	2.55	−1.53	3.68	−1.31	1.99	−2.38	4.35	+0.27	2.25	−1.44	3.44	−0.36	2.40	−0.63	3.96	+1.21	2.55	+0.35	32.47	− 8.98
Palmyra	0.39	.....	1.57	.....	2.55	.....	1.95	.....	4.87	.....	7.83	.....	1.71	.....	4.06	.....	4.18	.....	2.96	.....	3.61	.....	2.02	.....	37.70	.....
Paris	0.26	.....	1.94	.....	2.22	.....	1.50	.....	3.84	.....	5.69	.....	1.93	.....	4.22	.....	3.71	.....	3.26	.....	3.02	.....	1.97	.....	33.56	.....
Perry	0.23	.....	1.98	.....	2.75	.....	1.06	.....	6.64	.....	2.10	.....	2.22	.....	5.00	.....	3 02	....	3.35	.....	3.45	.....	0.98	.....	32.78	.....
Philadelphia	0.43	.....	0.71	.....	2.43	.....	1.29	.....	4.75	.....	9.14	.....	1.94	.....	3.06	.....	4.99	.....	4.55	.....	2.58	.....	1.92	.....	37.79	.....
Plevna	....	.....	....	.....	....	.....	....	.....	....	.....	6.21	.....	3.08	.....	1.46	.....	5.80	.....	4.79	.....	4.14	.....	2.06	.....	....	.....
St. Charles	0.43	−1.84	1.89	−0.74	2.47	−0.62	3.46	−0.22	3.40	−0.78	2.26	−1.70	2.09	−1.03	7.49	+4.01	4.96	+1.65	3.77	+1.05	3.62	+1.10	2.11	+0.23	37.95	+ 1.11
St. Louis(1)	0.40	−1.94	1.77	−0.79	2.39	−0.99	3.23	−0.58	3.61	−0.73	1.98	−1.84	4.06	+1.08	3.46	+0.47	5.66	+2.20	2.90	+0.18	4.65	+1.82	3.28	+1.07	37.39	− 0.05
St. Louis(2)	0.39	−2.68	1.46	−0.85	2.17	−0.78	2.56	−1.45	2.96	−1.28	2.17	−1.59	3.72	+1.25	3.34	−0.91	3.65	−0.59	2.57	−0.78	4.21	+1.59	2.87	+0.39	32.07	− 7.68
Shelbina	0.54	−1.18	1.82	−0.10	2.93	+0.08	2.28	−1.25	4.63	−0.35	4.01	−0.70	2.59	−1.29	3.23	+0.21	3.18	−0.90	5.56	+2.66	3.42	+1.23	2.00	+0.37	36.19	− 1.22
Steffenville	0.92	−1.27	1.50	−0.35	3.20	+0.29	3.35	−0.26	6.25	+1.30	7.38	+3.28	1.81	−2.46	1.45	−2.26	4.54	+0.17	5.61	+3.17	3.73	+1.62	3.32	+1.69	43.06	+ 4.92
Troy	....	.....	....	.....	....	.....	1.86	.....	4.81	.....	2.12	.....	2.12	.....	8.62	.....	3.60	.....	4.92	.....	3.30	.....	2.50	.....	....	.....
Union	0.28	−1.04	2.50	+1.10	3.05	−0.49	2.37	−2.26	4.05	−0.10	2.88	−0.93	3.82	+1.17	3.97	−0.59	5.44	+1.43	2.71	−1.09	5.11	+2.05	2.95	+0.59	39.13	− 0.16
Unionville	0.60	−1.24	0.70	−1.13	2.95	+0.56	4.52	+0.71	4.73	−0.23	4.24	−0.44	5.71	+1.65	2.58	−1.49	9.09	+4.16	4.64	+1.81	8.18	+6.22	3.65	+2.03	51.59	+12.61
Valley Park	0.56	−0.60	1.62	+0.26	2.06	−1.51	3.50	−1.24	3.40	−0.85	1.69	−1.52	2.57	+0.51	2.67	−0.97	6.39	+2.98	3.51	−0.09	3.80	+1.11	2.75	+0.30	34.52	− 1.62
Warrenton	0.48	−1.90	2.21	+0.02	3.23	−0.14	1.77	−2.54	5.16	+0.37	2.68	−1.28	1.33	−1.93	4.57	+0.17	6.50	+2.48	4.51	+1.51	3.99	+1.30	2.22	+0.08	38.65	− 1.86
West Ely	0.17	.....	1.92	.....	3.47	.....	2.44	.....	4.29	.....	5.68	.....	2.39	.....	3.97	.....	2.12	.....	3.61	.....	3.95	.....	2.49	.....	36.56	.....
Winfield	....	.....	....	.....	....	.....	1.91	.....	4.62	.....	1.45	.....	1.74	.....	3.30	.....	3.40	.....	5.85	.....	4.70	.....	2.63	.....	....	.....
Keokuk, Iowa	0.54	−1.02	1.08	−0.47	2.18	−0.20	3.27	+0.28	4.27	+0.34	6.56	+2.43	1.71	−1.70	2.40	−0.80	6.73	+2.89	4.05	+1.79	3.85	+1.91	2.01	+0.56	38.65	+ 6.01
Southeast Lowlands																										
Bragg City	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	4.31	.....	2.66	.....	1.26	.....	5.72	.....	5.31	.....	....	.....
Campbell	1.69	.....	5.07	.....	3.83	.....	2.69	.....	3.54	.....	0.83	.....	4.56	....	6.27	.....	3.09	.....	1.83	.....	6.26	.....	4.32	.....	43.98	.....
Cape Girardeau	0.82	−3.10	2.85	+0.67	4.36	+0.95	3.70	−0.24	6.42	+2.15	1.15	−2.57	0.66	−2.17	8.17	+4.38	2.76	−0.65	2.29	−0.90	6.52	+2.57	4.09	+0 70	43.79	+ 1.79
Caruthersville	1.17	−3.58	2.49	−1.31	3.81	−0.19	2.65	−1.47	1.62	−2.64	1.01	−2.97	4.65	+1.26	8.30	+4.92	1.60	−1.54	1.35	−1.75	7.27	+3.31	9.32	+5.04	45.24	− 0.92
Dexter	1.22	−4.07	3.63	+0.82	3.79	+0.64	2.69	−2.27	3.67	−1.29	5.19	+0.63	2.24	−1.16	3.88	−0.43	1.21	−3.55	2.63	−1.81	5.52	+1.61	4.32	+0.98	39.99	− 9.90
Doniphan	1.74	−2.47	4.47	+1.32	5.36	+1.77	3.32	−2.05	4.71	+0.55	2.10	−2.28	3.73	−0.38	7.96	+3.68	1.59	−2.13	2.79	−0.33	5.70	+2.58	5.45	+1.88	48.92	+ 2.14
Fisk	1.20	.....	3.14	.....	4.06	.....	2.74	.....	4.17	.....	5.93	.....	1.99	.....	6.61	.....	1.35	.....	2.29	.....	4.49	.....	5.18	.....	43.15	.....
Jackson	1.02	−2.70	3.40	+0.51	3.88	−0.46	3.98	−0.49	4.14	−0.22	0.97	−3.32	1.84	−1.64	6.26	+2.65	1.87	−1.91	2.04	−1.20	5.48	+2.05	5.53	+2.31	40.41	− 4.42
Marble Hill	2.12	−1.41	2.99	−0.29	3.22	−0.96	3.18	−1.26	5.59	+1.24	2.34	−1.83	2.30	−2.10	7.10	+3.50	1.47	−2.27	3.76	+0.84	6.37	+2.74	4.38	+0.87	43.82	− 0.93
Morehouse	1.52	−2.71	4.53	+1.27	4.55	−0.01	4.08	−1.00	3.75	−1.07	3.82	−1.21	6.39	+3.37	4.08	+0.10	1.27	−3.49	2.31	−1.21	7.47	+3.40	3.66	−0.11	47.43	− 2.67
New Madrid	2.06	−3.30	3.79	−0.06	4.29	−0.96	3.35	−1.00	3.13	−1.46	2.05	−2.16	6.85	+2.82	6.38	+2.58	3.17	−0.46	2.80	−0.58	6.67	+2.64	5.29	+0.94	49.83	− 1.00
Parma	1.61	−2.12	4.47	+1.75	4.27	−1.62	2.51	−2.08	2.77	−1.93	2.03	−1.86	4.53	+0.83	5.71	+1.56	2.49	−2.59	1.54	−1.60	6.16	+1.66	3.57	−1.20	41.66	− 9.20
Poplar Bluff	1.43	−2.54	3.62	+0.66	6.03	+1.51	2.47	−2.00	3.76	−1.27	1.48	−3.54	5.02	+1.54	5.55	+1.18	1.87	−1.92	2.18	−0.96	6.09	+2.47	5.09	+1.15	44.59	− 3.72
Sikeston	1.58	−2.65	4.63	+1.37	4.36	−0.14	3 32	−0.94	3.67	−0.49	3.24	−0.99	6.55	+2.18	3.25	−0.61	1.45	−1.88	2.05	−0.77	5.65	+1.91	3.68	−0.17	43.43	− 3.18
Cairo, Ill	1.77	−1.99	3.38	+0.25	4.20	+0.45	4.00	+0.28	2.99	−0.72	3.13	−0.70	1.97	−1.10	7.14	+4.12	1.19	−1.70	2.66	−0.10	5.35	+1.67	4.15	+0.75	41.98	+ 1.21
Ozark Plateau																										
Arcadia	0.55	−2.67	1.58	−1.58	3.32	−0.75	2.83	−1.79	5.07	+0.29	2.26	−2.32	4.23	+0.09	4.30	+0.57	1.41	−2.33	0.99	−2.13	5.45	+1.83	2.19	−0.78	34.18	−11.57
Aurora	0.75	−1.65	2.50	−0.32	2.25	−1.43	3.79	−0.56	3.27	−2.19	2.28	−2.70	2.81	−2.38	8.76	+4.28	0.68	−3.16	3.99	+0.61	4.50	+1.56	1.22	−1.32	36.80	− 9.26
Birchtree (near)	1.26	−1.80	3.77	+1.28	5.68	+1.43	3.99	−0.73	4.90	+0.59	3.35	−1.18	0.43	−3.43	7.95	+3.37	2.68	−0.95	2.73	−0.26	5.94	+2.81	3.61	+0.86	46.29	+ 1.99
Buffalo	0.64	.....	3.43	.....	2.70	.....	1.70	.....	5.13	.....	2.74	.....	4.17	.....	11.00	.....	2.56	.....	4.29	.....	4.97	.....	0.98	.....	44.31	.....
Caplinger Mills	0.58	.....	1.67	.....	2.64	.....	1.87	.....	4.44	.....	0.62	.....	3.19	.. ...	5.74	.....	1.77	.....	4.19	.....	5.04	.....	1.20	.....	32.95	.....
Chaonia	1.42	.....	3.31	.....	4.90	.....	4.09	.....	3.68	.....	3.67	.....	2.56	.....	5.76	.....	1.25	.....	1.38	.....	6.13	.....	5.03	.....	43.18	.....
Dean	1.12	−1.12	3.35	+1.52	3.45	+0.10	4.96	+0.92	3.15	−2.81	1.46	−4.58	1.86	−2.33	4.37	+0.21	0.46	−3.47	6.82	+3.01	5.91	+2.57	0.50	−1.77	37.41	− 7.75
Eldon	0.50	−1.04	3.94	+1.84	3.87	+1.04	1.64	−2.82	6.79	+1.93	1.35	−2.96	3.16	−0.38	2.61	−1.21	7.25	+3.16	4.13	+0.87	3.87	+1.38	1.48	−0.60	40.51	+ 1.21
Farmington	0.95	−1.40	2.31	−0.98	3.51	+0.24	2.82	−1.14	4.56	−0.94	1.22	−3.41	3.21	−0.23	4.04	+0.47	2.08	−1.29	1.55	−1.39	4.80	+1.05	2.86	+0.10	33.91	− 8.92
Fredericktown	0.72	−2.72	2.91	+0.31	3.54	−0.24	3.66	−1.33	3.87	+0.23	1.36	−3.83	1.84	−1.98	5.20	+1.14	2.84	−1.49	2.43	−1.98	6.35	+3.17	4.21	+1.45	38.93	− 7.27
Galena	0.63	−1.73	2.02	−0.06	3.68	−0.19	3.27	−0.21	3.78	−1.46	1.02	−2.54	3.28	−0.69	5.94	+1.83	0.56	−3.76	5.57	+2.48	4.12	+0.85	1.91	−0.62	35.78	− 6.10
Goodland	1.64	−1.23	2.64	+0.15	1.51	−2.74	3.84	−1.25	2.91	−1.71	1.95	−2.15	1.89	−1.99	1.83	−2.15	3.70	−0.12	2.08	−1.31	4.27	+1.35	3.09	+0.54	31.35	−12.61
Greenville	1.10	−2.06	3.31	+0.31	5.28	+0.78	3.70	−1.29	3.54	−0.65	1.80	−2.98	6.08	+2.31	7.42	+4.07	1.60	−1.54	1.65	−1.22	5.93	+2.25	4.83	+1 80	46.24	+ 1.78
Hailey	0.42	−2.31	2.12	+0.28	3.74	+1.57	3.43	−1.59	2.98	−2.95	2.78	−3 24	2.23	−1.77	6.67	+1.30	0.57	−3.55	6.71	+3.11	4.33	+1.84	1.21	−0.72	37.19	− 8.03
Koshkonong	1.92	−1.62	4.25	+1.46	5.42	+1.61	2.53	−2.44	3.87	−0.97	1.12	−3.36	4.21	+0.54	3.66	−0.68	2.07	−1.61	1.28	−1.91	4.61	+1.31	3 98	+0.57	38.92	− 7.10
Lebanon	0.64	−1.81	4.56	+2.06	3.50	+0.05	2.92	−1.26	7.81	+2.20	0.78	−4.15	4.38	+0.41	7.11	+3.23	2.95	−1.30	3.23	−0.10	4.64	+2.02	2.74	+0.26	45.26	+ 1.61
Leeper	1.60	−2.71	3.98	+1.62	4.44	+1.14	4.61	−1.02	3.99	−0.99	1.16	−5.13	3.47	−0.26	5.05	+1.12	1.52	−1.47	1.57	−2.30	4.81	+1.28	4.44	+1.25	40.64	− 7.47
Lockwood	0.80	−0.86	2.19	+0.22	2.78	+0.32	2.45	−1.21	5.78	+0.70	0.57	−4.23	8.66	+3.95	6.49	+2.13	0.69	−3.87	4.76	+1.24	6.17	+3.72	0.94	−1.12	42.28	+ 0.99
Mountain Grove	0.78	−2.09	3.46	+1.20	4.15	−0.19	3.82	−0.96	2.96	−1.89	2.23	−2.33	1.50	−2.33	6.15	+1.73	1.28	−2.96	3.02	−0.23	4.14	+1.38	2.99	+0.51	36.48	− 8.16
Neosho	0.73	−1.77	2.77	+0.39	2.12	−1.35	5.15	+1.03	3.28	−2.79	1.93	−3.50	4.62	+0.31	6.76	+2.62	1.42	−2.97	4.43	+0.95	5.80	+2.64	0.56	−1.93	39.57	+ 6.37
Owensville	0.30	−1.57	2.77	+1.22	2.91	−0.67	1.53	−2.21	5.97	+0.50	2.10	−3.19	3.35	+0.57	3.81	+0.45	3.20	−0.69	2.32	−1.26	3.95	+1.09	2.52	+0.28	34.73	− 5.48
Ozark Beach	0.81	−2.03	4.49	+2.88	4.15	+2.23	2.92	−2.66	3.98	−1.10	1.76	−4.08	4.43	+1.42	8.93	+4.45	0.73	−3.12	2.41	−1.60	2.94	+0.22	2.58	−0.26	40.13	− 3.65
Rolla	0.62	−1.83	2.54	+0.20	2.82	−0.77	2.54	−2.12	5.50	+0.49	2.98	−1.15	4.84	+0.96	5.59	+1.51	3.24	−0.67	3.21	+0.16	4.66	+2.14	3.77	+1.61	42.31	+ 0.53
Salem(near)	1.17	−1.68	2.65	+0.27	3.17	−0.13	3.17	−1.38	3.93	−0.61	1.62	−2.68	2.81	−0.55	2.68	−1.80	2.43	−1.65	3.61	−0.12	4.13	+1.51	3.69	+1.31	35.06	− 7.51
Seligman	0.88	−1.36	2.92	+1.03	3.54	−0.40	3.47	−0.46	3.56	−2.03	1.00	−2.53	6.75	+2.44	4.99	+0.95	1.01	−3.36	6.36	+3.01	3.98	+1.11	0.67	−1.83	39.13	− 3.43
Seymour(near)	1.09	−1.61	4.04	+1.59	3.26	−0.80	3.84	−0.12	2.99	−2.71	2.24	−2.39	1.79	−2.45	9.30	+5.34	2.20	−2.27	2.51	−0.79	4.26	+1.59	2.23	−0.08	39.75	− 4.70
Springfield	0.63	−1.71	3.06	+0.71	2.54	−0.85	3.80	−0.06	3.65	−1.54	0.84	−3.84	4.08	−0.13	10.68	+6.59	0.92	−2.60	2.53	−0.52	4.08	+1.29	1.65	−0.66	38.46	+ 3.32
Steelville	0.76	−1.09	2.63	+0.37	3.00	−0.92	3.24	−1.07	5.32	+0.98	4.69	+0.54	5.32	+2.16	3.22	−0.42	4.54	+1.13	2.36	−0.89	4.72	+1.98	3.27	+0.98	43.07	+ 3.75
Stover	0.55	−1.23	2.37	+0.88	2.45	−0.29	1.92	−2.42	4.79	−0.80	4.94	−0.51	2.19	−0.91	3.50	−0.17	7.71	+3.82	2.97	−1.34	4.30	+1.53	1.24	−0.66	38.93	− 2.10
Tuscumbia	0.59	−0.55	3.18	+1.86	3.63	+0.18	1.84	−2.60	6.72	+2.63	1.87	−1.80	5.02	+2.68	4.53	+0.96	4.55	−0.38	4.42	+0.23	5.40	+2.86	1.95	−0.02	43.70	+ 6.05
Williamsville	1.46	−2.74	3.01	+0.46	4.91	+1.38	3.05	−2.24	4.24	−0.12	2.93	−3.67	4.50	+1.14	4.30	−1.15	1.22	−2.53	1.26	−2.36	4.37	+0.72	4.92	+1.10	40.17	−10.01
Willow Springs(near)	1.03	−2.40	4.66	+2.29	5.05	+2.17	4.04	−1.18	4.14	−0.93	2.75	−3.10	1.99	−1.42	8.09	+3.74	2.73	−2.17	1.82	−2.66	4.71	+0.96	3.18	−0.23	44.19	− 4.93

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Monthly and Annual Precipitation for the Year 1931, with Departures—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Southwest Plain																										
Appleton City	0.66	−1.17	3.77	+1.80	2.62	−0.45	2.79	−1.47	4.40	−1.14	0.96	−4.03	1.57	−2.94	3.18	−0.50	3.09	−1.03	2.72	+0.15	5.48	+3.24	1.12	−0.54	32.36	− 8.08
Clinton	0.75	−1.23	3.79	+1.69	2.81	−0.05	2.48	−1.56	4.44	−1.00	1.76	−2.97	1.19	−2.64	5.40	+2.03	4.97	+0.91	4.13	+1.08	6.03	+3.96	1.62	−0.25	39.37	− 0.03
Concordia	0.46	−0.76	1.31	−0.39	2.09	−0.61	2.19	−1.46	3.95	−0.02	1.25	−4.76	1.78	−1.10	2.29	−0.86	3.88	−0.35	2.14	−2.08	7.23	+4.32	1.80	+0.25	30.37	− 7.82
Harrisonville	0 68	−0.92	2.44	+0.42	2.17	−0.52	2.66	−0.73	4.37	−0.44	0.92	−3.54	1.43	−2.33	4.17	+0.12	4.44	−0.14	3.10	+0.27	6.48	+4.41	1.37	−0.32	34.23	− 3.72
Joplin	0.81	−1.27	2.45	+0.21	2.45	−0.44	3.63	−0.62	4.95	−0.21	2.43	−2.91	8.44	+4.09	5.13	+0.91	0.76	−2.87	6.21	+2.72	7.56	+4.99	0.83	−1.11	45.65	+ 3.49
Lamar	0.61	−1.09	2.31	+0.08	2.55	−0.35	2.24	−1.91	5.67	+0.21	1.28	−3.68	3.87	−0.31	3.68	−0.55	1.44	−3.08	4.69	+1.53	6.09	+3.76	0.53	−1.45	34.96	− 6.84
Lamonte	0.36	−1.42	2.45	+0.54	3.09	+0.49	1.91	−1.86	5.89	+0.94	1.83	−2.66	1.91	−2.04	5.78	+2.05	4.84	+0.22	3.64	+0.96	5.24	+3.08	2.52	+0.77	39.46	+ 1.07
Marshall	0.54	−1.28	3.00	+1.16	2.74	+0.03	2.15	−1.54	4.23	−0.63	0.92	−3.40	2.37	−1.47	6.19	+2.55	1.63	−3.51	1.66	−1.20	5.24	+2.98	2.03	+0.35	32.70	− 5.96
Nevada	0.98	−0.99	1.84	−0.24	2.61	−0.38	2.96	−0.83	4.95	−0.77	0.93	−4.18	4.89	+0.95	6.17	+2.53	1.62	−2.68	2.96	−0.03	5.28	+3.25	0.42	−1.41	35.61	− 4.78
Osceola	0.79	−1.33	2.98	+1.19	3.17	+0.24	1.52	−2.53	5.07	−0.88	0.56	−4.19	2.70	−1.16	5.97	+1.90	2.90	−1.91	4.36	+1.20	5.04	+2.26	1.39	−0.74	36.45	− 5.95
Warrensburg	0.44	−1.35	1.38	−0.75	2.60	+0.06	2.58	−0.62	4.90	+0.24	2.84	−1.92	2.39	−1.46	2.71	−0.78	6.00	+2.21	3.82	+1.10	8.16	+6.16	0.80	−0.96	38.62	+ 1.93
Warsaw	0.79	−1.59	3.16	+0.60	3.53	+0.30	2.17	−2.05	5.66	+0.43	4.50	−0.67	2.25	−1.84	8.45	+4.16	6.08	+1.36	5.26	+1.79	5.30	+2.71	1.74	−0.54	48.89	+ 4.66
Waverly	0.30	−1.32	1.30	+0.66	2.49	−0.73	2.98	−1.31	3.90	−1.41	2.44	−2.68	5.36	+1.74	3.74	−0.03	5.44	+0.13	3.38	+0.19	7.17	+4.80	1.57	+0.11	40.57	+ 0.15
Northwest Plateau																										
Albany	0.10	−0.73	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	5.21	+1.61	....	.....	3.50	+0.71	....	.....	....	.....	....	.....
Bethany	0.17	−1.13	0.71	−0.73	1.44	−0.86	2.71	−0.51	2.41	−2.57	2.93	−1.55	3.62	−0.61	6.08	+2.13	8.04	+3.88	4.54	+2.09	8.26	+6.43	3.64	+2.39	44.55	+ 8.96
Chillicothe	0.28	−1.38	1.03	−0.98	2.53	−0.25	4.67	+0.23	3.59	−1.12	4.66	−0.41	2.06	−2.10	3.38	−1.08	10.08	+4.40	3.99	+0.26	9.10	+6.76	3.17	+1.71	48.54	+ 6.04
Conception	0.22	−0.73	0.74	−0.45	1.81	+0.06	2.46	−0.35	2.68	−2.09	3.32	−1.23	2.78	−1.55	8.10	+4.40	9.47	+5.35	5.33	+2.63	7.11	+5.65	2.52	+1.58	46.54	+13.27
Edgerton	0.15	−1.12	0.75	−0.70	1.23	−1.52	3.63	+0.09	3.15	−2.30	0.74	−4.37	3.28	−0.60	3.04	−0.18	6.06	+2.26	3.62	+0.97	8.04	+6.51	2.85	+1.64	36.54	+ 0.68
Gallatin	0.43	−0.76	0.74	−0.86	2.43	−0.12	4.50	+0.78	3.68	−1.82	3.42	−1.89	3.66	−0.42	4.55	+0.68	9.31	+4.88	2.94	−0.08	8.44	+6.53	2.50	+1.05	46.60	+ 7.97
Grant City	0.26	−0.70	0.92	−0.20	1.64	−0.47	2.31	−0.75	2.06	−2.67	2.52	−2.03	4.26	−0.57	4.58	+0.84	8.87	+4.61	5.35	+2.53	8.08	+6.46	3.28	+2.21	44.13	+ 9.26
Kansas City	0.56	−0.63	1.24	−0.51	2.35	−0.18	2.62	−0.52	5.99	+1.34	1.50	−3.49	3.24	−0.89	3.45	−0.64	5.12	+0.56	3.02	+0.10	9.52	+7.69	2.54	+1.21	41.15	+ 4.04
Kidder	0.52	−0.78	0.90	−0.62	1.66	−0.64	4.98	+1.94	3.81	−1.40	1.41	−2.95	3.20	−0.72	3.81	−0.06	9.82	+5.25	2.15	−0.76	9.72	+7.81	2.45	+1.19	44.43	+ 8.26
King City	0.43	−0.86	0.55	−0.87	2.62	+1.06	4.74	+0.39	3.71	+0.94	2.61	−4.72	1.06	−1.87	4.73	+1.70	10.80	+5.26	3.16	−1.78	8.33	+6.01	2.90	+2.24	45.64	+14.98
Lexington	0.49	−1.08	1.51	−0.49	4.19	+1.82	4.18	+0.82	6.07	+1.01	2.21	−2.56	3.54	−1.14	3.42	−0.03	4.93	+0.19	3.28	+0.30	6.82	+4.75	1.84	+0.06	42.48	+ 3.65
Maryville	0.25	−0.83	0.81	−0.63	2.20	+0.32	2.19	−0.72	3.13	−2.62	2.70	−1.93	2.30	−2.83	3.70	−0.26	5.57	+1.07	3.95	+1.14	7.16	+5.53	2.63	+1.63	36.59	− 0.13
Oregon	0.25	−1.14	0.85	−0.77	1.77	−0.25	3.29	0.00	2.60	−2.26	4.30	−0.43	2.55	−1.71	5.85	+1.84	8.92	+5.01	4.24	+1.59	8.37	+6.64	3.29	+1.92	46.28	+10.44
St. Joseph	0.53	−0.39	0.81	−0.67	2.44	+0.13	3.56	+0.37	4.13	+0.01	2.42	−2.68	4.05	+1.01	5.27	+1.36	7.88	+2.90	1.92	−1.02	8.35	+6.56	3.38	+2.27	44.74	+10.35
Tarkio	0.17	−0.62	0.58	−0.49	1.72	+0.02	3.36	+0.19	2.21	−2.45	6.53	+1.72	2.51	−1.23	3.86	−0.19	6.32	+2.48	2.83	+0.23	5.48	+4.00	2.07	+1.19	37.64	+ 4.85
Trenton	0.41	−0.97	0.71	−0.82	2.14	−0.30	4.85	+1.58	5.00	−0.34	4.67	+0.37	2.23	−1.83	6.67	+2.98	9.08	+4.55	4.16	+1.24	8.91	+7.03	3.44	+2.05	52.27	+15.54
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highest temperature was 106° and the lowest 44°. The average precipitation was 4.77 inches, or 1.02 inches greater than the normal. The net effect of the weather after the first week was favorable generally.

SEPTEMBER.—Abnormally warm and moderately wet. The mean temperature was 75.0°, or 6.0° above the normal. The highest temperature was 104° and the lowest 36°. The rainfall was 4.16 inches, or 0.32 inch more than normal; most of the water fell during the first three days and from the 22d to the 25th, rather a dry spell prevailed from the 7th to 14th. Some damage to crops by hot weather in southwest having Henry County as a center. Much ground was prepared for fall seeding, and the bulk of the corn crop was safe from frost damage.

OCTOBER.—Mainly high temperatures, few scattered frosts and rainfall well distributed as to time and places. Mean temperature 61.7°, or 4.3° warmer than normal. The highest was 95° and the lowest 27°. The rainfall was 3.45 inches, or 0.56 inch more than normal. Winter wheat seeding was completed and the general farm outlook was satisfactory.

NOVEMBER.—Abnormally warm the first three weeks; dry the first decade but very wet the second and last. It turned out to be next to the wettest November of record. The mean temperature was 55.2°, or 7.8° warmer than normal. The highest temperature was 87° and the lowest was 17°. The precipitation was 5.46 inches and 3.06 inches more than normal. The first snow fell on Thanksgiving Day but melted rapidly. Winter wheat looked well but the ground was too wet for pasturing. Corn husking was delayed by wet ground.

DECEMBER.—Abnormally warm and somewhat wetter than usual. The mean temperature was 42.7°, or 8.8° higher than normal. The highest temperature was 80° and the lowest 11°. The precipitation averaged 2.57 inches, or 0.50 inch more than normal. The snowfall was unimportant. The soil was too wet for gathering all the corn; and farm roads were very muddy, except over the western part of the Ozarks and most of the southwestern plain where precipitation was considerably less than normal. Winter wheat, as well as live stock look well.

Comparative Annual Data for the State

Year	Temperature			Precipitation	Year	Temperature			Precipitation
	Mean	Maximum	Minimum			Mean	Maximum	Minimum	
1888	52.9	111	−32	41.22	1910	55.0	109	−24	36.86
1889	54.3	107	− 9	37.91	1911	56.9	113	−19	38.94
1890	54.7	106	−19	35.71	1912	53.6	105	−36	38.68
1891	53.9	108	−11	38.04	1913	56.5	110	−12	37.47
1892	53.4	101	−11	42.76	1914	56.1	109	−18	34.72
1893	52.7	107	−20	38.19	1915	54.8	102	−24	49.62
1894	55.1	111	−35	33.18	1916	55.2	109	−29	40.33
1895	52.9	106	−26	39.30	1917	52.3	107	−23	31.94
1896	55.5	108	−10	44.63	1918	55.5	111	−25	37.16
1897	55.0	108	−16	38.82	1919	55.2	106	−23	40.05
1898	54.4	104	−20	53.67	1920	54.3	105	−10	37.17
1899	54.0	108	−32	37.32	1921	58.2	109	− 8	43.77
1900	55.6	105	−16	38.34	1922	56.8	108	− 6	39.99
1901	55.5	116	−29	25.28	1923	55.3	108	−11	41.23
1902	54.1	103	−17	44.96	1924	52.9	106	−28	40.01
1903	53.6	102	−25	40.15	1925	55.5	110	−14	39.78
1904	53.2	100	−23	41.62	1926	54.5	108	−20	43.07
1905	53.6	103	−40	45.43	1927	55.5	102	−24	53.86
1906	55.1	101	−13	37.34	1928	55.2	102	−18	45.59
1907	55.6	109	−15	41.81	1929	53.5	105	−23	46.61
1908	56.7	102	−10	42.56	1930	55.9	114	−31	31.27
1909	55.6	110	−20	45.16	1931	58.0	110	− 5	40.36
					Average 44 yrs.	54.9	116	−40	40.27

KILLING FROSTS, 1931

Stations	Last in Spring	First in Autumn	Days in Growing Season	Stations	Last in Spring	First in Autumn	Days in Growing Season
Northeast Plain				*Ozark Plateau (continued)*			
Brunswick	May 7	Nov. 6	183	Goodland	May 7	Oct. 18	164
Clifton Hill	May 7	Nov. 1	178	Greenville	April 28	Oct. 17	172
Columbia	April 5	Nov. 6	215	Koshkonong	April 5	Nov. 25	234
Downing	May 7	Nov. 6	183	Lebanon	May 7	Oct. 31	177
Elsberry	May 4	Oct. 18	167	Lockwood	April 22	Nov. 6	198
Fayette	May 7	Nov. 5	182	Mountain Grove	April 27	Oct. 31	187
Fulton	April 23	Nov. 1	192	Neosho	May 7	Oct. 31	177
Hannibal	Mar. 30	Nov. 6	221	Rolla	April 27	Nov. 1	188
Jefferson City	April 6	Nov. 4	212	Salem(near)	May 7	Nov. 6	183
Kirksville	May 7	Nov. 6	183	Seligman	April 22	Oct. 31	192
Louisiana	May 7	Oct. 18	164	Seymour(near)	May 7	Nov. 5	182
Macon	May 8	Nov. 6	182	Springfield	Mar. 29	Nov. 25	241
Mexico	May 7	Nov. 6	183				
St. Charles	April 5	Nov. 6	215	*Southwest Plain*			
St. Louis (1)	Mar. 28	Nov. 25	242	Appleton City	April 27	Nov. 6	193
St. Louis (2)	Mar. 28	Nov. 25	242	Clinton	April 22	Nov. 1	193
Steffenville	May 7	Nov. 4	181	Harrisonville	April 28	Nov. 6	192
Unionville	May 7	Nov. 4	181	Lamar	April 22	Nov. 1	193
Warrenton	April 5	Nov. 6	215	Lamonte	April 27	Nov. 6	193
Keokuk, Iowa	April 27	Nov. 6	193	Marshall	April 22	Nov. 6	198
				Nevada	April 27	Nov. 5	192
Southeast Lowlands				Warrensburg	April 22	Nov. 6	198
Campbell	April 22	Oct. 19	180	Warsaw	April 27	Nov. 5	192
Caruthersville	Mar. 18	Dec. 3	261				
Doniphan	April 27	Oct. 18	174	*Northwest Plateau*			
Jackson	April 28	Oct. 18	173	Bethany	May 7	Nov. 1	178
Marble Hill	April 28	Oct. 18	173	Chillicothe	May 7	Nov. 1	178
Poplar Bluff	April 22	Nov. 6	198	Conception	May 7	Nov. 6	183
Sikeston	Mar. 20	Nov. 6	231	Edgerton	May 7	Nov. 1	178
Cairo, Ill.	Mar. 20	Nov. 6	231	Grant City	May 6	Nov. 1	179
				Kansas City	April 5	Nov. 6	215
Ozark Plateau				Kidder	May 7	Nov. 6	183
Arcadia	April 29	Oct. 18	172	Lexington	April 5	Nov. 6	215
Aurora	April 27	Nov. 6	193	Maryville	May 21	Oct. 28	160
Birchtree	April 27	Nov. 6	193	Oregon	April 27	Nov. 6	193
Buffalo	April 22	Nov. 6	198	St. Joseph	April 27	Nov. 1	188
Dean	May 7	Oct. 28	174	Tarkio	April 27	Nov. 1	188
Eldon	April 23	Nov. 7	198	Trenton	May 7	Nov. 6	183
Farmington	April 27	Oct. 18	174				

Monthly Data of the State for 1931

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	36.0	+ 5.5	76	− 5	0.69	−1.35	2.12	0.07	4
February	40.9	+ 8.5	75	5	2.40	+0.29	5 07	0.50	6
March	39.5	− 4.4	70	10	3.02	0.00	6.03	1.23	8
April	54.8	− 0.3	90	22	3.07	−0.74	6.23	1.38	9
May	61.0	− 3.4	96	29	4.51	−0.16	4.70	1.62	10
June	77.1	+ 3.9	107	40	2.94	−1.93	9.14	0.56	5
July	80.3	+ 3.0	110	49	3.23	−0.77	8.66	0.43	7
August	74.9	− 1.1	106	44	4.77	+1.02	11.00	0.54	9
September	75.0	+ 6.0	104	36	4.16	+0.32	10.80	0.46	7
October	61.7	+ 4.3	95	27	3.45	+0.56	6.82	0.99	8
November	52.2	+ 7.8	87	17	5.46	+3.06	9.72	3.42	11
December	42.7	+ 8.8	80	11	2.57	+0.50	9.32	0.42	8
Year	58.0	+ 3.2	110	− 5	40.36	+0.89	11.00	0.07	96

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

19 MISSOURI SECTION

GEORGE REEDER, Meteorologist

VOL. XXXVI COLUMBIA, MO., JANUARY, 1932 No. 1

GENERAL SUMMARY

January, 1932, was abnormally warm in all Missouri, but there was a marked contrast in temperature conditions between the extreme northern and southern sections. In the northwestern plateau there were nine stations with monthly mean less than 30°, or 0.5° to 3° above the normal; and 19 stations in the southern sections with means of more than 40°, or 5° to 9° above the normal. Zero cold occurred on the 9th and the 30th, all confined to the northwest and northern border counties. Over the greater part of the State there were not more than a half dozen days colder than normal, while the daily excess on many days ranged from as much as 15° to more than 25°.

Other notably warm Januarys in recent years occurred in 1914, 1921, 1923, and 1931, the first three averaged even warmer than the current January; in January ,1923, temperature did not fall to zero anywhere in the State, while the present month had 7° below zero.

The month was wet in the southeastern lowlands and much of the Ozarks, slightly wetter than normal in northern areas and drier than normal in the southwestern plain. The total monthly fall was under one inch at four stations, all in the western border counties, while 28 stations received more than 5 inches, and 3 stations more than 9 inches, all in the southeast lowlands or Ozark Plateau. Generally the month's precipitation ranged from 1.50 inches to 3.50 inches.

Outside the northwestern counties the snowfall was unimportant; 16 stations in east-central and southern sections had no snow at all, 24 with only a trace, 35 with measurable amounts, and 24 stations with more than one inch; the average for seven northwestern counties was 7 inches, the greatest monthly totals being 9 and 9.5 inches, at Tarkio and Bethany, respectively.

There was some plowing in the drier section of the southwest. A small amount of corn on the stalk is still in the bottom lands. Wheat made rather rank growth and is too far advanced for the season. Livestock kept in good condition. Pastures and alfalfa continued green; and dandelions and other field flowers were observed up to the cold snap of the last few days. Further swelling of fruit buds was checked by the cold.

TEMPERATURE

The monthly mean for the State, 69 stations reporting, was 36.4°, or 5.9° warmer than the normal, and 0.4° warmer than the same month of 1931. Only three other Januarys, going backward in the past for forty or more years, were warmer, in 1923, 1921, and 1914. The highest local monthly mean was 47.4° at Caruthersville, and the lowest local monthly mean 23.4° at Tarkio. The highest temperature reported was 73°, at Aurora and Lebanon on the 14th, and the lowest was — 7°, at Tarkio on the 9th, and Maryville and Grant City on the 30th. Zero or lower occurred at 16 stations on the 9th or 30th; and minima of 32° or lower occurred on 22 days.

PRECIPITATION

The average precipitation, based upon the reports of 119 stations, was 3.32 inches, or 1.28 inches more than the 60 years' average. There was a small deficiency in the southwestern plains, a small excess in the northern sections, while the southeastern lowlands and most of the Ozark Plateau were considerably wetter than normal. The greatest local monthly amount was 9.92 inches at New Madrid, and the least was 0.29 inch at Edgerton. The greatest fall in any twenty-four consecutive hours was 2.35 inches, at Dean on the 16th.

(Continued on Page 4)

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PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.10	79	70	71	128	42	6,722	9.0	21	sw.	20
Hannibal	30.11	78	68	..	....	..	7,047	9.5	24	w.	6
Kansas City	30.10	81	72	75	156	51	7,693	10.3	26	sw.	16
St. Joseph	30.09	87	74	80	128	43	6,771	9.1	29	nw.	29
St. Louis	30.10	80	67	71	125	41	9,186	12.3	31	se.	12
Springfield	30.08	82	65	68	153	50	8,246	11.1	31	se.	11
Cairo, Ill.	30.13	86	74	77	....	..	6,980	9.4	35	sw.	12
Keokuk, Iowa	30.11	80	66	74	120	40	6,451	8.7	24	w.	17

COMPARATIVE DATA FOR JANUARY

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**30.5**	.....	**73**	**−16**	**2.04**	.....	**3.03**	**4.7**	**6**	**13**	**6**	**12**
1888	21.5	− 9.0	74	−32	1.91	−0.13	....	....	6	..	..	..
1889	31.8	+ 1.3	69	− 2	2.36	+0.32	....	....	6	..	..	..
1890	33.8	+ 3.3	81	−19	4.25	+2.21	....	....	9	..	..	..
1891	34.1	+ 3.6	74	− 1	1.52	−0.52	...	4.3	6	..	..	..
1892	24.0	− 6.5	67	−25	1.80	−0.24	....	....	4	14	8	9
1893	22.5	− 8.0	66	−14	0.45	−1.59	0.90	2.4	3	9	11	11
1894	31.4	+ 0.9	77	−35	2.21	+0.17	2.96	2.7	5	13	9	9
1895	24.7	− 5.8	78	−22	1.49	−0.55	2.20	9.4	5	14	8	9
1896	32.9	+ 2.4	71	− 9	1.17	−0.87	2.44	3.1	4	10	7	14
1897	28.4	− 2.1	72	−16	4.90	+2.86	6.95	4.0	8	12	7	12
1898	34.3	+ 3.8	75	−10	3.98	+1.94	3.35	8.4	9	11	8	12
1899	30.2	− 0.3	70	−21	1.55	−0.49	2.40	4.0	6	12	8	11
1900	34.5	+ 4.0	77	− 9	1.22	−0.82	2.30	0.2	4	14	7	10
1901	35.0	+ 4.5	72	−11	1.30	−0.74	2.95	0.8	4	17	7	7
1902	30.1	− 0.4	72	−17	1.23	−0.81	3.37	6.9	5	16	7	8
1903	31.4	+ 0.9	73	−11	1.36	−0.68	1.71	5.0	6	13	6	12
1904	27.0	− 3.5	66	−23	2.85	+0.81	4.74	7.4	8	14	6	11
1905	22.3	− 8.2	72	−19	1.79	−0.25	2.52	6.8	8	14	6	11
1906	35.6	+ 5.1	76	− 8	3.64	+1.60	3.00	9.2	6	14	5	12
1907	34.3	+ 3.8	79	− 5	5.10	+3.06	4.42	2.8	12	7	6	18
1908	34.4	+ 3.9	68	−10	1.51	−0.53	2.13	3.6	5	19	5	7
1909	33.7	+ 3.2	83	−20	2.17	+0.13	2.10	6.5	7	6	7	18
1910	32.3	+ 1.8	78	−24	1.83	−0.21	3.98	3.5	5	13	6	12
1911	34.6	+ 4.1	78	−19	1.20	−0.84	3.03	0.7	5	8	7	16
1912	20.0	−10.5	70	−36	1.06	−0.98	2.56	6.5	4	14	7	10
1913	33.1	+ 2.6	74	−12	3.67	+1.63	5.30	2.6	8	13	6	12
1914	38.1	+ 7.6	78	− 1	1.42	−0.62	2.00	1.0	4	12	7	12
1915	29.1	− 1.4	76	−24	2.92	+0.88	3.10	5.4	8	12	5	14
1916	31.6	+ 1.1	72	−24	7.36	+5.32	4.65	3.4	12	9	4	18
1917	32.9	+ 2.4	76	−10	1.52	−0.52	2.50	2.3	5	15	7	9
1918	16.4	−14.1	67	−24	1.68	−0.36	3.20	16.6	7	12	7	12
1919	34.0	+ 3.5	70	−23	0.40	−1.64	3.05	1.4	2	20	5	6
1920	28.6	− 1.9	72	− 5	1.57	−0.47	4.15	5.7	5	15	5	11
1921	37.1	+ 6.6	74	− 1	1.88	−0.16	1.45	5.4	6	10	7	14
1922	29.5	− 1.0	66	− 6	1.21	−0.83	2.95	3.9	5	14	5	12
1923	39.2	+ 8.7	75	3	2.72	+0.68	3.52	0.6	6	12	7	12
1924	24.9	− 5.6	68	−25	1.54	−0.50	1.78	5.7	7	14	5	12
1925	29.7	− 0.8	65	−15	1.00	−1.04	2.10	4.7	4	15	7	9
1926	32.7	+ 2.2	70	−20	1.90	−0.14	2.51	4.2	6	11	7	13
1927	30.8	+ 0.3	73	−24	3.05	+1.01	4.40	3.6	6	13	6	12
1928	33.3	+ 2.8	77	−18	0.87	−1.17	1.25	0.5	3	16	7	8
1929	25.1	− 5.4	72	−13	3.47	+1.43	3.50	6.8	8	11	6	14
1930	20.8	− 9.7	73	−31	4.51	+2.47	3.70	13.0	10	12	5	14
1931	36.0	+ 5.5	76	− 5	0.69	−1.35	0.80	2.0	4	16	6	9
1932	36.4	+ 5.9	73	− 7	3.32	+1.28	2.35	1.0	9	10	7	14

Climatological Data for January, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	33.3	+ 6.6	63	20†	3	30†	36	1.70	+0.12	0.57	1.5	12	10	1	20	nw.	O. K. Benecke
Clifton Hill	Randolph	781	33	34.8	+ 6.7	67	29	− 1	30	53	1.27	−0.31	0.42	2.0	14	7	9	15	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	36.2	+ 7.0	64	20	5	30	26	1.79	−0.13	0.55	T.	12	5	8	18	w.	U. S. Weather Bureau
Downing	Schuyler	876	11	31.2	+ 5.8	57	28	− 3	30	28	1.60	+0.17	0.85	0.2	10	8	11	12	w.	James Taylor
Elsberry	Lincoln	449	1	38.0	.....	66	13	8	30	35	2.17	.....	0.60	0	9	5	12	14	s.	Ray E. Mills
Fayette	Howard	661	52	35.6	+ 8.6	66	20	4	30	35	1.91	+0.05	0.41	T.	8	..	..	.	.....	J. D. Settle
Fulton	Callaway	818	44	34.8	+ 5.3	66	13	5	30	35	2.19	−0.04	0.48	T.	11	13	6	12	. ....	Chamber of Commerce
Goriu	Scotland	700	45	....	.....	..	..	....	..	..	1.28	−0.20	0.55	1.3	8	6	4	21	sw.	J. W. Pulliam
Hannibal	Marion	534	49	35.5	+ 8.4	63	13	5	30	30	1.53	−0.19	0.50	0.2	10	5	6	20	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	36.7	+ 6.9	71	13	7	30†	39	2.66	+0.53	0.50	0	10	3	11	17	w.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	31.7	+ 6.9	55	20†	− 2	30	32	1.71	+0.26	0.73	1.5	9	10	2	19	w.	Prof. J. S. Stokes
Louisiana	Pike	469	38	36.6	+ 8.5	60	12‡	7	30	27	1.45	−0.52	0.60	0	4	14	3	14	s.	Stark Bros. Nurseries
Macon	Macon	875	33	32.4	+ 4.9	60	28	0	30	31	1.64	+0.07	0.40	0.5	9	11	6	14	w.	W. C. Brown
Mexico	Audrain	800	43	34.8	+ 6.8	63	28	4	31	37	2.72	+0.71	0.80	T.	10	15	0	16	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	....	..	..	1.25	−0.78	0.58	T.	5	5	3	23	s.	J. S. Conway
St. Charles	St. Charles	456	44	38.6	+ 7.6	68	13	10	30	29	2.46	+0.27	0.52	T.	12	8	10	13	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	39.8	+ 8.7	68	13	13	30	31	2.50	+0.16	0.60	0.1	12	9	5	17	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	39.1	+ 8.9	66	13	11	30	32	2.52	+0.01	0.62	0.5	11	9	4	18	w.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	....	..	..	1.70	+0.11	0.39	2.5	10	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	34.1	+ 6.7	62	28	1	31	29	2.75	+0.70	1.05	2.0	7	8	9	14	e.	Frank Hall
Unionville	Putnam	1,062	39	30.4	+ 6.9	56	20	− 5	30	26	2.10	+0.34	1.05	2.0	8	12	4	15	s.	Geo. W. Davis
Warrenton	Warren	816	50	37.4[c]	+ 8.2	70	13	7	30	34	2.75	+0.45	0.67	1.0	12	11	8	12	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	32.7	+ 7.8	61	28	− 1	30	30	1.28	−0.28	0.46	1.7	9	6	1	24	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	35.2	+ 7.2	71	13	− 5	30	53	1.95	+0.07	1.05	0.7	10	9	6	16	w.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	41.9	.....	71	14	17	30	30	9.37	+3.31	1.73	0	13	10	6	15	n.	Jeff. King
Caruthersville	Pemiscot	265	36	47.4	+ 8.3	70	16	22	31	25	9.14	+4.30	2.50	T.	13	12	2	17	s.	Sam Smith
Doniphan	Ripley	344	28	43.4	+ 7.6	69	14†	16	30	36	6.25	+1.85	1.80	T	9	13	8	10	e.	W. W. Martin
Jackson	Cape Girardeau	428	41	38.0	+ 4.2	62	14†	14	30†	32	6.00	+2.22	1.28	T.	11	9	2	20	n.	John G. Putz
Marble Hill	Bollinger	470	37	42.4	+ 7.8	68	15	15	30	37	5.89	+2.22	1.12	0	11	10	4	17	w.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	....	..	..	8.85	+4.00	1.72	0.5	14	11	5	15	s.	John A. Spence
Poplar Bluff	Butler	339	27	42.3	+ 6.3	69	14†	16	30	42	7.29	+3.07	1.52	T.	11	14	4	13	w.	J. H. Wolpers
Sikeston	Scott	318	25	44.2	+ 7.2	68	14†	18	30	29	7.35	+2.91	1.40	1.0	13	12	2	17	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	44.1	+ 9.2	68	14	20	30	29	7.02	+3.26	1.36	0.9	13	8	4	19	s.	U. S. Weather Bureau
Section means and	extremes	....	..	43.0	+ 7.2	71	14	14	30†	42	7.46	+3.02	1.80	0.3	12	11	4	16	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	37.8	+ 5.9	67	14	10	31	49	3.30	+0.26	1.27	0	8	17	2	12	nw.	Arcadia College
Aurora	Lawrence	1,370	31	40.4	+ 7.1	73	14	11	30	34	5.01	+2.56	1.43	T.	10	14	4	13	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	42.0	+ 7.5	69	14	13	30	31	5.51	+2.32	1.24	0	10	14	5	12	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	39.2	.....	69	14	8	29	41	3.88	.....	1.07	0.3	10	22	7	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	....	..	..	1.75	.....	0.39	0	7	6	15	10	s.	J. M. Atkinson
Dean ‡‡	McDonald	1,000	28	40.0	+ 4.1	72	14	8	30	41	6.69	+4.35	2.35	0	8	14	6	11	s.	H. E. Dean
Eldon	Miller	934	37	37.0	+ 5.9	68	13	8	30†	39	2.51	+0.88	0.74	0	6	8	14	9	s.	E. H. Shepherd
Farmington	St. Francois	918	21	40.4	+ 7.8	65	13	11	30	31	3.90	+1.38	0.92	0	13	13	7	11	sw.	Robert Forsyth
Goodland	Iron	1,000	39	41.2	+ 8.6	71	13†	11	30†	36	4.11	+1.43	1.23	0	10	13	6	12	s.	F. M. Adams
Greenville	Wayne	381	23	40.8	+ 5.8	69	14	13	31	35	6.57	+3.51	2.00	T.	7	17	5	9	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	....	..	..	6.35	+3.62	2.20	T	8	11	8	12	sw.	A. W. Madison
Koshkonong	Oregon	958	31	42.6	+ 6.1	70	14	15	30	31	4.70	+1.04	1.19	0	10	11	6	14	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	39.4	+ 6.9	73	14	6	30	44	5.40	+2.87	1.10	T.	10	13	4	14	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	39.9	+ 6.6	67	13	10	30	34	2.11	+0.37	0.59	T.	7	15	8	8	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	38.4[a]	+ 5.6	72	14	10	30	40	5.18	+2.36	1.48	T.	14	8[a]	11[a]	11[a]	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	42.0	+ 6.9	71	14	10	30	45	4.58	+2.08	1.06	T.	12	10	15	6	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	40.1	+ 8.2	69	13†	9	31	38	3.37	+0.93	0.80	T.	10	5	11	15	nw.	F. H. Lane
Salem	Dent	1,173	28	40.6	+ 8.0	69	13†	10	30	37	8.68	+0.89	1.12	T.	11	13	6	12	s.	A. C. Leech
Seligman	Barry	1,542	31	41.2	+ 9.1	72	14	8	30	43	6.39	+3.51	2.00	0	10	15	4	12	w.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	40.1	+ 6.1	70	14	10	30	49	5.30	+2.75	1.68	T.	9	12	9	10	nw.	Ira H. Hailey
Springfield	Greene	1,324	54	38.8	+ 5.3	71	14	9	30	34	3.79	+1.45	1.38	T.	11	10	11	10	s.	U. S. Weather Bureau
Section means and	extremes	.....	..	40.2	+ 0.7	73	14	6	30	49	4.48	+2.19	2.35	T.	10	12	8	11	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	36.4	+ 5.1	62	28	6	30	34	1.70	−0.14	0.35	T.	9	8	15	8	sw.	W. G. Bigelow
Clinton	Henry	765	39	35.8	+ 4.1	64	13	7	30	31	1.63	−0.36	0.35	T.	11	12	7	12	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	32.2	+ 4.9	62	28	3	30	37	1.36	−0.19	0.47	1.0	9	6	5	20	nw.	John H. Patterson
Lamar	Barton	980	44	37.6	+ 5.5	68	13	10	30†	42	2.78	+1.02	0.80	0	9	15	3	13	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	35.2	+ 6.3	64	20	5	30	28	1.71	−0.27	0.40	T.	7	5	10	16	nw.	J. E. Wheeler
Marshall	Saline	779	45	35.4	+ 7.5	68	20†	3	30	37	1.33	−0.38	0.55	2.0	7	14	8	9	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	37.8	+ 5.9	67	13	8	30	33	2.42	+0.39	0.66	0	7	14	5	12	s.	George A. Kaupp
Warrensburg	Johnson	878	45	35.0	+ 6.3	62	20	4	30	33	0.78	−0.99	0.22	1.4	7	14	6	11	sw.	E. A. Markey
Warsaw	Benton	687	31	39.0	+ 6.1	68	13	7	30	39	1.93	−0.35	0.40	0	8	12	3	16	w.	Everett Martin
Section means and	extremes	.....	..	36.0	+ 5.7	68	13†	3	30	42	1.74	−0.14	0.80	0.5	8	11	7	13	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	29.2	+ 4.4	56	20	− 4	30	27	1.37	+0.11	0.85	9.5	7	13	5	13	nw.	A. S. Cumming
Chillicothe	Livingston	779	23	30.4	+ 3.6	62	20	− 2	30†	39	2.19	+0.66	0.74	0.1	10	8	9	14	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	26.0[n]	+ 1.3	..	..	− 6	9†	..	1.99	+1.08	0.70	5.5	6	4	11	16	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	29.6[f]	+ 2.7	56	21	− 1	30	24	0.29	−0.77	0.14	0.3	5	13[e]	0[e]	13[e]	n.	Fred L. Stiff
Grant City	Worth	1,134	28	26.8	+ 2.0	52	20	− 7	30	28	1.73	+0.81	0.50	4.0	6	9	11	11	nw.	W. P. Spillman
Kansas City	Jackson	963	43	32.8	+ 4.6	60	20	4	30	24	1.12	−0.07	0.46	2.4	11	6	13	12	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	28.7	+ 2.7	57	20	− 2	30†	36	1.63	+0.04	0.84	4.0	9	7	6	18	nw.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	....	..	..	1.42	+0.13	0.59	4.0	7	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	47	33.2	+ 5.4	62	19	3	30†	40	1.70	+0.08	0.40	0.5	12	14	8	9	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	26.4	+ 3.5	55	20	− 7	30	35	1.09	+0.07	0.69	6.5	6	6	14	11	n.	J. R. Brink
Oregon	Holt	1,048	76	28.8	+ 4.7	58	20	− 3	30	31	0.60	−0.74	0.37	2.0	5	6	12	13	nw.	Mina Wright
St. Joseph	Buchanan	967	24	29.0	+ 2.1	58	20	− 3	30	27	1.30	+0.40	....	3.5	7	10	7	14	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	29	23.4	+ 0.5	50	20	− 7	9	31	1.30	+0.56	0.64	9.0	6	9	5	17	nw.	Albert Volker
Trenton	Grundy	822	36	31.0	+ 4.7	60	20	− 2	30	27	1.32	−0.03	0.46	1.0	7	9	9	13	s.	W. H. Estes
Section means and	extremes	.....	..	28.9	+ 3.2	62	19†	− 7	9†	40	1.46	+0.18	0.85	3.7	7	9	8	14	nw.	
State means and	extremes	.....	..	36.4	+ 5.9	73	14	− 7	9†	53	3.32	+1.28	2.35	1.0	9	10	7	14	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for January, 1932

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri	.48	.03			.30	.20							.02		T.	.14	.04				T.	.11	.15	T.		.15						1.62
Bowling Green	Mississippi	.50				.33	.11									.35	T.							.25			.10						1.64
Brunswick	Grand	.57			.01	.45							.02	.12		.07	.09	.02				.07	.02	.14			.12						1.70
Clifton Hill	Chariton	.03	.03		.10	.42			T.	.02				.11	.07	.02	.14	.01					.02	.10	.10		.10			T.			1.27
Columbia***	Missouri	.36		T.	.24	.35			T.	T.		T.	.02		.21	.04	.08				T.	.14	.02	.15		.02	.16			T.			1.79
Downing	Mississippi				.02	.85							.18	.10	.10	.05	.07	.09				.07					.07						1.60
Edina	do	.40				.40	.34						T.	.05		.12	.05	T			T.		.22	.07			T.						1.65
Elsberry	do	.28			.10	.32							T.	.07		.06	.60						.35	.25			.14						2.17
Fayette	Missouri	.31	T.		.41	.23											.23					.05	.18	.32			.18						1.91
Fulton	do	.48	.02			.48	.21			T.						.05	.08	.30					.14	.19			.20	.04			T.		2.19
Gorin	Mississippi				.07	.55							.09		.04		.16					.24		.05			.08						1.28
Hannibal***	do	.19			.20	.33			T.	T.			.01		.36		.16				T.	.02	.01	.13			.12			T.			1.53
Hermann	Missouri	.51			T.	.45	.17						T.	.02		.16	.41	.48					.35	.32			.28	.06					3.21
Jefferson City	do		.05			.50	.25									.17	.43	.21					.28	.42			.25	.10					2.66
Kahoka	Mississippi	.58				.20	.41																.40	.15									1.74
Kirksville	do	.03			.13	.73							.20		.10		.20					.25		.05			.02						1.71
LaBelle	do	.32				.20	.29									.25	.05					.10		.12			.05						1.38
Laddonia	do	.58			.05	.38	.14									.18	.82						.16	.12			.14						2.57
LaGrange	do				.66										.05		.26					.13		.14			.13						1.37
Louisiana	do					.60											.35					.20					.30						1.45
Lucerne	Grand	.31				.28	.55						.04	.22			.04	.24								T.							1.68
Macon	Chariton	.40				.36	.30							.06		.27	.05					.05		.10			.05						1.64
Memphis	Mississippi	.54	T.			.36	.29							.17		T		.15					T	.05			.08						1.64
Mexico	do	.80	.03			.40	.30									.40	.19	.02					.16	.22			.20						2.72
Milan	Grand			.47		.27							.62	.37			.18	.12			.10					.08	.33						2.54
Monroe City	Mississippi	.08				.58								T.	.18		T.					.19					.22						1.25
New London	do	• •	.57			.33	.19									.55	24	.08					.05			.15	.14						2.30
Pacific	Meramec	.10				.30	.08							.08		.05	.28	.30				.02	.66	.21			.27	.10			T.		2.45
Palmyra	Mississippi																																
Paris	do	.45				.33	.30									.06	.11						.02	.17			.11						1.55
Perry	do	.48				.35	.17								T.	.15	.12					T.	.16	.18		.13							1.74
Philadelphia	do																																
Plevna	do	.23				.34	.29							.04		.10	.12	.04					.03	.12				.10					1.41
St. Charles	Missouri	.18			.18	.08	.15						.02			.26	.52	.20				.19		.25			.15	.28					2.46
St. Louis (1)***	Mississippi	.04	T.		.13	.12							.25		.08	.02	.53	.01				.58	.13	.10		T.	.51			T.			2.50
St. Louis (2)*	do	.05			.19	.11							.30		.12	.01	.62					.55	.10	.08			.39				T.		2.52
Shelbina	do	.34				.39	.29									.20	.10	.04				.05	.04	.14			.11						1.70
Steelville	do				.05	.95									.20		.15					.20		.15	T.		1.05						2.75
Troy	do	.67				.28	.08							.10		.10	.40	.25					.15	.25			.15						2.43
Union	Meramec	.18	.02			.37	.28						.02	.05		.04	.36	.45				.02	.48	.29			.28	.08					2.92
Unionville	Chariton	.30			.15	.90							.20		.10	.20	.15										.10						2.10
Valley Park	Meramec	.10	T.			.28	.05						T.	.23		.15	.19	.45				.04	.64	.24	T.		.22	.18					2.77
Warrenton	Mississippi	.25			.12	.38							.07			.04	.67	.19				.22	.19	.26			.22	.14					2.75
West Ely	do	T.			.40	.28							T.		.73		.05	T.			T.	T.	.04			.39						1.89
Winfield	do	.25				1.13							.05				.90							.55		.22						3.10
Keokuk, Ia.***	do	T.	T.		.08	.38			T.			T.	.10		.30		.09				.01	.11	T.	.12			.09			T.			1.28
Southeast Lowlands																																	
Bragg City	St. Francis				1.33	.05						.50	.60		1.95	.30	1.30	.82				.95		.30		.30				.30			8.70
Campbell	do	.10				1.73	.01					T	1.00	.09	.01	1.46	1.40	1.35					1.30	.54			.27			.11			9.37
Cape Girardeau	Mississippi	T.	.11			1.05	.05						.04	.76	T.	.50	.43	1.74	.02				.67	.48	T.		.13	T.					5.98
Caruthersville	do		.12			.75	.35						.60	1.25		2.50	.30	.80	.40				.60	1.10			.30	.07			T.		9.14
Dexter	St. Francis					1.13							.80	.10		.80	.98		.18				.90				.40						5.29
Doniphan	Black	.11				.16						T.	.80			.62	1.80	.95					.96	.50			.35			T.			6.25
Fisk	St. Francis	.04				1.43	T.						.06	.72	.18	T.	1.63	.98					.79	.55			.22	T.		T.	T.		6.60
Jackson	Mississippi	.06				1.15				T.			.90		.12	.20	1.00	1.28				.02	.67	.40			.20			T.			6.00
Marble Hill	do	.30				.89							.62	.43	.12	.40	.98	1.12					.52	.42			.09						5.89
Morehouse	do	.22				1.72	.03						.76	.29	.11	1.03	1.49	1.28					.81	.58			.25	.08		.20			8.85
New Madrid	do	.02	.04			1.05	.34						.20	1.40	.06	2.05	.80	1.27	.30				1.10	.60	.06		.20	.06		.01	.36		9.92
Parma	St. Francis	.06				1.55	.05						.40	.55		1.27	1.20	1.40	.02				1.09	.57			.24				.25		8.65
Poplar Bluff	Black					1.52	.03						.20	1.10	.08	.37	1.38	.94					.72	.70			.25				T.		7.29
Sikeston	Mississippi	.05			1.40	.10						.10	1.40		1.00		1.40	.15				.70	.70			.10	.05			.20			7.35
Cairo, Ill.***	do	.05	T.		.02	1.07				T.		T.	1.11		.44	.60	1.15	1.12			T.	.14	.71	.19		T.	.27		T.	.15			7.02
Ozark Plateau																																	
Arcadia	St. Francis				T.	T.	.16							.24			.68	.43					1.27	.25			.14	.13					3.30
Aurora	Neosho	.05			.64	.40							.09			.14	1.43					1.20	.46	.27			.33						5.01
Birchtree (near)	Black	.42			.18	.95						.33				.39	.99	.37					1.24	.38			.26						5.51
Buffalo	Osage				.49	.51							.05			.22	1.07					.27	.32	.31	.32		.32						3.88
Caplinger Mills	do				.39	.35											.32					.30	.02	.15			.22						1.75
Chaonia	St. Francis	.11	.04			1.41	.05						.15	1.00	.02	.33	1.12	1.38					.70	.71			.23	.08					7.33
Dean	Neosho				.78	.61						T.	.31		T.		2.35				1.28	.36	T	.45			.55						6.69
Eldon	Missouri	.24				.74											.63						.32	.30			.28						2.51
Farmington	St. Francis	.06			.03	.41	.02						.18	.19	T.	.05	.91	.28				.18	.92	.20			.47			T.			3.90
Fredericktown	do					.72	.12						.12	.68		.41		1.06					1.60	.46	.26		.22	.34					5.99
Galena	White				.10	1.05										.68	1.47	.40					1.60	.49			.34						6.13
Goodland	Black	.10			.13	.45							.15				1.23	.22				.51	.80	.22			.30						4.11
Greenville	St. Francis					1.16							1.31				.46	2.00					.74	.60			.30			T.			6.57
Hailey	White				.68	1 02	.10					T.				10	2 20					1.40	.50	.35			T.						6.35
Koshkonong	Black	.11			.14	1.15							.35				.80	.18				.03	1.19	.44			.31						4.70
Lakeside	Osage	T.				.65	.17									.05	.43	.06					.41	.30			.29	.02					2.38
Lebanon	do				.90		60	.38	.12					T.		20	1.10	.40				T.	1.10			.35	.25			T.			5.40
Leeper	Black	.04				1.09	.12							.55		.14	.59	.89					.72	.62			.79	.09					5.64
Lockwood	Osage	T.			.59	.49				T.					T.		.35	T.				.36	.16	.05			.11						2.11
Mountain Grove	White	.02	.03		.01	.88	.10						.07	.02		.04	1.48	.58					1.38	.31			.23	.03					5.18
Neosho	Neosho	.04			.78	.52	T.	.04					.04	.03			1.06	.03				.80	.43	.38			.43						4.58
Owensville	Gasconade					.45	.41										.65	.25					.42	.31			.31	.27					3.07
Ozark Beach	White					1.42	.15						.12			.08	1.60	.92					1.73	.33			.35						6.70
Rolla	Meramec		.06			.67	.12									.08	.80	.34					.67	.17			.26	.20					3.37
St. Thomas (near)	Osage	.19	.05			.57	.32									.23	.57	20					.53	.33			.31	.12					3.42
Salem	Meramec	.05			.18	.38							.08			.22	1.12	.05				.56	.59	.15			.30						3.68
Seligman	Neosho	.19			.68	.63							.11			11	2.00					.78	.99	.37			.53						6.39
Seymour (near)	White	.06	T.		.41	.74	T.									28	1.68	T.				.92	.64	.28			.29						5.30
Springfield***	do	T.		T.	.58	.23	T.					T.	.03		.07	.15	1.23					.96	.16	.22		.07	.09			T.			3.79
Steelville	Meramec					.34	.20						T			.16	.49	.32				.05	.71	.19			.21	.28					2.95
Stover	Missouri	.11				.56	.15							.07			.18	.09				.04	.18	.21			.26	.02					1.87
Tuscumbia	Osage	.09			T.	.67	.24									.39	.56	.16					.43	.36			.26	.05					3.21
Williamsville	Black	.19	.29			1.25	.03						.24	.54		.07	.82	1.72					.71	.72			.25	.09					6.92
Willow Sprgs. (near)	White	.04	.01		.02	1.12	.21						.16	.02		.20	.75	.77				.06	1.50	.40			.30						5.56

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Daily Precipitation for January, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																																	
Appleton City	Osage	.04			.30	.35	T.		T.			.02	.14		T.	T.	.30	T.				.18	T.	.07			.30			T.			1.70
Clinton	do	.02			.22	.35								.05	.02		.27					.27	.02	.13		.23		.05					1.63
Concordia‖	Missouri		.18			.68																	.05										0.91
Harrisonville‖	Osage	.15				.47	.16						.01	.04				.18						.11			.19	.05					1.36
Joplin‖	Neosho			.04	.83	.28										.06	1.12					.85	.15	.17		.15	.27						3.92
Lamar‖	do				.14	.80	.14						.07				.45	.10					.58	.20			.30	T.					2.78
Lamonte	Missouri				.40	.30							.20		T.		.20					.25		.03			.33						1.71
Marshall	do				.12	.55							.11		.04		.13					.13		T.			.25			T.			1.33
Nevada	Osage				.66	.29	T.										.47					.28	.38	.06			.28						2.42
Osceola‖	do				.04	.71	.04							.02			.31	.05				.02	.26	.23			.28						1 96
Warrensburg	Missouri				.18		T.						.12		.02		.14					.06			.04		.22						0.78
Warsaw	Osage				.40	.37							.12		T.		.26					.22	.03	.21			.32						1.93
Waverly ‖	Misouri	.40				.47	.23						.14	.26			.05					.19		.02			.20						1.96
Northwest Plateau																																	
Bethany	Grand				.12	.85							.12		.06		.15					.03					.04			T.			1.37
Chillicothe ‖	do	.53			.01	.74	.11			T.			.03	.20		.02		.23		T.		.26		T.			.06			T.			2.19
Conception	Missouri	.12			.20	.41	T.						.70		.40		T.	.16					T.	T.			T.			T.			1.99
Edgerton	do	.08								T.					T.	.03		.01				.14	T.				.03			T.	T.		0.29
Gallatin ‖	Grand	.96				.25								.40			.13	.06									.02						1.82
Grant City	do				.20	.41							.31		.50		.24										.07			T.		T.	1.73
Kansas City***	Missouri	.01			.46	.26	T.		T.			.02	.08	T.	.01	.02	.10				T.	.05	T.	.01			.10						1.12
Kidder ‖	Grand	.84			T.	.34	.05	T.					.05	.05			T.	.17				.02	.06				.05						1.63
King City	Missouri	.10			.33	.59							.13		.11		.14											.02					1.42
Lexington ‖	do	.21			.06	.40	.25						.05	.09		.07	.20	.07				.10	.07			.13							1.70
Maryville	do	.07			.20	.69	.02	T.					.07		T.		.04										T.			T.	T.		1.09
Oregon	do	.05			.37	.03									T.		.10	T.									.05			T.			0.60
St. Joseph***	do	T.			.51	.47		T.					.12		.08		.08				T.	.01	T.	T.			.03			T.	T.		1.80
Tarkio	do				.14	.64									.07		.22	.03									.20						1.30
Trenton	Grand				.29	.46						T.	.24		.09	.08	.11				T.	T.					.05			T.			1.32

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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The monthly snowfall averaged about 1.0 inch, the heaviest between 3 and 9 inches in the northwest part of the State. South of the Missouri River, and including the lower river counties from Boone eastward, snow was light and unimportant.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Local on the 1st, 5th, 13th, and 14th.

Halos, lunar.—13th, 15th, 24th, and 25th. Solar.—10th, 11th, 15th, 21st, 25th, and 31st.

Sleet or frozen rain.—1st, 4th, 5th, 6th, 14th, 16th, 23d, 25th, and 26th.

Thunderstorms.—5th, 12th, 14th, 15th, and 26th.

Daily Temperatures for January, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	43	43	35	40	46	32	31	33	28	44	48	54	60	36	31	43	53	49	55	63	52	38	34	39	42	39	41	63	23	17	25	41.3
	Minimum	37	30	24	24	31	25	23	18	13	12	28	32	43	30	23	23	31	25	25	34	42	31	31	19	21	28	26	27	23	3	3	25.3
Columbia	Maximum	43	36	29	37	50	37	37	34	31	45	54	56	63	38	34	46	52	45	58	64	59	37	35	38	45	40	50	64	38	19	32	43.4
	Minimum	35	29	24	29	37	27	28	22	16	27	35	48	38	33	27	31	36	28	32	46	37	32	26	21	28	33	29	38	12	5	12	29.1
Fayette	Maximum	41	39	34	42	49	39	36	35	30	46	51	55	64	48	35	45	53	49	58	66	55	54	34	39	44	38	49	63	36	27	30	44.6
	Minimum	38	32	21	25	31	26	22	19	15	17	26	33	43	31	25	27	32	27	24	43	53	31	32	19	20	28	26	28	26	4	5	26.7
Hannibal	Maximum	43	36	38	36	49	41	34	32	24	42	49	52	63	38	35	46	51	43	53	54	58	39	35	36	44	42	45	61	42	19	22	42.0
	Minimum	35	31	27	28	35	27	28	23	16	24	34	45	38	33	28	29	36	29	29	44	39	33	26	21	30	33	32	42	12	5	8	29.0
Jefferson City §§	Maximum	40	36	40	40	51	45	42	37	32	46	56	55	71	44	35	47	54	47	58	66	61	38	36	39	45	49	54	66	32	24	35	45.8
	Minimum	33	32	24	27	30	28	28	25	19	18	25	33	49	35	28	27	32	29	28	29	45	34	33	20	20	25	29	27	30	7	7	27.6
Kirksville	Maximum	37	34	37	35	41	43	31	28	27	41	42	48	48	38	28	34	44	40	50	55	54	40	31	37	45	38	39	55	49	19	16	38.8
	Minimum	32	28	19	24	31	20	20	14	8	20	30	40	36	25	20	25	31	33	28	38	38	29	26	15	26	31	28	32	17	− 2	2	24.6
Louisiana	Maximum	55	50	45	40	45	38	40	36	40	45	50	60	48	37	35	33	47	40	50	50	59	50	38	35	44	40	43	60	45	23	25	43.4
	Minimum	40	37	30	23	36	30	24	16	20	33	40	44	33	28	30	27	30	30	23	43	48	33	33	23	27	33	32	38	20	7	10	29.7
Macon§§	Maximum	38	34	34	38	45	30	30	30	29	43	46	51	56	32	32	42	47	42	53	59	54	39	31	36	44	39	45	60	25	17	25	39.5
	Minimum	35	30	24	24	30	24	24	18	11	13	28	29	42	28	23	24	31	26	28	37	42	30	29	17	23	31	28	29	23	0	1	25.2
Mexico §§	Maximum	41	36	31	39	49	32	40	34	30	45	53	53	62	37	33	45	51	44	55	62	59	35	34	37	45	45	49	63	30	42	28	43.2
	Minimum	37	30	21	23	30	26	26	21	30	15	24	33	44	30	26	26	31	28	26	30	43	32	29	20	21	28	27	28	27	5	4	26.5
St. Louis(1)	Maximum	49	39	42	40	54	47	47	34	31	44	51	56	68	65	54	47	54	46	53	54	55	42	40	36	47	46	51	62	51	27	31	47.2
	Minimum	38	35	30	33	37	31	30	29	23	24	32	46	49	37	31	31	42	33	32	41	42	36	29	26	32	43	32	43	20	13	16	32.4
Unionville	Maximum	37	34	35	34	35	35	28	28	24	38	42	50	50	40	34	35	43	40	50	56	52	38	35	40	48	40	40	52	40	16	12	38.1
	Minimum	32	28	12	30	32	20	14	14	8	20	30	35	34	23	17	22	30	30	26	34	35	25	24	14	25	30	23	30	14	− 5	0	22.8
Warrenton	Maximum	51	37	39	37	50	50	46	38	32	47	56	53	70	62	48	37	55	50	..	..	..	43	36	39	46	45	50	63	58	25	30	[c]46.2
	Minimum	35	33	23	24	35	29	27	26	15	21	30	46	46	35	29	29	36	29	25	..	..	35	31	21	27	32	28	40	24	7	11	[b]28.6
Southeast Lowlands																																	
Campbell	Maximum	47	45	50	45	57	56	52	52	36	49	54	53	68	71	68	49	58	55	52	53	65	60	48	46	40	50	54	57	57	39	41	52.5
	Minimum	38	31	25	26	38	31	21	23	21	20	26	42	45	41	41	35	42	32	22	33	43	42	36	28	25	34	25	36	30	17	20	31.3
Caruthersville	Maximum	56	56	47	52	50	56	56	51	51	43	55	55	55	68	69	70	49	60	61	52	61	64	64	50	49	49	52	55	57	56	37	55.0
	Minimum	47	42	41	32	37	44	41	32	31	29	51	35	45	50	51	45	40	48	37	34	39	49	48	44	33	32	38	33	44	36	22	39.7
Doniphan	Maximum	46	48	55	44	56	56	53	40	42	50	53	55	68	69	69	49	65	59	55	63	67	64	48	46	45	52	55	64	61	52	47	54.7
	Minimum	40	31	21	29	39	29	21	23	21	20	26	45	48	44	42	35	43	30	30	31	43	44	39	25	24	35	29	40	30	16	19	32.0
Jackson	Maximum	47	41	44	40	51	51	44	37	32	41	48	52	60	62	62	39	56	52	45	52	56	56	41	36	39	42	47	57	50	31	36	46.7
	Minimum	36	35	22	26	35	34	21	22	21	21	25	40	44	48	35	31	39	27	20	20	43	38	35	23	19	31	26	37	27	14	14	29.3
Poplar Bluff §§	Maximum	43	53	43	46	56	52	40	46	50	53	59	68	69	69	46	64	54	54	63	65	63	50	56	43	53	56	63	56	40	44	49	53.7
	Minimum	38	30	23	28	39	27	22	23	22	20	25	45	45	43	37	35	40	30	21	30	42	44	40	26	23	36	26	38	26	16	18	30.9
Sikeston	Maximum	56	56	50	51	56	55	50	53	39	47	54	57	65	68	68	57	59	59	51	61	65	65	45	44	43	49	52	56	56	35	49	53.9
	Minimum	40	39	28	33	40	40	28	28	28	25	30	44	38	56	41	36	43	33	28	34	45	43	41	29	27	35	31	40	31	18	20	34.6
Cairo, Ill	Maximum	46	44	49	46	58	56	49	47	36	45	55	58	67	68	67	51	58	50	50	59	64	57	49	42	44	49	52	57	55	32	41	51.6
	Minimum	40	39	32	36	42	35	32	30	28	28	35	45	50	58	38	37	46	37	33	39	49	44	36	30	31	36	34	44	27	20	24	36.6
Ozark Plateau																																	
Arcadia §§	Maximum	44	38	53	44	53	42	49	37	37	46	52	54	65	67	43	50	60	50	53	57	54	53	41	42	47	46	53	41	62	41	39	48.8
	Minimum	35	35	20	20	33	33	23	20	23	17	20	27	42	40	34	30	31	28	18	19	39	51	37	20	20	28	26	26	13	15	10	26.9
Aurora	Maximum	39	42	52	45	50	43	50	39	40	54	53	54	71	73	56	43	50	47	57	59	60	45	42	33	46	46	61	55	54	36	52	49.9
	Minimum	33	29	27	35	35	27	29	22	17	27	34	48	46	44	27	35	38	28	32	38	43	34	29	20	22	37	27	42	22	11	22	31.0
Birchtree	Maximum	53	40	53	49	55	53	50	45	52	49	53	52	67	69	63	45	57	48	57	62	62	50	46	41	52	50	58	56	40	39	43	51.9
	Minimum	37	34	22	36	36	32	37	22	28	23	30	45	48	48	42	37	40	22	27	38	45	40	35	19	23	33	31	30	24	13	18	32.1
Eldon §§	Maximum	40	39	42	36	51	38	45	30	34	51	58	51	68	48	37	48	54	48	57	65	56	55	35	40	46	50	66	65	30	36	39	47.0
	Minimum	39	33	23	23	32	29	28	23	12	12	24	33	48	36	22	22	33	30	27	27	45	34	33	21	21	28	28	28	29	8	8	27.1
Farmington	Maximum	47	42	52	44	54	52	48	40	36	50	53	55	65	62	58	40	59	50	52	57	54	52	42	39	48	48	56	64	54	35	41	50.0
	Minimum	36	34	24	29	36	33	25	27	25	20	28	42	47	48	34	32	39	31	21	39	42	38	34	21	24	33	27	35	26	11	15	30.8
Koshkonong	Maximum	43	41	52	44	54	54	48	41	38	49	48	53	68	70	68	42	61	52	54	62	64	62	46	42	46	52	57	68	53	39	46	52.2
	Minimum	37	35	30	36	37	33	26	27	22	26	30	44	46	51	37	35	40	32	28	37	49	41	35	22	28	31	29	40	29	15	18	33.1
Lebanon	Maximum	44	40	54	55	50	49	48	42	33	44	56	53	65	73	70	45	49	47	55	62	59	46	46	39	45	59	57	64	58	30	45	51.0
	Minimum	27	29	24	30	30	29	26	21	13	26	31	45	48	36	26	29	36	25	26	39	42	32	25	16	25	30	25	34	20	6	12	27.8
Mountain Grove §§	Maximum	39	39	53	42	56	39	49	38	36	50	51	54	68	72	40	46	52	49	52	63	57	44	37	..	44	48	54	67	33	39	44	[a]48.5
	Minimum	33	31	25	28	32	28	27	26	16	19	31	34	40	46	30	30	30	28	28	32	40	35	35	20	..	25	26	27	27	10	11	[a]28.3
Neosho	Maximum	45	42	52	53	51	46	47	48	41	62	58	58	70	71	64	55	53	50	58	59	62	47	39	40	48	49	63	68	66	38	54	53.5
	Minimum	34	29	21	38	38	26	26	21	16	26	39	50	48	41	27	37	37	21	26	42	42	33	30	17	25	34	25	48	21	10	20	30.6
Rolla	Maximum	46	39	46	42	55	53	44	42	34	49	55	52	69	69	66	42	50	49	53	61	58	53	41	35	45	48	55	62	60	28	40	49.7
	Minimum	37	33	25	33	34	30	29	27	19	24	33	47	48	40	30	32	39	28	27	23	49	36	30	20	25	32	28	42	25	10	9	30.5
Springfield	Maximum	39	40	50	44	51	37	44	34	34	50	51	53	67	71	40	45	49	45	55	59	57	43	41	37	43	44	56	64	43	32	46	47.2
	Minimum	34	30	30	34	32	26	28	22	16	30	36	47	47	37	27	34	37	29	30	42	37	34	26	21	29	32	29	43	16	9	22	30.5
Southwest Plain																																	
Appleton City	Maximum	43	37	40	39	47	42	33	31	35	51	47	55	61	55	34	41	52	50	55	61	59	37	35	41	43	40	57	62	53	23	36	45.0
	Minimum	34	29	24	29	35	23	26	17	14	25	35	42	43	31	22	31	35	27	30	41	37	30	29	19	26	31	26	32	19	6	14	27.8
Clinton	Maximum	44	35	33	38	43	44	32	35	30	45	45	52	64	55	37	40	46	46	56	56	58	48	36	32	40	39	50	55	53	22	35	43.4
	Minimum	35	30	23	30	36	25	27	25	20	23	32	42	45	32	22	22	36	27	29	40	38	32	30	20	26	32	26	26	22	7	14	28.2
Harrisonville§§	Maximum	36	40	37	37	44	37	32	30	35	46	48	54	59	31	32	43	51	48	54	61	45	33	37	43	41	35	54	62	27	20	32	41.4
	Minimum	35	27	20	22	30	21	20	15	9	10	30	35	42	28	16	16	29	25	26	31	37	27	27	16	18	25	24	25	17	3	4	22.9
Lamar§§	Maximum	42	42	52	42	49	39	43	36	37	56	58	60	68	49	40	46	52	49	57	61	61	38	35	40	45	40	61	63	30	32	52	47.6
	Minimum	33	30	24	24	37	26	26	22	16	16	32	39	48	35	25	25	37	27	26	32	43	32	31	21	21	29	28	28	25	10	10	27.7
Lamonte	Maximum	45	39	31	37	47	40	35	31	33	47	45	54	61	42	34	41	51	48	54	64	56	38	36	38	42	38	53	61	46	19	31	43.1
	Minimum	34	29	22	27	36	24	21	19	12	25	32	40	42	31	23	30	32	25	29	42	36	30	26	21	27	32	27	40	18	5	12	27.4
Marshall	Maximum	45	38	37	36	47	46	38	33	31	42	43	53	56	59	35	43	49	46	56	68	68	39	35	42	42	40	49	62	56	27	29	44.8
	Minimum	35	30	26	23	35	21	19	17	10	24	32	41	35	30	22	25	28	28	30	43	37	30	25	18	19	31	27	37	19	3	9	26.1
Nevada	Maximum	44	41	47	42	47	41	37	34	35	53	50	56	67	57	36	43	50	49	55	60	59	37	35	40	45	40	59	62	53	26	41	46.5
	Minimum	33	28	23	35	36	23	27	18	14	29	37	41	47	32	23	32	37	26	32	41	36	30	29	20	30	34	27	41	20	8	14	29.1
Warrensburg	Maximum	57	57	32	37	46	42	34	30	32	48	45	53	59	50	34	38	50	46	54	62	56	37	34	31	41	38	52	59	50	29	31	44.0
	Minimum	33	28	20	25	31	22	24	18	11	25	31	39	42	29	14	27	30	25	31	42	35	28	27	16	24	31	26	40	17	4	10	26.0
Warsaw	Maximum	49	41	46	40	51	51	42	36	36	53	57	57	68	62	45	40	53	51	58	63	60	43	40	39	45	45	56	64	61	26	40	49.0
	Minimum	36	31	21	29	35	25	26	21	14	24	35	43	47	34	25	32	38	25	27	42	39	31	30	20	27	32	28	37	22	7	13	28.9
Northwest Plateau																																	
Chillicothe §§	Maximum	41	32	35	38	41	32	31	31	40	44	47	49	42	29	33	38	45	44	61	62	39	34	34	44	44	37	43	56	24	18	37	39.5
	Minimum	32	27	20	20	28	20	18	12	7	12	16	33	39	24	18	18	27	24	24	38	36	17	24	15	18	30	23	30	16	− 2	− 2	21.4
Grant City	Maximum	33	31	31	33	33	31	25	21	25	35	35	45	45	26	22	33	37	37	48	52	48	30	31	40	39	38	38	36	31	14	12	33.4
	Minimum	29	22	15	26	30	17	10	9	− 3	20	28	35	26	19	11	27	27	22	27	36	30	22	20	13	25	31	21	26	8	− 7	1	20.1
Kansas City	Maximum	39	34	34	35	40	36	34	31	34	43	46	53	50	29	32	42	47	43	54	60	55	34	35	41	46	39	52	53	30	15	25	40.0
	Minimum	31	24	22	29	25	20	19	17	11	29	35	43	28	25	17	29	32	29	36	43	31	28	26	20	32	31	28	30	7	4	9	25.5
Kidder	Maximum	35	29	34	35	36	32	24	27	29	40	43	48	39	27	32	37	42	41	53	57	37	43	33	40	47	37	42	48	18	15	22	36.2
	Minimum	32	27	18	18	29	20	18	17	5	4	27	33	39	23	15	15	28	25	25	34	37	27	26	16	16	25	23	23	17	− 2	− 2	21.2
Lexington§§	Maximum	39	36	37	44	37	30	32	34	45	48	52	53	44	34	42	49	48	55	62	45	43	36	43	44	37	51	60	41	20	28	43	42.3
	Minimum	35	28	20	20	30	20	20	17	10	10	30	34	44	28	18	18	32	28	29	35	43	29	29	19	19	29	25	25	20	3	3	24.2
Maryville	Maximum	34	33	31	32	34	34	25	24	29	37	33	42	42	27	33	33	40	42	52	55	50	29	33	43	45	40	41	39	32	15	14	35.3
	Minimum	28	20	10	23	30	15	4	5	− 6	20	26	30	26	17	7	23	23	20	25	34	28	20	19	11	21	30	19	22	4	− 7	0	17.6
Oregon	Maximum	33	31	33	34	33	32	27	26	31	44	35	45	44	27	31	39	43	43	54	58	54	30	34	44	46	41	46	36	30	18	18	36.8
	Minimum	29	18	14	22	30	17	11	10	0	27	28	33	26	18	10	27	26	24	32	38	28	23	22	15	25	32	22	26	7	− 3	4	20.7
St. Joseph	Maximum	34	28	29	34	35	32	24	28	31	41	38	49	45	26	30	37	41	42	54	58	52	32	34	42	47	38	44	42	24	15	19	36.3
	Minimum	28	19	17	26	22	18	15	12	4	27	30	36	22	17	12	28	28	26	34	41	29	26	24	17	28	30	24	24	3	− 3	6	21.6
Trenton	Maximum	38	34	36	34	38	34	30	30	27	42	43	48	45	30	30	35	43	41	53	60	52	32	32	40	47	38	43	51	36	16	17	37.9
	Minimum	32	27	21	26	32	21	19	14	8	23	32	40	30	24	18	26	30	28	26	42	28	29	26	15	26	32	24	31	14	− 2	5	24.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 3-3-32—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXVI COLUMBIA, MO., FEBRUARY, 1932 No. 2

GENERAL SUMMARY

As during the two preceding winter months the weather of February was unusually mild, and furthermore, made the sixth consecutive month of abnormal warmth, and the warmest part of the warmest winter and autumn ever known since the beginning of climatic records in Missouri. February averaged 10° above the normal, the largest excess of any month during this warm period, the excess of warmth for the whole period of six months being 7°.

There were only three or four days during February with normal or subnormal temperatures. The 4th was the coldest and about the only real winter day. On this day temperatures were zero or lower at seven stations in the northwest and northern border counties, and 10° to 18° above zero in southern sections. The 10th, the warmest day, was almost like summer, average temperatures ranging as much as 30° to 40° above the normal, while the afternoon maxima were in the 80s, 83° being the highest recorded, which, by the way, has been equaled and exceeded in five other Februarys on single days.

The precipitation for the State, as a whole, was 1.41 inches, about 67 per cent of the 60 years' average. It was unevenly distributed geographically but fell at timely intervals, nearly all falling in two periods, 2d to 4th, and 11th to 21st. The southeastern lowlands, as in January, was rather wet, while all other divisions received less than the usual amounts, the southwestern plain with about 40 per cent of the normal, being the driest part of the State, although moisture was quite sufficient for winter needs. The ground moisture or saturation level is again normal for the entire State, the first time in many months.

Also as during January the snowfall was unimportant south of the Missouri, and in most of the central and eastern counties north of the river; but in the northwest and along the northern border amounts ranged to as much as 6 to 8 inches; practically all snow fell on the 4th and 14th, most of it on the latter date.

The weather of February was generally favorable for outdoor activities. During the last ten days much ground was dry enough for plowing, and considerable amount of oats was sown in central and southwest counties. Winter wheat looked well and fully covered the ground in most fields; also livestock did well in the open with plenty of rough feed. At the close of the month, peach, pear, and plum buds in the Ozark region and other southern parts were unduly advanced, thus running risk of serious injury should any late cold spells occur. Apples and strawberries seemed to be dormant.

TEMPERATURE

The monthly mean temperature for the State, based upon the records of 70 stations, was 42.4°, or 10.0° above the normal, and the third consecutive abnormally warm February. The highest local monthly mean was 50.2° at Caruthersville; and the lowest local monthly mean was 33 8° at Tarkio. The highest reported temperature was 83° at St. Charles on the 10th; and the lowest, —3° at Maryville on the 4th. The greatest daily range occurred on the 5th, at Lexington, 52°. Temperature fell to 32° or lower on an average of 18 days; and to zero or lower on one day, the 4th, at about 7 stations, all in the northern border counties.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 1.41 inches, or 0.70 inch less than the 60 years' average. The southeastern lowland was wetter than normal. Sections north of the Missouri River received a little more than 50 per cent of the normal, while the Ozarks and southwestern

(Continued on Page 9)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.05	83	62	62	177	57	6,224	8.9	27	sw.	11
Hannibal	30.06	82	62	..	..	..	6,356	9.1	34	w.	11
Kansas City	30.04	78	54	66	196	63	7,164	10.3	31	w.	16
St. Joseph	30.03	83	61	67	185	60	6,290	9.0	34	nw.	11
St. Louis	30.04	76	56	57	174	56	8,198	11.8	35	sw.	11
Springfield	30.02	77	58	59	190	60	7,697	11.1	38	w.	11
Cairo, Ill.	30.06	83	66	68	..	..	7,196	10.3	30	sw.	11
Keokuk, Iowa	30.06	77	57	63	188	60	5,817	8.4	28	w.	11

(Beginning January 1, 1932 wind velocities are true velocities).

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**32.4**	.....	**76**	**—12**	**2.11**	.....	**2.49**	**5.3**	**6**	**12**	**6**	**10**
1888	33.0	+ 0.6	73	—11	2.04	—0.07	....	....	7	..	..	..
1889	29.3	— 3.1	73	— 9	2.57	+0.46	....	....	7	..	..	..
1890	35.5	+ 3.1	81	— 7	2.24	+0.13	....	....	7	..	..	..
1891	32.7	+ 0.3	76	— 8	2.28	+0.17	....	2.4	6	..	..	..
1892	37.7	+ 5.3	71	2	4.15	+2.04	....	....	9	7	6	16
1893	27.9	— 4.5	65	—20	1.98	—0.13	2.30	4.6	6	10	7	11
1894	30.8	— 1.6	72	—12	2.52	+0.41	2.60	11.2	6	10	8	10
1895	23.6	— 8.8	77	—26	0.55	—1.56	1.10	3.3	5	10	10	8
1896	35.6	+ 3.2	81	—10	1.61	—0.50	2.20	4.1	5	12	8	9
1897	34.8	+ 2.4	74	—15	2.30	+0.19	3.60	8.2	7	7	7	14
1898	35.4	+ 3.0	78	— 9	1.62	—0.49	2.90	0.8	5	13	6	9
1899	20.4	—12.0	72	—32	2.17	+0.06	4.30	5.3	6	12	8	8
1900	26.2	— 6.2	70	—16	3.92	+1.81	2.85	16.6	10	10	6	12
1901	28.1	— 4.3	76	—19	1.63	—0.48	2.36	7.6	6	13	7	8
1902	24.0	— 8.4	72	—17	1.50	—0.61	2.35	5.8	5	11	8	9
1903	29.8	— 2.6	74	—25	2.92	+0.81	2.65	5.3	7	11	6	11
1904	30.0	— 2.4	82	—18	0.91	—1.20	1.46	1.5	5	11	8	10
1905	21.5	—10.9	69	—40	1.64	—0.47	1.20	13.2	8	11	6	11
1906	33.7	+ 1.3	73	—13	2.28	+0.17	2.40	4.1	7	15	6	7
1907	34.8	+ 2.4	77	—15	1.65	—0.46	3.72	4.5	6	12	5	11
1908	35.6	+ 3.2	78	— 7	4.32	+2.21	4.28	4.1	9	13	8	10
1909	38.8	+ 6.4	71	— 4	3.38	+1.27	2.50	3.1	9	13	5	10
1910	28.3	— 4.1	72	—24	1.98	—0.13	3.00	7.7	6	12	6	10
1911	38.1	+ 5.7	87	0	3.64	+1.53	2.08	6.3	8	12	5	11
1912	28.3	— 4.1	72	—12	2.45	+0.34	3.20	11.9	6	10	7	12
1913	29.8	— 2.6	78	— 9	2.21	+0.10	4.78	8.5	7	12	5	11
1914	28.3	— 4.1	75	—11	2.71	+0.60	2.80	14.0	7	12	6	10
1915	39.4	+ 7.0	72	7	3.18	+1.07	2.05	4.1	8	9	5	14
1916	31.4	— 1.0	78	—12	0.98	—1.13	2.70	5.0	5	13	6	10
1917	30.5	— 1.9	83	—22	0.41	—1.70	1.24	1.4	2	14	7	7
1918	34.9	+ 2.5	83	—25	1.11	—1.00	2.00	0.6	4	15	6	7
1919	35.3	+ 2.9	71	—10	1.98	—0.13	2.20	6.4	7	13	4	11
1920	34.5	+ 2.1	78	— 5	0.57	—1.54	1.41	1.2	4	11	6	12
1921	40.1	+ 7.7	86	5	0.94	—1.17	2.00	1.8	4	14	6	8
1922	35.4	+ 3.0	80	— 5	1.79	—0.32	1.65	1.9	5	14	6	8
1923	30.2	— 2.2	75	— 9	1.37	—0.74	2.20	1.4	5	13	5	10
1924	33.8	+ 1.4	79	— 5	1.84	—0.27	1.60	8.1	7	14	4	11
1925	38.7	+ 6.3	78	1	1.85	—0.26	1.78	1.7	6	12	5	10
1926	39.4	+ 7.0	76	— 4	2.08	—0.03	2.00	2.9	6	11	6	11
1927	41.3	+ 8.9	78	1	1.08	—1.03	1.48	2.3	5	10	8	10
1928	37.0	+ 4.6	71	— 2	2.28	+0.17	3.25	1.8	7	12	6	11
1929	25.0	— 7.4	64	—23	1.92	—0.19	4.25	9.4	7	10	5	13
1930	44.5	+12.1	89	— 5	1.71	—0 40	2.20	1.3	4	13	8	7
1931	40.9	+ 8.5	75	5	2.40	+0.29	3.04	0.3	6	12	6	10
1932	42.4	+10.0	83	— 3	1.41	—0.70	3.25	2.0	6	12	7	10

Climatological Data for February, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	39.6	+ 9.8	76	10†	9	5	43	1.31	−0.48	0.43	12.0	7	17	1	11	sw.	O. K. Benecke
Clifton Hill	Randolph	731	33	40.3	+10.1	77	10	6	4	41	0.95	−0.48	0.34	4.0	8	11	9	9	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	42.6	+10.8	77	10	12	4	36	1.01	−1.08	0.34	2.4	8	7	8	14	w.	U. S. Weather Bureau
Downing	Schuyler	876	11	36.6	+ 4.3	71	10	4	4	41	0.83	−0.49	0.24	7.0	6	9	11	9	w.	James Taylor
Elsberry	Lincoln	449	1	41.4	.....	81	10	15	4	47	1.39	.....	0.50	T	4	7	9	13	se.	Ray E. Mills
Fayette	Howard	661	52	41.1	+10.5	79	10	10	4	43	1.28	−0.52	0.63	2.8	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	39.9	+ 6.8	75	10	10	4	39	1.38	−0.38	0.52	2.1	7	15	5	9	w.	Chamber of Commerce
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	1.87	+0.43	1.52	6.0	5	8	10	11	se.	J. W. Pulliam
Hannibal	Marion	534	49	40.9	+11.2	78	10	15	4	38	1.19	−0.72	0.74	2.1	5	9	10	10	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	42.0	+ 9.9	79	10	11	4†	43	0.98	−0.94	0.30	0	5	4	16	9	w.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	37.6	+10.5	78	29	5	4	42	0.64	−1.06	0.34	3.5	2	11	4	14	w.	Prof. J. S. Stokes
Louisiana	Pike	469	38	41.0	+10.1	78	10	11	4	40	1.03	−1.25	0.94	0.1	3	19	7	3	w.	Stark Bros. Nurseries
Macon	Macon	875	33	38.4	+ 8.8	75	10	9	4†	41	0.77	−1.05	0.36	3.3	4	19	5	5	e.	W. C. Brown
Mexico	Audrain	800	43	39.8	+ 9.7	78	10	10	4†	44	1.53	−0.57	0.51	2.2	7	19	0	10	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	0.88	−0.61	0.62	0.6	4	12	5	12	ne.	J. S. Conway
St. Charles	St. Charles	456	44	43.3	+10.0	83	10	17	4	40	0.60	−1.89	0.44	T.	4	7	10	12	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	44.6	+ 9.8	82	10	20	4	32	1.59	−1.04	1.05	T.	6	9	9	11	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	44.0	+11.8	83	10	17	4	32	1.81	−0.13	1.16	T.	6	12	5	12	w.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	0.80	−1.13	0.40	2.1	5	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	34	38.4[a]	+ 8.7	76	29	11	4	44	1.17	−0.62	0.67	4.5	5	13	7	9	e.	Frank Hall
Unionville	Putnam	1,062	39	36.0	+ 9.3	73	28	− 1	4	40	1.25	−0.52	0.60	8.0	5	15	5	9	sw.	Geo. W. Davis
Warrenton	Warren	816	50	43.0	+12.1	80	10	13	4	40	0.97	−1.08	0.40	0.5	7	6	13	10	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	38.0	+ 9.6	73	10	13	4	38	0.98	−0.62	0.59	2.1	7	8	11	10	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	40.4	+ 9.7	83	10	− 1	4	47	1.14	−0.74	1.52	2.8	5	11	8	10	w.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	47.0	.....	79	28	20	5	42	3.51	.....	1.48	0	7	14	6	9	n.	Jeff. King
Caruthersville	Pemiscot	265	36	50.2	+ 9.9	77	13	29	1†	36	3.98	+0.36	1.50	0	7	14	2	13	s.	Sam Smith
Doniphan	Ripley	344	28	48.4	+ 9.1	80	10	18	5	46	4.31	+1.26	2.30	0	7	14	7	8	e.	W. W. Martin
Jackson	Cape Girardeau	428	41	42.2	+ 5.7	75	10	18	5	37	3.15	+0.31	1.23	0	6	5	7	17	s.	John G. Putz
Marble Hill	Bollinger	470	37	46.6	+10.0	80	10	19	1	44	1.98	−1.27	0.81	0	5	8	8	13	n.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	. ....	..	..	..	..	..	5.04	+2.10	3.10	0	9	13	8	8	sw.	John A. Spence
Poplar Bluff	Butler	339	27	47.6	+ 9.5	80	29	19	5	46	4.13	+1.22	1.85	0	9	18	6	5	sw.	J. H. Wolpers
Sikeston	Scott.	318	25	47.8	+10.6	78	11	23	5	42	5.25	+2.19	3.25	0	8	15	2	12	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	48.6	+10.1	75	10	29	4	29	4.43	+1.21	2.72	T.	9	6	8	15	s.	U. S. Weather Bureau
Section means and	extremes	....	..	47.3	+ 9.3	80	10†	18	5	46	3.98	+0.92	3.25	0	7	12	6	11	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	41.2	+ 7.1	80	11	14	5	39	0.62	−2.32	0.22	0	4	18	2	9	se.	Arcadia College
Aurora	Lawrence	1,370	31	47.5	+13.0	78	9	11	4	41	0.62	−2.03	0.30	T.	5	17	3	9	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	46.6	+10.3	78	10	17	5	41	1.31	−1.17	0.40	0.5	5	19	1	9	se.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	44.6	.....	75	9	11	4	38	1.19	.....	0.48	0	4	17	8	4	nw.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	0.50	.....	0.30	0	4	10	11	8	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	46.0	+10.3	80	9	10	4	45	1.31	−0.47	0.45	0	5	13	5	11	sw.	H. E. Dean
Eldon	Miller	934	37	42.2	+ 9.1	78	28	11	5	44	0.23	−1.57	0.16	T.	4	10	13	6	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	44.7	+ 7.8	79	10	17	5	43	0.98	−1.98	0.31	T.	5	11	10	8	sw.	Robert Forsyth
Goodland	Iron	1,000	39	44.6	+10.3	80	10	12	5	49	0.95	−1.37	0.35	T.	5	13	7	9	n.	F. M. Adams
Greenville	Wayne	381	23	45.0	+ 9.2	80	10	15	5	45	2.26	−0.74	1.20	T.	3	19	3	7	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	1.75	−0.09	0.45	T.	6	14	6	9	se.	A. W. Madison
Koshkonong	Oregon	958	31	49.0	+ 9.9	75	10	21	4†	37	2.45	−0.30	1.34	0	6	12	7	10	e.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	44.6	+10.2	75	10	9	4	35	1.60	−0.69	0.80	T.	4	18	4	7	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	46.8	+ 9.8	76	28	11	4	35	0.80	−0.97	0.37	T.	5	16	4	9	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	31	44.4	+ 9.3	77	9	11	1	45	1.36	−0.86	0.78	0.5	8	17	8	4	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	47.2	+ 9.6	75	9†	12	4	42	1.22	−1.02	0.68	0	6	13	5	11	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	45.3	+ 9.0	78	10	14	4	39	1.36	−0.79	0.70	T.	7	1	11	17	sw.	F. H. Lane
Salem	Dent	1,173	28	45.8	+10.0	80	10	15	4	41	1.13	−1.14	0.55	T.	5	10	12	7	s.	E. E. Martin
Seligman	Barry	1,542	31	48.5[d]	+11.0	78	27	10	4	36	1.15	−0.74	0.35	T.	5	18	3	8	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	46.0	+11.0	76	9	4	4	46	1.71	−0.46	0.77	1.0	4	14	4	11	se.	Ira H. Hailey
Springfield	Greene	1,324	54	46.2	+11.0	76	9	11	4	37	0.54	−1.89	0.28	0.2	7	14	7	8	w.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	44.3	.....	76	10	9	4	40	1.07	.....	0.43	1.2	8	8	11	10	w.	J. M. Wilson
Section means and	extremes	.....	..	45.5	+ 9.9	80	9†	4	4	49	1.19	−1.08	1.34	0.1	5	13	7	9	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	44.4	+10.5	77	28	10	4	34	1.01	−0.77	0.43	0.1	7	5	15	9	sw.	W. G. Bigelow
Clinton	Henry	765	39	44.0	+10.4	78	28	10	4	35	1.34	−0.63	0.63	1.5	5	5	14	10	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	40.6	+ 9.9	79	28	6	4	48	0.62	−1.24	0.25	0.7	6	5	10	14	ne.	John H. Patterson
Lamar	Barton	980	44	44.6	+ 9.3	80	28	12	4	43	1.32	−0.77	0.60	0	5	17	2	10	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	42.6	+ 9.4	75	28	9	4	35	0.88	−1.01	0.30	3.2	5	16	4	9	se.	J. E. Wheeler
Marshall	Saline	779	45	42.6	+11.7	76	10	9	4	37	0.84	−0.90	0.38	0.8	3	15	5	9	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	45.6	+11.7	79	28	11	4	34	0.72	−1.05	0.60	0	2	11	5	13	s.	George A. Kaupp
Warrensburg	Johnson	878	45	42.2	+ 9.7	76	28	8	4	35	0.63	−1.40	0.33	1.0	5	14	6	9	sw.	E. A. Markey
Warsaw	Benton	687	31	44.3	+ 8.7	76	10	10	4	37	0.82	−1.51	0.46	0	7	12	5	12	w.	Everett Martin
Section means and	extremes	.....	..	43.4	+10.1	80	28	6	4	48	0.91	−1.03	0.63	0.8	5	11	7	11	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	36.4	+ 8.9	74	28	0	4	38	0.74	−0.71	0.40	6.8	5	15	6	8	nw.	A. S. Cumming
Chillicothe	Livingston	779	23	37.6	+ 5.6	76	10†	3	4	44	1.07	−0.79	0.44	6.5	3	15	5	9	se.	Wm. J. Olenhouse
Conception	Nodaway	980	43	35.2	+ 7.0	..	..	− 2	4	..	1.12	−0.07	0.40	7.5	5	10	9	10	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	36.8[a]	+ 4.5	74	27	4	4	36	0.49	−0.87	0.23	2.6	7	18	4	7	n.	Fred L. Stiff
Grant City	Worth	1,134	28	34.0	+ 5.4	72	28	− 1	4	34	0.90	−0.23	0.30	6.3	6	11	11	7	s.	W. P. Spillman
Kansas City	Jackson	963	43	42.0	+10.8	78	28	8	4	32	0.63	−1.19	0.27	2.6	10	11	10	8	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	36.2	+ 7.8	74	10	3	4†	45	0.96	−0.55	0.30	5.0	7	14	3	12	se.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	0.86	−0.56	0.40	5.5	6	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	47	41.0	+10.0	79	27	8	4†	52	1.40	−0.58	0.47	5.0	7	16	6	7	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	35.0	+ 9.2	75	28	− 3	4	39	1.03	−0.36	0.35	8.0	6	7	13	9	se.	J. R. Brink
Oregon	Holt	1,048	76	38.4	+ 9.6	80	28	0	4	38	0.76	−0.84	0.32	6.5	4	14	8	7	sw.	Mina Wright
St. Joseph	Buchanan	987	24	38.8	+ 6.7	77	28	4	4	35	0.69	−0.76	....	6.4	9	12	8	9	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	29	33.8	+ 4.8	74	28	− 2	4	33	1.11	+0.02	0.54	7.0	5	17	2	10	se.	Albert Volker
Trenton	Grundy	822	36	37.7	+ 8.3	74	28	4	4	38	0.72	−0.81	0.26	5.5	6	9	13	7	s.	W. H. Estes
Section means and	extremes	.....	..	37.1	+ 7.6	80	28	− 3	4	52	0.89	−0.59	0.54	5.8	6	13	8	8	sw.	
State means and	extremes	.....	..	42.4	+10.0	83	10	− 3	4	52	1.41	−0.70	3.25	2.0	6	12	7	10	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for February, 1932

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	..	..	
Northeast Plain																																
Boonville	Missouri		T.		.09							.90			.10	.12		.17				.01										1.39
Bowling Green	Mississippi				.45							.10				.07		.05														0.67
Brunswick	Grand		.07		.18							.30			.43	.20	.05	.08														1.31
Clifton Hill	Charlton		.01		T.	.09						.34	.01		.30	.10	.06		.04													0.95
Columbia***	Missouri	T.	.01	.20	.02							.20		.02	.33	T.	.22				T.	.01										1.01
Downing	Mississippi		.14	T.	.20							.24	T.		.20	.02	.03															0.83
Edina	do		T.		.30							.55	T.		.15	.05																1.05
Elsberry	do		T.	.36	.50										T.		.47					.06										1.39
Fayette	Missouri										.11	.63			.28		.02	.19				.05										1.28
Fulton	do		.03	T.	.52							.24			.15	.15	.04	.25				T.										1.38
Gorin	Mississippi		.05	.11								1.52	T.		.15		.04															1.87
Hannibal***	do	T.	T.	.19	.05							.74			.14	T.	.07					T.										1.19
Hermann	Missouri		.03		.17							.18				.03	.08	.33				.01										0.83
Jefferson City	do		.10		.20							.26				.12		.30														0.98
Kahoka	Mississippi				.43						.38				.15																	0.96
Kirksville	do											.34	T.		.30																	0.64
LaBelle	do				.26							.32			.25		.05															0.88
Laddonia	do				.32							.18				.22		.08														0.80
LaGrange	do				.27							.55			.04	.12																0.98
Louisiana	do			.04								.94		.05																		1.03
Lucerne	Grand				T.							.28			.40	.02		.03														0.73
Macon	Chariton				.15							.36			.15	.11																0.77
Memphis	Mississippi		T.	T.	.03							.31	T.		.13	.02	T.	T.														0.49
Mexico	do				.51						T.	.39			.20	.10	.05	.23				.05										1.53
Milan	Grand		.05	.12	.21							.32			.34	.05						T.										1.09
Monroe City	Mississippi		T.	.09								.62			.06		.11															0.88
New London	do				.46							.81				.14		.12														1.53
Pacific	Meramec		.08		T.							.54				.05		.22				.30										1.19
Palmyra	Mississippi			**	**							.82			.18																	1.00
Paris	do				.16							.53			.10	.03		.10														0.92
Perry	do			T.	.32							.75				.15	.02	.12														1.36
Philadelphia	do			.10	.70								.15		.30																	1.25
Plevna	do																															....
St. Charles	Missouri		.02	.01	T.							.44					.13	T.														0.60
St. Louis (1)***	Mississippi	.02	.01	.04	T.							1.05			T.	T.	.21		T.			.26										1.59
St. Louis (2)*	do	.01	.02	.10	T.						T.	1.16					.30					.22										1.81
Shelbina	do		T.								.07	.40			.21			.09				.03										0.80
Steffenville	do			.10	.10							.67	T.		.25		.05															1.17
Troy	do				.70							.23					.08															1.01
Union	Meramec		.04		.04							.42				.07		.22				.14	.09									1.02
Unionville	Chariton		.10		.20							.25	T.		.40	.20	.10															1.25
Valley Park	Meramec		.07	T.	.02						.04	.67	T.			T.		.26				.25	.04									1.35
Warrenton	Mississippi		.04	.24	.10							.09			T.	.05	.40					.05										0.97
West Ely	do			T.	.25							.38			.18	.10	T.	.05														0.96
Winfield	do	.10											.62				.13					.30										1.15
Keokuk, Ia.***	do	.01	T.	.16	.11			T.				.59	T.		.07	.02	T.															0.98
Southeast Lowlands																																
Bragg City	St. Francis	.35	.03									.59			.50	.30	.40				.43												2.60
Campbell	do		.28	.06								.51			.48	.30	1.48					.40											3.51
Cape Girardeau	Mississippi		.16	.01	.28							.42	.25			.06		1.34				.28	.05										2.85
Caruthersville	do		.48										.70			.50	.25	1.50				.37	.18										3.98
Dexter	St. Francis	.03	.07	.50							.56						.40	2.20				.55											4.31
Doniphan	Black		.32	T.	.33							.55			.32	.15	2.30			T.	.34												4.31
Fisk	St. Francis		.22	.01	T.							.22		T.	T.	.23	.39	1.53	T.	T.		.27											2.87
Jackson	Mississippi		.17		.13						.88				.20		1.23					.54											3.15
Marble Hill	do		.14									.46			.23		.81					.34											1.98
Morehouse	do		.20	.03	.16							.62			.22	.14	3.10	.02		T.		.55											5.04
New Madrid	do		.27	.08	.08								.56		.02	.38	.34	.91				.41	.18										3.23
Parma	St. Francis		.20										.48			.38	.50	1.15				.25	.22										3.18
Poplar Bluff	Black		.25		.27							.27			.35	.10	.55	1.85		.02		.47											4.13
Sikeston	Mississippi	.28	.07	.10											.80	.10	3.25		T		.48	.17											5.25
Cairo, Ill.***	do	.17	.22	.15				T.				.46			.14	.07	2.72	.01	T.	T.		.49											4.43
Ozark Plateau																																
Arcadia	St. Francis		.05									.21	T.					.22					.14										0.62
Aurora	Neosho	T.	T.	T	T.							.30		T.	.12	.04	.11					.05											0.62
Birchtree (near)	Black			.22								.32			.28	.09	.40															1.31
Buffalo	Osage												.32				.20	.48				.19										1.19
Caplinger Mills	do			.05								.10			.05		.30															0.50
Chaonia	St. Francis		.25		.17							.64			.03	.25	.07	1.30				.37	.07										3.15
Dean	Neosho	T.	T.	T.				T.		T.		.45		T.	.18	.15	.15				T.	.38											1.31
Eldon	Missouri		.01		.03							.16			T.	.03																	0.23
Farmington	St. Francis		.03	T.								.25			.11		.28					.31											0.98
Fredericktown	do		.04	.05								.30	.07			.18	.06	.22				.44	.06										1.42
Galena	White												.39			.15	.25																0.79
Goodland	Black			.05								.20			.15		.20					.35											0.95
Greenville	St. Francis		T.	T.											.76	T.	1.20					.30											2.26
Hailey	White	T.	T.		T.						.30	.30	.45	.20	.25	.25																	1.75
Koshkonong	Black		.11	T.								.29			.29	.15	1.34					.27											2.45
Lakeside	Osage		.01		.11							.15				.04	.01	.36		T.													0.68
Lebanon	do		.20		T.							.20			.40		.80																1.60
Leeper	Black		.14		.12							.29			T.	.29	T.	1.07				.27	.03										2.21
Lockwood	Osage	T.		.04	T.							.20			.09	T.	.37					.10											0.80
Mountain Grove	White		.02		.03							.78			.08	.12	.09	.22				.02											1.36
Neosho	Neosho		.02	.04								.68			.12	.03	33																1.22
Owensville	Gasconade				.17											.15		.11															0.43
Ozark Beach	White											.38			.28	.17	.13	.38															1.34
Rolla	Meramec		.03		T.							.70			.01	.08	.01	.40				.13											1.36
St. Thomas (near)	Osage		.02		.11							.31				.07	.02	.31		.04													0.88
Salem	Meramec		.05	T.								.55			.08	T.	.26					.19											1.13
Seligman	Neosho	T.		.03	T.							.35			.25	.17	.35				T.												1.15
Seymour (near)	White	T.	T.	T.	T.							.77			.29	.21	.44																1.71
Springfield***	do	T.	T.	T.	.02			T.		T.		.28		T.	.03	.01	.12				.07	.01											0.54
Steelville	Meramec		.06		T.							.63			T.	.14	.07	.48				.24											1.62
Stover	Missouri				.06							.07			.02	.10	.02	.29															0.56
Tuscumbia	Osage		T.		.28							.14				.05	T	.42		.02													0.91
Williamsville	Black		.15		.02							.34			.08	.20	.30	.99				.32	.04										2.44
Willow Sprgs. (near)	White		.08		.07							.27			.15	.13	.04	.30				.07											1.11

Continued on next page

Daily Precipitation for February, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	..	..	
Southwest Plain																																	
Appleton City	Osage	....	.03	.01	.03	....	....	....	....	....	T.	.35	....	....	.15	.01	.43	....	....	....	T.	T.	....	....	....	....	....	....	....	....	....	....	1.01
Clinton	do	....	.03	T.	.05	....	....	....	....	....	....	.63	....	....	.13	....	.50	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.34
Concordia‖	Missouri	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Harrisonville‖	Osage	....	....	....	.03	....	....	....	....	....	....	.25	....	....	.03	....	.05	.24	....	....	....	.02	....	....	....	....	....	....	....	....	....	....	0.62
Joplin‖	Neosho	....	....	.02	....	....	....	....	T.	....	T.	.12	....	.18	.12	....	.50	....	....	....	.12	T.	....	....	....	....	....	....	....	....	....	....	1.06
Lamar‖	do	....	....	....	T.	....	....	....	....	....	....	.50	....	....	.02	.12	T.	.60	....	....	....	.08	....	....	....	....	....	....	....	....	....	....	1.32
Lamonte	Missouri	....	....	.04	.09	....	....	....	....	....	....	.21	....	....	.24	....	.30	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.88
Marshall	do	....	T.	T.	T.	....	....	....	....	....	....	.38	....	....	.28	....	.18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.84
Nevada	Osage	T.	T.	T.	....	....	....	....	....	....	....	.12	....	....	....	T.	.60	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.72
Osceola‖	do	....	.03	....	.02	....	....	....	....	....	....	.08	....	....	....	.02	.02	.02	.44	....	.03	....	.04	....	....	....	....	....	....	....	....	....	0.68
Warrensburg	Missouri	....	T.	....	....	....	....	....	....	....	....	.33	....	....	.10	.03	.15	....	....	....	.02	....	....	....	....	....	....	....	....	....	....	....	0.63
Warsaw	Osage	T.	.02	T.	.01	....	....	....	....	....	....	.10	....	....	.15	.02	.46	....	....	....	....	.06	....	....	....	....	....	....	....	....	....	....	0.82
Waverly ‖	Misouri	....	....	....	.05	....	....	....	....	....	....	.40	....	....	.12	.02	....	.28	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.87
Northwest Plateau																																	
Bethany	Grand	T.	T.	.05	.16	....	....	....	....	....	....	.09	.04	....	.40	T.	T.	....	....	....	....	T.	....	....	....	....	....	....	....	....	....	....	0.74
Chillicothe ‖	do	....	....	T.	.21	....	....	....	....	....	....	.44	....	....	.42	T.	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.07
Conception	Missouri	....	....	T.	.30	....	....	....	....	....	....	T.	.05	....	.40	T.	.34	....	....	....	.03	....	....	....	....	....	....	....	....	....	....	....	1.12
Edgerton	do	T.	.02	T.	.02	....	....	....	....	....	....	.08	....	....	.23	T.	.09	....	....	....	.04	.01	....	....	....	....	....	....	....	....	....	....	0.49
Gallatin ‖	Grand	....	....	....	.20	....	....	....	....	....	....	.10	....	....	.14	.06	.04	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.64
Grant City	do	....	T.	....	.20	....	....	....	....	....	....	.03	....	.30	.10	.24	....	....	....	.03	....	....	....	....	....	....	....	....	....	....	....	....	0.90
Kansas City***	Missouri	T.	T.	.02	.01	....	....	....	....	....	.01	.27	....	.16	.06	.01	.06	....	....	....	.02	.01	....	....	....	....	....	....	....	....	....	....	0.63
Kidder ‖	Grand	....	.05	.. ..	.20	....	....	....	....	....	.05	.17	....	....	.30	....	.13	....	....	....	....	.06	....	....	....	....	....	....	....	....	....	....	0.96
King City	Missouri	.01	....	....	.15	....	....	....	....	....	....	....	T.	....	.40	.10	.19	....	....	....	.01	....	....	....	....	....	....	....	....	....	....	....	0.86
Lexington ‖	do	....	....	....	.11	....	....	....	....	....	....	.40	....	....	.47	.19	.04	.14	....	....	....	.05	....	....	....	....	....	....	....	....	....	....	1.40
Maryville	do	....	T.	....	.35	....	....	....	....	....	....	....	.05	....	.30	.10	.18	....	....	....	.05	....	....	....	....	....	....	....	....	....	....	....	1.03
Oregon	do	....	T.	T.	.13	....	....	....	....	....	....	....	T.	....	.26	T.	.32	....	....	....	.05	....	....	....	....	....	....	....	....	....	....	....	0.76
St. Joseph***	do	T.	.02	.04	.02	....	....	....	....	....	....	.02	T.	.15	.25	.02	.16	T.	....	....	.01	T.	....	....	....	....	....	....	....	T.	....	....	0.69
Tarkio	do	....	T.	....	.12	....	....	....	....	....	....	....	.03	....	.33	....	.54	....	....	....	.09	....	....	....	....	....	....	....	....	....	....	....	1.11
Trenton	Grand	....	.02	....	.12	....	....	T.	....	..	....	.15	T.	....	.26	.08	.09	....	....	....	T.	....	....	....	....	....	....	....	....	....	....	....	0.72
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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plain received less than one-half the normal, but sufficient for winter needs. The largest local amount was 5.25 inches, at Sikeston, Scott County; and the least local amount was 0.23 inch, at Eldon, Miller County. The greatest amount that fell in any 24 consecutive hours was 3.25 inches at Sikeston on the 16th.

The snowfall averaged 2.0 inches. There was none in the southeastern counties and little anywhere south of the Missouri River but quite heavy in the northwest sections and along the northern border, 8 inches in Putnam County being the largest total.

MISCELLANEOUS PHENOMENA

Fogs, dense.—On the 2d, 3d, 16th, and 24th.

Halos, lunar.—13th, 17th, 18th, 19th, 21st, 26th, 27th, and 29th.

Halos, solar.—1st, 8th, 9th, 10th, 12th, 13th, 18th, 19th, 20th, 23d, 26th, 27th, 28th, and 29th.

Sleet.—3d, 4th, 14th, 15th, 16th, 20th, and 21st.

Thunderstorms.—Local on 3d; more or less general on 11th.

Winds.—Nearly a gale from the west on the 11th, especially over the southern half of the State, but no damage reported.

Daily Temperatures for February, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	..	..	Mean
Northeast Plain																																	
Brunswick§§	Maximum	43	42	26	28	52	59	55	39	67	76	64	55	41	32	37	55	34	46	41	38	53	45	51	65	71	72	69	76	68	..	..	51.7
	Minimum	11	24	20	10	9	28	29	23	24	39	56	29	20	21	28	29	28	23	27	25	27	27	29	30	37	38	40	40	..	..	27.5
Columbia	Maximum	44	50	38	29	51	54	62	41	70	77	68	53	40	35	39	55	44	41	42	41	47	45	50	61	73	68	67	72	64	..	..	52.4
	Minimum	25	38	24	12	23	34	33	28	34	63	39	27	22	30	31	38	27	26	29	26	35	29	29	34	43	42	45	40	44	..	..	32.8
Fayette	Maximum	44	59	39	30	50	59	61	40	69	79	67	59	43	33	39	53	39	47	46	40	49	49	51	64	73	73	72	77	64	..	..	54.1
	Minimum	19	30	22	10	12	25	29	25	26	39	55	29	19	20	29	30	29	23	27	25	25	27	25	29	31	34	39	40	41	..	..	28.1
Hannibal	Maximum	42	46	34	30	48	53	48	41	65	78	68	49	40	36	36	54	52	45	38	39	51	42	42	54	72	67	64	71	62	..	..	50.6
	Minimum	18	34	20	15	23	35	31	23	33	54	39	27	23	29	29	36	29	25	28	25	37	28	29	31	34	42	44	40	43	..	..	31.2
Jefferson City §§	Maximum	44	60	32	28	54	58	68	44	72	79	66	56	43	37	40	57	37	44	44	45	43	48	52	65	74	70	70	74	67	..	..	54.2
	Minimum	13	27	29	11	11	33	31	29	29	42	59	34	21	20	30	32	29	25	25	25	25	28	26	26	37	41	43	41	42	..	..	29.8
Kirksville	Maximum	40	43	36	24	46	52	46	45	57	71	68	46	39	35	31	45	49	41	39	35	46	44	46	47	71	69	66	73	78	..	..	49.2
	Minimum	11	33	16	5	12	31	28	17	28	40	40	27	14	25	23	29	25	20	25	23	32	23	24	25	30	36	39	39	36	..	..	26.1
Louisiana	Maximum	40	46	40	25	25	46	48	42	66	78	75	70	55	45	40	49	45	46	46	50	50	50	45	55	70	67	68	70	66	..	..	52.3
	Minimum	19	37	23	11	14	20	23	24	30	44	60	30	30	20	30	34	36	20	30	20	27	29	23	30	30	44	45	40	40	..	..	29.8
Macon§§	Maximum	43	45	27	29	47	56	48	40	63	75	58	49	44	33	38	52	33	45	41	39	50	45	44	56	72	68	69	73	67	..	..	50.0
	Minimum	10	24	18	9	9	27	29	21	22	40	54	29	19	26	26	27	27	22	20	24	28	25	26	29	34	38	40	38	39	..	..	26.9
Mexico §§	Maximum	44	48	43	28	48	55	55	40	68	78	61	54	40	34	39	53	33	46	42	40	48	46	47	64	73	70	67	72	65	..	..	51.8
	Minimum	19	25	20	10	10	25	28	24	24	37	57	30	19	23	29	28	30	22	25	28	24	26	26	28	33	41	42	37	37	..	..	27.8
St. Louis(1)	Maximum	42	51	48	34	55	50	57	48	65	82	69	55	44	39	42	51	54	44	45	43	42	45	44	63	72	70	65	71	65	..	..	53.6
	Minimum	24	37	31	20	24	38	36	31	33	61	44	32	27	33	33	41	29	28	29	27	37	32	32	36	45	50	50	48	47	..	..	35.7
Unionville	Maximum	42	42	40	30	45	52	47	46	54	66	62	45	40	35	34	40	40	38	38	38	38	50	46	40	42	70	66	67	73	67	..	48.1
	Minimum	8	32	12	— 1	8	28	26	14	26	35	40	25	15	24	21	30	22	16	20	20	32	22	20	26	30	35	36	40	35	..	..	24.0
Warrenton	Maximum	42	48	48	30	51	52	58	55	69	80	76	55	51	41	38	49	53	42	42	42	42	45	44	63	73	70	65	72	69	..	..	54.0
	Minimum	21	36	25	13	19	33	31	27	29	56	47	33	20	30	30	36	29	23	29	23	35	27	26	33	40	43	45	43	43	..	..	31.9
Southeast Lowlands																																	
Campbell	Maximum	49	55	59	59	54	55	65	59	72	77	72	63	52	42	42	51	51	47	54	48	47	55	56	68	73	75	74	79	70	..	..	59.4
	Minimum	22	38	49	25	20	29	28	42	30	52	55	30	30	32	32	33	39	32	38	26	25	34	25	29	34	36	47	48	42	..	..	34.6
Caruthersville	Maximum	45	49	55	67	66	54	62	68	69	68	71	71	77	55	49	43	53	52	48	49	49	47	51	51	61	68	69	69	67	..	..	58.7
	Minimum	29	39	44	54	30	29	38	38	46	42	62	58	41	39	36	39	43	44	38	44	33	44	40	33	38	45	47	50	45	..	..	41.7
Doniphan	Maximum	50	62	57	60	54	62	69	65	73	80	73	64	56	45	42	50	53	42	57	50	52	57	60	73	75	79	75	75	71	..	..	61.4
	Minimum	22	40	50	25	18	26	26	43	35	60	56	30	31	34	34	40	39	34	40	40	28	35	24	27	32	36	40	37	41	..	..	35.3
Jackson	Maximum	40	49	52	43	46	55	58	55	64	75	69	60	50	40	39	47	47	42	47	44	42	44	45	62	67	69	65	65	64	..	..	53.3
	Minimum	20	20	41	22	18	25	24	35	27	56	55	28	24	30	30	33	33	23	35	22	36	32	22	25	31	37	40	33	42	..	..	31.0
Poplar Bluff §§	Maximum	56	57	50	52	59	66	60	72	78	72	62	52	42	42	51	51	44	59	48	48	58	55	69	73	79	76	72	78	80	..	..	60.7
	Minimum	22	40	46	25	19	26	27	40	32	48	46	30	30	33	35	40	38	32	38	27	38	32	26	28	33	43	45	38	46	..	..	34.6
Sikeston	Maximum	47	52	53	54	51	58	62	62	69	77	78	76	58	46	41	48	48	46	52	52	47	49	49	67	71	74	74	70	70	..	..	58.7
	Minimum	26	40	49	30	23	32	31	40	33	58	58	34	30	34	35	41	37	30	40	27	40	34	27	30	38	43	48	39	46	..	..	37.0
Cairo, Ill	Maximum	47	60	64	47	50	58	62	58	68	75	69	57	48	41	45	53	51	46	52	48	47	48	47	64	69	71	68	68	66	..	..	56.8
	Minimum	32	42	47	29	29	39	42	39	39	62	50	44	32	36	36	45	38	33	37	30	41	39	36	38	45	48	50	46	51	..	..	40.5
Ozark Plateau																																	
Arcadia §§	Maximum	39	46	56	45	34	60	61	63	52	68	80	63	56	48	38	41	53	45	45	53	46	42	52	50	70	73	73	70	72	..	..	55.0
	Minimum	15	27	37	20	14	22	23	26	25	37	57	27	20	21	29	30	32	19	20	20	22	31	19	21	31	40	42	33	37	..	..	27.5
Aurora	Maximum	44	65	65	52	59	56	70	60	78	73	69	58	49	42	40	60	56	51	48	45	47	50	60	65	71	69	72	75	75	..	..	59.4
	Minimum	30	35	34	11	23	31	34	32	43	63	45	35	25	31	33	38	27	30	33	30	37	31	27	42	45	49	47	46	45	..	..	35.6
Birchtree	Maximum	44	62	58	56	57	59	67	67	75	78	70	58	51	44	49	49	51	51	52	54	48	53	55	67	71	74	72	74	68	..	..	59.8
	Minimum	23	31	40	20	17	27	27	27	34	58	51	29	29	30	33	35	33	30	33	27	36	35	25	30	36	40	46	40	45	..	..	33.3
Eldon §§	Maximum	44	61	31	30	55	59	68	48	72	75	59	56	33	37	41	57	38	45	45	46	45	49	54	66	73	71	71	78	67	..	..	54.3
	Minimum	13	27	31	12	11	26	30	30	29	43	59	34	20	20	31	33	30	24	24	25	25	30	28	28	36	41	44	46	43	..	..	30.1
Farmington	Maximum	45	50	50	38	60	60	63	57	66	79	70	57	48	39	42	48	48	47	47	49	42	47	47	70	74	73	68	73	68	..	..	56.0
	Minimum	23	37	36	20	17	30	29	33	29	59	51	32	21	31	31	38	33	22	33	21	37	32	23	33	38	48	49	38	44	..	..	33.4
Koshkonong	Maximum	45	60	69	58	58	60	69	68	70	75	71	68	53	43	39	48	56	47	53	47	48	53	57	67	70	73	71	73	70	..	..	60.0
	Minimum	27	37	52	21	21	33	35	37	36	60	52	37	32	32	32	38	34	33	40	29	36	36	31	37	46	48	51	48	48	..	..	37.9
Lebanon	Maximum	44	58	58	33	55	59	69	58	71	75	70	56	49	42	41	58	58	46	48	49	47	49	55	65	70	70	70	73	65	..	..	57.3
	Minimum	30	35	28	9	20	30	41	27	38	61	40	31	19	27	28	37	26	24	27	25	32	21	25	38	42	42	42	41	43	..	..	32.0
Mountain Grove §§	Maximum	38	69	58	35	56	62	69	57	77	72	60	56	41	34	43	53	46	45	53	46	50	55	58	66	70	72	73	74	74	..	..	57.3
	Minimum	11	28	35	13	14	27	27	34	32	40	56	33	23	23	30	32	29	28	30	27	27	30	26	35	43	45	46	44	47	..	..	31.6
Neosho	Maximum	54	63	63	55	55	55	65	65	75	74	73	62	60	46	43	59	64	48	47	51	50	49	59	62	68	68	75	75	74	..	..	60.6
	Minimum	29	35	44	12	20	30	30	30	33	49	48	30	28	34	36	28	28	37	33	29	39	33	24	35	41	41	41	41	41	..	..	33.8
Rolla	Maximum	45	64	61	37	56	55	65	65	72	78	73	54	53	43	41	52	53	45	45	46	46	46	52	64	70	68	67	71	67	..	..	57.0
	Minimum	27	37	35	14	22	30	31	31	33	62	49	34	22	30	30	39	30	24	31	25	36	30	26	37	42	34	46	41	46	..	..	33.6
Springfield	Maximum	41	65	62	30	54	55	70	54	76	74	68	55	45	39	40	58	43	47	47	47	47	50	56	63	69	68	71	72	71	..	..	56.4
	Minimum	32	39	25	11	24	35	36	33	42	63	40	30	25	31	33	40	28	30	32	32	36	32	33	42	45	49	47	48	51	..	..	36.0
Southwest Plain																																	
Appleton City	Maximum	41	56	50	30	53	58	63	57	71	72	70	57	42	39	41	57	54	44	43	45	43	48	57	63	71	73	74	77	69	..	..	55.8
	Minimum	26	38	25	10	22	30	34	28	37	62	46	33	23	31	31	37	26	26	29	27	37	28	28	34	41	40	42	43	45	..	..	33.1
Clinton	Maximum	41	52	52	28	50	59	68	58	69	74	68	48	45	40	40	62	52	44	42	42	47	50	50	58	62	75	75	78	73	..	..	55.2
	Minimum	25	38	24	10	22	32	40	28	35	60	47	32	20	30	31	32	28	25	20	25	38	30	28	34	42	40	44	44	45	..	..	32.7
Harrisonville §§	Maximum	40	56	25	30	55	60	61	43	72	74	59	55	41	32	42	53	36	45	44	41	46	50	55	65	74	73	77	79	65	..	..	53.4
	Minimum	12	27	21	6	7	26	23	24	24	41	58	31	20	22	28	30	23	23	27	26	27	27	28	29	31	38	39	42	42	.	..	27.7
Lamar §§	Maximum	46	58	38	33	52	58	67	57	74	74	58	62	44	38	46	61	40	47	47	50	46	49	61	65	72	74	76	80	75	..	..	56.8
	Minimum	18	36	34	12	13	29	32	31	31	46	55	35	25	26	34	36	28	28	31	31	33	31	28	28	39	45	42	42	42	..	..	32.4
Lamonte	Maximum	41	50	48	28	51	56	61	50	68	74	68	53	39	38	40	55	52	45	41	41	44	47	53	64	72	69	71	75	60	..	..	53.6
	Minimum	22	37	22	9	22	30	31	26	33	58	36	30	21	29	31	38	26	25	29	27	37	28	29	32	41	38	44	42	43	..	..	31.6
Marshall	Maximum	44	49	48	30	51	56	58	59	68	76	71	51	41	40	38	54	54	46	48	38	46	46	50	62	72	70	70	75	70	..	..	54.5
	Minimum	18	37	20	9	21	30	26	25	31	65	42	31	21	25	28	34	25	24	27	25	36	27	27	33	40	40	43	43	40	..	..	30.8
Nevada	Maximum	44	55	54	30	53	55	65	56	72	73	68	59	43	41	42	57	56	45	44	48	46	49	58	64	72	72	75	79	73	..	..	56.8
	Minimum	27	41	25	11	25	30	34	28	38	62	46	35	23	34	33	40	26	26	30	28	38	29	28	35	46	39	44	50	45	..	..	34.3
Warrensburg	Maximum	41	50	48	27	48	55	60	44	67	74	68	54	39	38	38	55	54	43	40	40	45	46	53	63	69	69	72	76	67	..	..	53.2
	Minimum	19	36	20	8	21	30	32	24	32	58	43	31	19	28	30	36	24	25	28	26	36	27	27	33	42	39	43	43	43	..	..	31.1
Warsaw	Maximum	43	62	58	32	54	57	67	60	72	76	71	57	47	45	42	60	60	44	44	45	45	53	58	64	66	68	73	70	..	..	..	56.5
	Minimum	26	39	26	10	20	27	30	28	37	63	46	33	20	31	32	40	27	23	29	25	37	29	24	33	38	36	41	39	43	..	..	32.1
Northwest Plateau																																	
Chillicothe §§	Maximum	42	45	21	40	48	55	52	37	63	76	49	48	40	31	40	48	33	44	42	45	46	47	49	58	75	67	71	76	63	..	..	50.0
	Minimum	18	25	16	3	5	26	28	18	19	35	40	25	16	21	24	29	23	20	23	23	31	23	27	26	33	36	40	38	37	..	..	25.1
Grant City	Maximum	36	36	26	17	43	48	47	39	46	56	42	36	32	32	37	36	37	35	36	38	39	43	44	65	64	61	70	72	65	..	..	44.1
	Minimum	9	26	13	— 1	9	30	26	9	29	36	21	16	22	21	21	19	17	22	21	22	23	26	29	35	38	31	39	43	37	..	..	23.8
Kansas City	Maximum	42	51	25	28	55	57	58	40	69	75	67	48	40	31	35	54	32	46	40	38	47	46	54	63	72	70	73	78	60	..	..	51.5
	Minimum	17	25	17	8	27	34	36	23	37	63	41	26	25	29	29	29	23	27	29	28	36	29	29	36	47	46	49	51	46	..	..	32.5
Kidder	Maximum	40	43	24	27	48	54	52	37	61	74	49	42	37	30	34	47	30	40	37	36	43	43	47	60	71	67	70	73	59	..	..	47.4
	Minimum	7	22	16	3	3	25	30	19	20	36	47	26	19	20	25	26	23	20	24	25	25	25	25	29	29	36	37	40	42	..	..	25.0
Lexington §§	Maximum	51	40	29	54	60	59	44	69	75	64	51	44	32	38	52	35	49	44	38	50	49	54	63	74	71	75	79	62	64	..	..	54.1
	Minimum	10	23	20	8	8	28	33	23	23	44	50	33	20	22	22	29	25	24	27	26	28	26	27	28	33	41	42	46	42	..	..	28.0
Maryville	Maximum	37	38	23	22	47	51	51	41	51	62	61	41	37	33	32	39	39	37	38	38	49	44	48	51	68	69	69	75	62	..	..	46.7
	Minimum	10	21	10	— 3	9	29	25	14	29	29	35	20	12	22	20	29	17	15	20	22	31	23	27	27	33	34	37	36	39	..	..	23.2
Oregon	Maximum	39	39	24	24	50	56	55	42	59	70	65	43	37	33	33	45	42	41	42	36	43	45	52	66	74	71	74	80	64	..	..	49.8
	Minimum	14	22	12	0	13	31	31	12	31	42	37	25	19	25	24	31	19	21	24	25	34	26	28	28	41	37	41	45	41	..	..	26.9
St. Joseph	Maximum	41	42	21	26	51	54	53	37	64	74	65	38	37	30	33	48	29	42	39	37	47	44	48	64	72	70	73	77	61	..	..	48.9
	Minimum	15	19	10	4	26	33	33	19	34	48	35	24	21	26	26	28	20	24	26	27	34	26	29	29	44	39	44	44	43	..	..	28.6
Trenton	Maximum	40	43	31	24	47	53	43	36	59	73	66	42	38	32	33	45	45	42	37	39	47	43	44	47	72	65	69	74	63	..	..	48.0
	Minimum	13	31	13	4	16	30	30	18	31	41	39	25	17	27	25	31	23	19	26	31	34	24	28	30	34	39	40	38	39	..	..	27.4

*, ᵇ, ᵉ, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-5-32—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

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UNIVERSITY OF ILLINOIS

GEORGE REEDER, Meteorologist

VOL. XXXVI COLUMBIA, MO., MARCH, 1932 No. 3

GENERAL SUMMARY

The month of March was not only a cold month—the coldest March since 1915—but it brought a decided reversal of temperature conditions that had prevailed in the State of Missouri since last September, the six months period ending with February constituting a notable series of successive months with temperature decidedly above normal. The change to colder occurred along about the 4th and 5th of March. For the following six to eight consecutive days temperatures, as a rule, did not rise above the freezing point day or night, the minima being generally less than 10°. And until about the 24th values did not attain to normal, a period of about 21 days with subnormal temperature.

The first three or four days of the month were rainy and mild, but thereafter precipitation was scattered and light, though many stations received substantial amounts on the 21st. Monthly totals were less than normal in all sections. In the southwestern plain the total precipitation for the first three months of this year is only 35 per cent of normal. The northeastern plain being the next driest with 47 per cent of normal since January 1st. Snow fell on several dates but, except in the north, melted or evaporated rapidly largely because of the extreme dryness of the air; and it may be worthy of mention that due to the dryness throughout the cold period there was little hard frost in the soil, although ice was 6 inches or more thick.

Because of the extremely mild winter most vegetation was prematurely advanced at the beginning of March and rather extensive sowings of oats and clover, as well as some gardening and trucking had been accomplished; also, except in the extreme north, fruits were prematurely advanced, with some blossoms out in the extreme southeast counties. Under such conditions the severe cold of March, of course, caused heavy damage. Wheat was damaged to some extent; oats and clover that had sprouted were killed; and nearly a clean sweep was made of peaches, while other tree fruits, especially apples, escaped with less damage. Weather conditions moderated somewhat with resumption of field activities the last week of the month.

TEMPERATURE

The monthly mean temperature for the State, as shown by the records of 70 stations, was 38.3°, or 5.6° colder than normal. The highest local mean was 47.6° at Caruthersville; and the lowest local mean was 31.8° at Kidder. The highest recorded temperature was 81° at Neosho on the 20th; and the lowest was −2° at Unionville on the 6th, making an absolute range in temperature of 83°. The greatest daily range was 50°, at Lamar on the 15th. Temperatures were 32° or lower an average of 18 days; and did not rise above 32° for about six to eight consecutive days beginning on the 5th. Zero or lower occurred at four stations on either the 6th, 8th, or 10th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting was 1.89 inches, or 1.13 inches less than the 60 years' average. The deficiency was marked and general for all the State, except the southeastern lowlands where about 74 per cent of the normal occurred. The largest local monthly amount was 4.84 inches, at Caruthersville, Pemiscot County, while Johnson County, with only 0.30 inch, was the driest. The greatest amount in any 24 hours was 2.11 inches, at Campbell, Dunklin County, on the 27th.

(Continued on Page 14)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	30.01	77	53	57	223	60	8,099	10.9	30	sw.	29
Hannibal	30.02	75	57	..	....	..	8,208	11.0	32	sw.	29
Kansas City	30.04	75	54	61	253	68	9,357	12.6	31	nw.	4
St. Joseph	30.03	81	59	61	248	67	8,203	11.0	32	ne.	21
St. Louis	30.00	73	56	57	219	59	9,869	13.3	41	sw.	29
Springfield	29.99	79	57	61	218	59	8,685	11.7	32	sw.	21
Cairo, Ill	29.99	77	62	60	...	..	8,233	11.1	32	sw.	21
Keokuk, Iowa	30.03	72	54	60	234	63	7,360	9.9	27	sw.	29

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR MARCH

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**43.9**	.....	**86**	**2**	**3.02**	.....	**3.59**	**3.1**	**8**	**13**	**8**	**10**
1888	38.5	− 5.4	90	1	4.02	+1.00	....	....	10	..	..	..
1889	44.3	+ 0.4	84	13	1.98	−1.04	....	....	5	..	..	..
1890	37.3	− 6.6	76	−11	2.61	−0.41	....	5.7	8	..	..	..
1891	36.6	− 7.3	78	−11	3.01	−0.01	....	7.1	10	..	..	..
1892	38.9	− 5.0	87	5	3.11	+0.09	....	....	8	8	10	13
1893	40.5	− 3.4	86	1	2.86	−0.16	2.15	3.2	7	11	10	10
1894	47.7	+ 3.8	89	2	2.93	−0.09	3.20	0.2	6	15	9	7
1895	42.4	− 1.5	98	0	2.14	−0.88	3.00	4.4	9	14	7	10
1896	39.2	− 4.7	82	2	2.05	−0.97	4.47	5.2	8	11	9	11
1897	44.2	+ 0.3	93	− 5	6.07	+3.05	4.10	1.0	2	9	9	13
1898	44.7	+ 0.8	83	9	7.09	+4.07	3.87	0.6	11	11	7	13
1899	37.4	− 6.5	78	− 8	2.93	−0.09	4.30	8.9	16	9	11	11
1900	40.4	− 3.5	88	− 4	1.48	−1.54	3.41	0.2	6	15	9	7
1901	42.7	− 1.2	85	− 1	3.74	+0.72	3.21	1.8	8	11	8	12
1902	45.3	+ 1.4	85	1	3.49	+0.47	5.60	0.8	9	10	10	11
1903	46.8	+ 2.9	81	9	3.35	+0.33	6.19	1.1	8	13	7	11
1904	44.8	+ 0.9	87	8	4.14	+1.12	7.50	1.2	9	11	9	11
1905	50.3	+ 6.4	88	10	2.99	−0.03	2.67	T.	8	11	8	12
1906	34.6	− 9.3	75	− 5	3.93	+0.91	3.00	8.6	11	6	7	18
1907	53.9	+10.0	95	16	2.82	−0.20	3.08	1.0	7	14	7	10
1908	50.1	+ 6.2	89	14	2.58	−0.44	2.55	1.0	7	14	7	10
1909	44.5	+ 0.6	81	9	3.07	+0.05	3.30	0.6	6	13	9	9
1910	55.8	+11.9	96	15	0.66	−2.36	2.25	0.1	2	20	7	4
1911	46.8	+ 2.9	91	5	1.85	−1.17	2.00	1.4	6	16	8	7
1912	35.2	− 8.7	89	− 4	4.62	+1.60	2.85	16.5	11	12	6	13
1913	40.6	− 3.3	84	−12	4.36	+1.34	7.97	5.0	9	12	8	11
1914	43.2	− 0.7	87	− 2	2.75	−0.27	3.01	4.7	8	13	7	11
1915	36.4	− 7.5	70	6	1.50	−1.52	1.85	7.9	6	7	8	16
1916	47.0	+ 3.1	95	− 2	2.53	−0.49	4.25	3.1	7	14	8	9
1917	45.2	+ 1.3	86	− 7	2.91	−0.11	4.08	1.5	7	15	7	9
1918	50.9	+ 7.0	95	8	0.94	−2.08	2.25	0.1	4	18	6	7
1919	46.3	+ 2.4	90	− 2	2.40	−0.62	5.37	0.7	6	15	8	8
1920	44.6	+ 0.7	86	− 6	5.01	+1.99	6.00	1.4	8	15	6	10
1921	51.9	+ 8.0	90	11	4.69	+1.67	2.88	0.5	10	13	9	9
1922	45.6	+ 1.7	80	3	6.46	+3.44	4.00	2.2	12	11	6	14
1923	40.4	− 3.5	83	−11	4.12	+1.10	2.84	2.3	8	14	6	11
1924	38.4	− 5.5	80	8	2.55	−0.47	2.38	9.4	8	8	8	15
1925	47.7	+ 3.8	86	− 5	1.95	−1.07	2.55	0.8	5	17	8	6
1926	39.6	− 4.3	83	8	2.89	−0.13	1.77	7.0	8	13	6	12
1927	45.9	+ 2.0	80	0	5.87	+2.85	4.90	3.7	11	12	8	11
1928	46.3	+ 2.4	89	10	1.54	−1.48	1.60	2.4	5	15	9	7
1929	48.6	+ 4.7	97	11	3.30	+0.28	3.30	T.	8	12	8	11
1930	43.2	− 0.7	88	5	1.37	−1.65	2.63	1.4	4	18	6	7
1931	39.5	− 4.4	70	10	3.02	0.00	2.90	8.8	8	11	7	13
1932	38.3	− 5.6	81	− 2	1.89	−1.13	2.11	2.8	7	12	9	10

Climatological Data for March, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	35.4	− 6.5	76	29	6	7†	39	1.33	−1.18	0.30	3.7	12	15	3	13	nw.	O. K. Benecke
Clifton Hill	Randolph	731	33	35.8	− 6.4	77	29	− 1	10	49	0.95	−1.69	0.39	4.7	11	12	7	12	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	37.0	− 5.6	76	29	8	7	32	1.16	−1.78	0.40	3.7	7	7	9	15	nw.	U. S. Weather Bureau
Downing	Schuyler	876	11	33.0	− 8.6	72	29	2	6†	34	1.50	−0.83	0.55	7.2	9	14	8	9	nw.	James Taylor
Elsberry	Lincoln	449	1	38.0	.....	77	29	7	7	49	1.09	.....	0.30	3.0	7	5	8	18	nw.	Ray E. Mills
Fayette	Howard	661	52	36.8	− 5.1	77	29	7	6†	43	0.85	−1.95	0.25	4.0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	37.0	− 7.1	76	29	8	9	39	1.33	−1.69	0.45	2.5	7	11	9	11	nw.	Chamber of Commerce
Gorin	Scotland	700	45	....	.....	..	..	....	..	..	1.23	−1.19	0.40	2.5	6	10	7	14	nw.	J. W. Pulliam
Hannibal	Marion	534	49	35.4	− 5.6	75	29	6	6	35	1.68	−0.92	0.56	3.0	9	8	10	13	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	37.2	− 6.4	77	29	8	9	42	1.25	−1.85	0.23	1.0	8	4	14	13	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	33.5	− 6.2	73	29	1	6†	36	2.05	−0.67	0.75	4.5	7	10	6	15	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	38	37.1	− 6.4	73	25†	7	6	40	1.11	−1.99	0.37	1.5	5	21	5	5	n.	Stark Bros. Nurseries
Macon	Macon	875	33	34.4	− 7.8	76	29	4	6†	36	1.12	−1.50	0.35	1.5	5	20	5	6	w.	W. C. Brown
Mexico	Audrain	800	43	35.8	− 6.2	76	29	6	6†	39	1.55	−1.27	0.40	4.5	8	22	0	9	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	....	..	..	1.39	−1.33	0.33	3.2	7	10	9	12	se.	J. S. Conway
St. Charles	St. Charles	456	44	39.0	− 5.5	76	29	8	9	38	1.15	−1.89	0.32	1.0	9	8	14	9	nw.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	38.8	− 5.3	74	29	9	9	34	1.33	−2.05	0.36	0.3	9	9	12	10	nw.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	38.2	− 5.4	74	25†	9	8†	33	1.11	−2.27	0.33	1.3	10	16	8	7	nw.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	....	..	..	1.42	−1.40	0.41	4.0	7	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	34.8	− 7.4	74	29	3	7	38	2.03	−0.93	0.43	6.0	7	11	13	7	n.	Frank Hall
Unionville	Putnam	1,062	39	32.4	− 6.5	73	29	− 2	6†	34	1.45	−0.97	0.70	10.0	6	14	7	10	n.	Geo. W. Davis
Warrenton	Warren	816	50	38.2	− 4.3	76	29	7	9	37	1.01	−2.33	0.30	1.5	9	4	20	7	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	32.9	− 6.0	76	29	3	6	35	1.56	−0.82	0.48	4.8	10	9	9	13	nw.	U. S. Weather Bureau
Section means and	extremes	.....	..	36.0	− 6.2	77	29	− 2	6†	49	1.33	−1.48	0.75	3.4	8	11	9	11	nw.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	44.5	.....	80	1†	14	10	40	4.53	.....	2.11	0.5	8	11	5	15	s.	Jeff. King
Caruthersville	Pemiscot	265	36	47.6	− 3.8	79	30†	13	10	33	4.84	+0.33	1.50	1.0	7	13	2	16	s.	Sam Smith
Doniphan	Ripley	344	28	45.6[c]	− 3.4	75	26	10	9	45	3.33	−0.78	1.14	0.6	5	10	12	9	n.	W. W. Martin
Jackson	Cape Girardeau	428	41	38.2	− 9.0	72	21	5	9	39	3.85	−0.45	1.78	2.5	8	5	6	20	n.	John G. Putz
Marble Hill	Bollinger	470	37	42.4	− 5.2	74	25†	8	9	40	2.98	−1.43	1.83	T.	6	6	11	14	n.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	....	..	..	4.36	−0.20	1.43	0.5	8	15	7	9	sw.	John A. Spence
Poplar Bluff	Butler	339	27	44.0	− 4.6	80	20	10	9	45	3.24	−1.32	1.01	0.8	9	17	5	9	w.	J. H. Wolpers
Sikeston	Scott.	318	25	44.4	− 4.2	75	21†	10	9	42	4.50	+0.07	1.20	3.0	10	9	5	17	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	42.7	− 4.5	74	21	11	9	33	4.19	+0.44	1.02	2.0	12	3	13	15	nw.	U. S. Weather Bureau
Section means and	extremes	....	..	43.7	− 5.0	80	1†	5	9	45	3.98	−0.42	2.11	1.2	8	10	7	14	n.	
Ozark Plateau																				
Arcadia	Iron	926	51	37.8	− 6.8	75	21	5	9	49	2.05	−1.75	0.89	0.2	8	17	3	11	ne.	Arcadia College
Aurora	Lawrence	1,370	31	42.6	− 3.3	80	20	6	9	41	2.48	−1.41	0.95	0.2	8	11	3	17	nw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	43.2	− 4.1	75	1†	8	9	37	2.97	−1.18	1.52	0.5	6	16	6	9	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	40.7	.....	75	25	8	9	35	2.07	.....	0.74	2.2	9	15	9	7	nw.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	....	..	..	0.51	.....	0.25	T.	5	6	14	11	n.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	43.2	− 5.6	80	20†	5	9	45	2.32	−1.20	1.37	2.0	3	11	16	4	sw.	H. E. Dean
Eldon	Miller	934	37	37.0[a]	− 6.6	77	29	8	9†	42	0.73	−2.36	0.15	0.4	7	6	15	10	n.	E. H. Shepherd
Farmington	St. Francois	918	21	39.9	− 6.6	77	21	6	9	40	1.85	−1.56	1.02	0.8	12	8	15	8	ne.	Robert Forsyth
Goodland	Iron	1,000	39	40.8	− 4.2	76	29	5	13	48	2.16	−1.97	0.92	0.5	7	13	9	9	n.	F. M. Adams
Greenville	Wayne	381	23	41.4	− 6.3	79	21	9	13	44	3.31	−1.19	1.93	T.	5	19	5	7	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	....	..	..	2.96	−0.21	0.95	1.0	9	14	11	6	.....	A. W. Madison
Koshkonong	Oregon	958	31	44.4	− 5.0	78	1	8	9	34	2.00	−1.93	0.80	T.	5	14	2	15	nw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	39.3	− 5.7	76	26	4	9	37	2.86	−0.68	1.20	1.5	7	12	4	15	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	42.2	− 5.1	76	20†	9	9	37	1.83	−1.00	0.58	2.5	9	13	12	6	nw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	31	41.3	− 4.1	72	25	5	9	35	2.88	−1.24	1.28	0.2	10	10	11	10	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	42.2	− 5.9	81	20	8	9	49	2.25	−1.23	0.82	3.5	12	13	10	8	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	40.0	− 5.5	74	29	7	9	34	1.85	−1.87	0.49	0.6	9	0	14	17	nw.	F. H. Lane
Salem	Dent	1,173	28	40.4	− 6.0	74	25	6	9	41	2.63	−0.99	0.98	T.	10	7	14	10	n.	E. E. Martin
Seligman	Barry	1,542	31	43.8	− 2.8	79	20	7	10	41	3.01	−0.51	0.72	3.0	9	13	10	8	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	40.2	− 5.2	73	25	6	9	35	2.76	−1.11	0.71	3.2	6	11	6	14	nw.	Ira H. Hailey
Springfield	Greene	1,324	54	40.1	− 5.1	76	25	5	9	40	2.52	−0.87	1.02	2.0	11	15	8	8	nw.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	38.6	.....	76	25†	7	9	39	1.15	.....	0.26	1.4	9	8	12	11	nw.	I. M. Wilson
Section means and	extremes	.....	..	40.9	− 5.3	81	20	4	9	49	2.23	−1.28	1.93	1.2	8	12	9	10	nw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	39.2	− 5.9	75	25	7	9	39	0.78	−2.40	0.27	0.7	8	6	20	5	nw.	W. G. Bigelow
Clinton	Henry	765	39	39.0	− 6.0	77	25	8	9	37	0.96	−2.15	0.21	2.0	6	4	19	8	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	36.2	− 5.1	75	25	6	7†	46	0.72	−1.96	0.29	3.0	6	2	9	20	nw.	John H. Patterson
Lamar	Barton	980	44	40.4	− 5.6	78	20†	8	9†	50	1.15	−1.85	0.60	1.0	7	19	3	9	nw.	Jesse A. Mann
Lamonte	Pettis	867	31	37.0	− 7.0	75	25†	7	7	37	1.23	−1.67	0.32	4.0	7	12	8	11	nw.	J. E. Wheeler
Marshall	Saline	779	45	37.7	− 5.3	76	29	5	7†	35	1.57	−1.22	0.40	8.0	7	13	12	6	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	40.6	− 4.3	77	25	7	9	39	1.52	−1.43	0.50	1.0	6	15	4	12	nw.	George A. Kaupp
Warrensburg	Johnson	878	45	37.9	− 6.1	75	25†	6	9	42	0.30	−2.37	0.09	2.0	6	18	6	7	ne.	E. A. Markey
Warsaw	Benton	687	31	41.7[e]	− 5.3	78	29	8	9	39	1.12	−2.46	0.24	0.2	11	13	9	9	w.	Everett Martin
Section means and	extremes	.....	..	38.9	− 5.6	78	20†	5	7†	50	1.04	−1.95	0.60	2.4	7	11	10	10	nw.	
Northwest Plateau																				
Bethany	Harrison	916	37	33.1	− 7.2	71	29	1	8	34	0.96	−1.34	0.37	3.0	4	19	6	6	nw.	A. S. Cumming
Chillicothe	Livingston	779	23	33.2	− 7.9	76	29	1	8	37	2.24	−0.24	0.97	9.5	7	15	7	9	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	33.7	− 6.1	72	29	− 1	8	36	0.88	−0.84	0.31	4.5	4	11	11	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	32.9[b]	−10.3	65	29†	4	7†	29	0.98	−1.19	0.40	6.7	7	19	0	12	n.	Fred L. Stiff
Grant City	Worth	1,134	28	32.4	− 8.9	69	29	0	8	33	0.71	−1.34	0.30	5.0	4	13	13	5	nw.	W. P. Spillman
Kansas City	Jackson	963	43	36.4	− 6.3	73	29	5	8	34	2.30	−0.23	1.19	4.7	9	11	12	8	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	31.8	− 9.0	72	29	3	8†	37	1.09	−1.00	0.40	5.0	6	14	8	9	nw.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	....	..	..	1.50	−0.06	0.82	8.3	5	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	47	36.2	− 7.2	74	25†	6	7†	42	2.19	−0.35	0.95	5.7	8	14	12	5	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	33.4	− 4.5	75	29	− 1	8	37	0.93	−0.91	0.35	6.5	7	9	16	6	n.	J. R. Brink
Oregon	Holt	1,048	76	35.6	− 4.0	75	29	1	8	39	1.50	−0.58	0.90	8.0	6	14	10	7	nw.	Mina Wright
St. Joseph	Buchanan	967	24	34.6	− 7.9	73	29	2	8	33	1.52	−0.80	0.95	5.4	5	13	10	8	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	29	33.6	− 6.5	77	29	0	8	38	0.61	−1.11	0.21	4.0	4	14	7	10	nw	Albert Volker
Trenton	Grundy	822	36	34.0	− 7.1	74	29	3	8	33	1.73	−0.69	0.97	5.0	6	11	14	6	nw.	W. H. Estes
Section means and	extremes	.....	..	33.9	− 7.2	77	29	− 1	8	42	1.37	−0.76	1.19	5.8	6	14	10	7	nw.	
State means and	extremes	.....	..	38.3	− 5.6	81	20	− 2	6†	50	1.89	−1.13	2.11	2.8	7	12	9	10	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for March, 1932

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville	Missouri	.01	.14	.03	.04	.17					T.									.11		.01	.34									.02	0.87
Bowling Green	Mississippi	.30		.15		.21				.02			T.							.18			.34		T.							1.20
Brunswick	Grand	.15	.12		.05	.30				.02										.25	.03	.05	.17		.08						.06	.05	1.33
Clifton Hill	Chariton	.10	.01	.06	.07	.13						T.	.02							.02			.39		.09						.05	.01	0.95
Columbia***	Missouri	.26	T.	.11	.17	.07			T.	T.	T.	T.	T.				T.		.10	T.		.40		T.	T.						.05		1.16
Downing	Mississippi	.24	.15	T.		.18			T.	T.			.02		T.				.19			.55	T.		.07					.06	.04		1.50
Edina	do		.45			.35			T.	T.			T.		T.					.15			.90		T.								1.85
Elsberry	do	.25		.04		.20														.16		.30	.10					.04		T.		1.09
Fayette	Missouri	.20		.05		.25													.13			.04	.18									0.85
Fulton	do	.01	.27	.12	.06	.30				T.			T							.12	T.		.45									T.	1.33
Gorin	Mississippi	.40		.01	.12														.19			.33							.18			1.23
Hannibal***	do	.40	T.	.07	.13	.06			T.	T.	T.		T.	T.					.25			.56			.15	T.		.04			.02		1.68
Hermann	Missouri		.16		.08	.30			T.		T			T.				.05		.12		.53				.01				.01	.11	1.37
Jefferson City	do	.23	T.	.04	.17	.20	T.													.15			.16	.12								.18	1.25
Kahoka	Mississippi		.20			.31													.20			.85										1.56
Kirksville	do	.30	.13		.02		.20												.40			.25	.75										2.05
LaBelle	do		.25		.25															.20			.58								T.		1.28
Laddonia	do		.20		.12																.06			.08							T.	0.46
LaGrange	do																																
Louisiana	do	.37		.15		.20			T.	.02			T									.37		T.								1.11
Lucerne	Grand		.15		.02	.07														.11			.70									1.05
Macon	Chariton	.05	.10			35														.34			.28									1.12
Memphis	Mississippi		.30			.36				T.	T.									.23			1.25									2.14
Mexico	do	T.	.30	.05	.15	.35				T.				.05						.20			.40		T.							.05	1.55
Milan	Grand		.25	.36		.43				T.							.12		.25					T						.08		1.49
Monroe City	Mississippi	.26		.17		.18													.33			.28		.13		T.	.04					1.39
New London	do		.43	.09		.30	T.		.14											.17			.73		.16	T.		.05			.02	2.09
Pacific	Meramec		.12		.15	.18	T.		T.	T.	T.							.39		.08	T.		.46				.03				.05	1.46
Palmyra	Mississippi	.30		.12		.30													.20			.13		.12								1.17
Paris	do		.31		.10	.21														.18			.23		.12								1.15
Perry	do	.25			.20	.30														.20			.46		.08								1.49
Philadelphia	do		.15		.10	.18			T.	T.		T.	T.							.30			.40	.08				.20					1.41
Plevna	do																																
St. Charles	Missouri	.01	.22	.13		.03					T.		T.					.32	T.	.13		.24	.06				.01				T.		1.15
St. Louis (1)***	Mississippi	.18	T.	.08	T.	.18			T.	T.	T.		T	T.	T.		.36		.06	T.		.35	T.				.02			.01		.09	1.33
St. Louis (2)*	do	.20	T.	.09		.12			T	.01	T.		T.				.33		.03	.01		.26					.02			T.		.04	1.11
Shelbina	do			.21	.08	.21														.32			.41		.11					.08			1.42
Steffenville	do	.35		.10		.20													.43			.25	.35		.35						T.		2.03
Troy	do	.21		.03		.26														.10			.41		.02	.03				.02		1.00	2.08
Union	Meramec		.10		.12	.25												.37		.08			.26			.05						.07	1.30
Unionville	Chariton	.15		.10	T.	.30													.15			.70	.05									1.45
Valley Park	Meramec		.17		.05	.02					T.				T.			.67		T.	T.		.50				.05				T.	.06	1.52
Warrenton	Mississippi	.05	.18	.05		.30			T.	T.	T.		T.		T.		T.	.04	T.	.10		.10	.12				T.				.07		1.01
West Ely	do	.29		.14	.30				T.	T.		T.	T.						.12			.75		.07			.04				T.		1.71
Winfield	do	.20		.30		.20																	.40	.10									1.20
Keokuk, Ia.***	do	.39	.09	.01	.11	.17			T.	T.		T.	T.	T.					.19	T.		.47	T.		.10	.02					.01	T.	1.56
Southeast Lowlands																																	
Bragg City	St. Francis			.43		.17			.03									.40									1.60	.30				.68	3.61
Campbell	do			37		.46				.04								.52				.03						2.11			.80	.20	4.53
Cape Girardeau	Mississippi		.15	T.	.58	.03	.03		T.	.02								2.22									.03	.32	T.		.07	.51	3.96
Caruthersville	do				.50	.10												.40					.14					1.40	.80			1.50	4.84
Dexter	St. Francis			.60		.02			.02									1.11										1.10				.75	3.60
Doniphan	Black			.50		T.			.16									1.09									T.	1.14			.44		3.33
Fisk	St. Francis		T.	.07	.62	T.			T.	T.								.98					.03		T.		.85	.08		.23	.61	3.47
Jackson	Mississippi		.14	.64		.06			.04				.02					1.78				.12									1.05		3.85
Marble Hill	do			.63		.06			.18				T.					1.83				T.						.08			.20		2.98
Morehouse	do		.05	.64		.18			.06									1.01				.09						1.43			.90		4.36
New Madrid	do				.47		.30		T.	.10								.40					.60			.01	1.62	.71		.03	.85	5.09
Parma	St. Francis			.18	.18	.03												.48										1.37	.60			.70	3.54
Poplar Bluff	Black		T	.50	.04	.09	.05		T.	.05								1.01										.98			.12	.40	3.24
Sikeston	Mississippi	.05	.20	.50		.18			.12								1.20									.80	.45		.05	.95		4.50
Cairo, Ill.***	do	.01	.08	.52	T.	.12	T.		.08	T.	T.		T.				.67	.19				.74	T.			.15	.88	T		.70	.05	4.19
Ozark Plateau																																	
Arcadia	St. Francis		.12	T.	.14	T.	T.		.02	T.								.89					.20				.27			.15	.26	2.05
Aurora	Neosho	T.	.09	.14		.42			T.	T.	T.		T.				.48	.30	.05			.05									.95		2.48
Birchtree (near)	Black			.88			.10		.07									1.52													.10		2.97
Buffalo	Osage				.33	.25	.07	T.	.07	.05			T.					.74	.05	.04											.47		2.07
Caplinger Mills	do	T.		.13	.08	T.	T.	T.									.25		.03			.02										0.51
Chaonia	St. Francis		.07	.30	.34	.07	.07		T.	.05								2.10											.37	.07		.40	3.84
Dean	Neosho	T.	T.	T.	T.	T		.22	T.		T.						1.37		T.			T.				T.	T.			.73		2.32
Eldon	Missouri		.12	.02	.15	.13					T.			T.							.11		.07							.13		0.73
Farmington	St. Francis	.03	.29	.13		.04			T.				.04				.02	1.02		.03		.06				.03	.05			.11		1.85
Fredericktown	do			.16	.07	.06			T.									1.31					.19				1.52				.36	3.67
Galena	White			.08														.98					.10			.10					.48	1.74
Goodland	Black		.60	.15					.04				T.					.92				.25				.10				.10		2.16
Greenville	St. Francis			.62		.10			T								1.93										.18			.48		3.31
Hailey	White		.10	.33	.05	.40		.04		T							.95	.19				.20									.70		2.96
Koshkonong	Black	T.		.61		.12			T.	T.								.80										.30			.17		2.00
Lakeside	Osage	T.	.09	.10	.04	.26			T	T.			T.					.25		.06		T.	.16		.02							.15	1.13
Lebanon	do					T.			.15	.26			.30					1.20		.36		T.				.10					.49		2.86
Leeper	Black		.08	.39	.19	.09			.02	T.								2.09					.11			T.	.14			T.	.28	3.39
Lockwood	Osage	T.		.13	.18	.20	T.	T.	.15	T.	T.		T.				.58	.38	.07			.07	T.				T.			.07		1.83
Mountain Grove	White	T.	.08	.71		.14	T.	T.	.02	T.	T.		T.				.04	1.28		.04		.19				T.	.10			.28		2.88
Neosho	Neosho	.02	.02	.04	.06	.18		.10	.20	.05							.82					.05	.01							.70		2.25
Owensville	Gasconade				.11													.40		.12			.52									.15	1.30
Ozark Beach	White		.11	.36	.05	.19			T.	T.								1.34									.18					.55	2.78
Rolla	Meramec		.25		.10	.25		.06	T.	T.			T.	T.				.49		.04			.25				.09					.32	1.85
St. Thomas (near)	Osage		.12	.14	.08	.25												.29					.36									.07	1.31
Salem	Meramec	.05	T.	.38		.10			.05	T			T.				.64	.98		T.		.07	.07				.07				.22		2.63
Seligman	Neosho	T.	.55	.14		.20	.10	.20	T.	T.	T.	T.	T.				.27	.56				T.					.27	T.			.72		3.01
Seymour (near)	White	T.	T.	.61		.25	T.	T.	.26	T.	T.							.71				.22	T.								.71		2.76
Springfield***	do	.04	T.	.26	.20	.09	T	T.	.06	T.	T.	T.	T.				1.02		.04			.07				.03	.02	T.			.69		2.52
Steelville	Meramec		.27		.16	.18	T.			T.	T			T.				.86		.12			.11									.28	1.98
Stover	Missouri	.03			.20	.40													.06				.17								T.		0.86
Tuscumbia	Osage		.14	.16	.03	.35			T		T.							.32		.07			.18		T.							.10	1.35
Williamsville	Black		.08	.13	.27	.06	.01		.03	.03								1.39					.01				.02	.31	.05				2.39
Willow Sprgs. (near)	White		.03	.32	.20	.10	.02		.01	T.								1.26					.08				.06	.08				.24	2.40

Continued on next page

Daily Precipitation for March, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																															
Appleton City	Osage	.03	....	.13	.27	.15	T.	T.	T.	T.	T.	T.	T.	....	....	....	T.	....	.06	....	....	.09	.02	....	T.	....	....	....	....	....	.03	T.	0.78
Clinton	do	.09	....	.21	.20	.19	....	....	....	....	....	....	....	....	....	....	....	....	.15	....	....	....	.12	....	....	....	....	....	....	....	....	....	....	0.96
Concordia‖	Missouri	....	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.43	.35	....	....	....	....	....	....	....	....	....	0.78
Harrisonville‖	Osage	.03	.04	....	....	.29	....	....	....	....	....	....	....	....	....	....	....	....	....	.07	....	T.	.21	....	....	....	....	....	....	....	.08	....	0.72
Joplin‖	Neosho	T.	....	T.	.32	....	....	....	....	....	....	....	....	....	....	....	1.10	....	.03	....	....	.01	....	.02	....	....	....	.02	....	....	T.	....	1.50
Lamar‖	do	....	T.	.05	.04	.24	T	....	.07	....	....	....	....	....	....	....	....	.60	....	.08	....	T	.07	....	....	....	....	....	....	....	....	....	1.15
Lamonte	Missouri	.18	....	.30	.10	.32	....	....	....	....	....	....	T.	....	....	....	....	....	.08	....	....	.21	.04	....	....	....	....	....	....	....	....	T.	1.33
Marshall	do	.20	....	....	.08	.40	....	....	T.	T.	....	....	....	....	....	....	....	....	.30	....	....	.12	.32	....	....	....	....	....	....	....	.15	....	1.57
Nevada	Osage	T.	....	.15	.39	.50	T.	....	.07	....	....	....	....	....	....	....	.02	....	....	....	....	.39	....	....	....	....	....	....	....	....	....	....	1.52
Osceola‖	do	.04	.03	.18	.18	.62	....	T.	.01	T	....	....	....	....	....	....	....	.14	....	.12	....	.02	T.	....	.02	....	....	....	....	....	....	....	1.36
Warrensburg	Missouri	....	....	....	.09	.05	....	....	....	T.	....	T.	T.	....	....	....	....	....	.02	.02	....	.04	.08	....	....	....	....	....	....	....	....	....	0.30
Warsaw	Osage	.11	....	.24	.23	.21	.02	....	....	T.	....	....	....	....	....	....	T.	.07	.15	.01	....	.05	.02	....	.01	....	....	....	....	....	....	....	1.12
Waverly ‖	Missouri	.10	.10	.03	T.	.34	....	....	....	....	....	....	....	....	....	....	....	....	....	.27	....	.06	.64	....	....	....	....	....	....	....	.04	....	1.58
Northwest Plateau																															
Bethany	Grand	.34	....	....	.18	....	....	....	T.	T.	....	....	....	....	....	....	....	....	.07	....	....	.37	....	....	....	....	....	....	....	....	....	....	0.96
Chillicothe ‖	do	.29	.09	....	....	.40	....	....	....	16	....	....	T.	....	....	....	....	....	....	.25	....	T.	.97	....	....	....	T.	....	....	....	.08	....	2.24
Conception	Missouri	.14	T.	....	.27	....	....	....	T.	....	....	T.	T.	....	....	....	....	....	.16	....	....	.31	....	....	....	....	....	....	....	....	....	....	0.88
Edgerton	do	.02	....	.01	.20	....	....	....	....	....	....	T.	.08	....	....	....	....	....	.15	....	....	.40	....	....	....	....	....	T.	....	....	.12	....	0.98
Gallatin ‖	Grand	.15	.08	.08	....	23	....	....	....	....	....	....	....	....	....	....	....	....	....	.27	....	....	.44	....	....	....	....	....	....	....	....	....	1.25
Grant City	do	.21	....	....	.10	.10	....	....	T.	T.	....	T.	....	....	....	....	....	....	T.	....	....	.30	....	....	....	....	....	....	....	....	....	....	0.71
Kansas City***	Missouri	.18	T.	.05	.55	....	T.	....	T.	T.	T.	T.	T.	....	....	....	....	....	.16	T.	....	1.19	....	.01	.01	....	....	T.	.01	....	.14	....	2.30
Kidder ‖	Grand	.15	.06	.08	....	.22	....	....	....	....	....	....	....	....	....	....	....	....	....	.18	....	T.	.40	....	....	....	....	....	....	....	....	....	1.09
King City	Missouri	.06	....	....	.25	.10	....	....	T.	....	....	....	....	....	....	....	....	....	.27	....	....	.82	....	....	....	....	....	....	....	....	....	....	1.50
Lexington ‖	do	.22	.03	....	....	.54	....	....	....	....	.04	....	....	....	....	....	....	....	....	.24	....	.07	.95	....	....	....	....	....	....	....	.10	....	2.19
Maryville	do	.12	....	....	.21	.10	....	....	....	T.	T.	.05	T.	....	....	....	....	....	.05	....	....	.35	....	.05	....	....	....	....	....	....	....	....	0.93
Oregon	do	.03	....	....	.27	.10	....	....	T.	T.	....	.03	....	....	....	....	....	....	.17	....	....	.90	....	....	....	....	....	....	....	....	....	....	1.50
St. Joseph***	do	.09	T.	.01	.31	....	T.	....	T.	T.	T.	T.	T.	T.	....	....	....	....	.16	T.	....	.95	T.	....	....	....	....	....	....	....	T	....	1.52
Tarkio	do	.17	....	....	.19	....	....	....	....	T.	....	T.	....	....	....	....	....	....	.04	....	....	.21	....	....	....	....	....	....	....	....	....	....	0.61
Trenton	Grand	.12	....	.09	.12	.19	....	....	T.	T.	....	T.	....	....	....	....	....	....	.24	....	....	.97	....	....	....	....	....	....	....	....	....	....	1.73
		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

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The snowfall, more widely distributed than in any month of the preceding winter, averaged nearly 3 inches; 10 inches at Unionville was the largest monthly total, and over most of the northern half of the State amounts varied between 4 and 8 inches.

MISCELLANEOUS PHENOMENA

Fogs, dense.—Local on the 2d, and 3d.

Frost, killing.—General and as late as the 31st.

Hail.—At a few stations on the 21st, without damage.

Halos, lunar.—16th, 18th, 19th, and 20th.

Halos, solar.—7th, 8th, 9th, 11th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 23d, 26th, 27th, and 29th.

Sleet.—4th, 5th, 21st, and 22d.

Thunderstorms.—Local 16th, 25th, 26th, 27th, and 30th. Widespread on 21st.

Winds.—Strong but generally straight-flowing, and quite general, 9th, 13th, 21st, and 22d.

UNUSUAL WEATHER PHENOMENA.—General stormy weather prevailed on the 21st. Blizzard-like winds with drifting snow along the northern border, and black, threatening skies in central and southern sections. The following are the outstanding reports: From about 2 p. m. and later on March 21. At Seymour, low, black clouds, severe squall and some light hail; no damage. At Rolla, 3.30 p. m. black, low clouds, heavy wind with hail continued for about half an hour. Barometer dropped from 29 inches to 28 inches in 30 minutes. No damage by hail; wind damage confined to trees, smoke-stacks, windows, and cupolas, but nothing serious. At Farmington, 3.30 p. m.—"Almost a tornado; marked drop in temperature." St. Louis: "A thunderstorm occurred March 21; first thunder heard at 3 p. m. and a few times later. Hail began at 3.08 p. m. and ended 3.25 p. m.; it fell with rain. The stones ranged in size from one-eighth to one-half inch, and covered the ground about 0.3 inch. Reports from nearby points indicate that the fall of hail was heavier in the city than in the suburbs and St. Louis County. The storm was unusual in that it was attended by extremely threatening conditions, particularly the blackness of the clouds, which made the city as dark as night for a few minutes about 3 p. m. Maximum wind velocity 32 miles and extreme 35. No damage was caused by the hail, so far as reported.—O.I.C.

Daily Temperatures for March, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick§§	Maximum	52	43	41	44	21	17	20	15	20	24	26	26	52	36	54	58	50	54	66	51	38	40	44	66	72	58	62	68	76	53	57	45.3
	Minimum	43	39	38	37	10	7	6	6	7	7	7	18	14	16	18	24	27	28	32	30	30	24	26	29	40	43	37	35	37	46	27	25.4
Columbia	Maximum	56	51	41	43	30	19	22	15	19	25	28	26	43	34	56	58	47	56	68	50	37	41	46	66	73	59	54	63	76	63	54	45.8
	Minimum	47	40	38	30	13	8	8	8	10	9	18	18	16	18	26	39	31	30	36	30	27	25	32	38	48	43	38	39	47	36	30	28.3
Fayette	Maximum	64	45	43	43	39	32	25	19	21	29	30	28	47	38	56	59	50	55	72	50	35	44	48	67	74	57	57	67	77	61	60	48.1
	Minimum	41	41	37	37	11	7	7	8	8	7	9	19	12	17	18	26	30	25	29	29	31	24	26	32	37	41	36	35	40	44	26	25.5
Hannibal	Maximum	52	45	40	43	35	16	20	16	18	23	28	24	40	33	50	59	43	52	62	45	34	40	38	65	70	60	53	61	75	61	51	43.6
	Minimum	42	40	37	35	12	6	7	7	9	8	15	20	16	17	28	35	30	27	34	29	29	26	31	30	49	42	37	40	41	37	31	27.3
Jefferson City §§	Maximum	62	45	42	47	25	23	24	22	22	28	31	27	45	37	58	59	48	59	71	52	43	44	50	67	75	57	55	65	77	60	51	47.5
	Minimum	45	44	39	38	16	9	9	9	8	9	9	18	13	18	18	24	31	26	29	31	34	24	24	32	37	47	37	37	38	48	29	26.8
Kirksville	Maximum	58	42	39	39	36	20	19	17	17	24	27	25	39	32	47	58	45	44	57	41	36	38	39	61	68	64	58	63	73	71	55	43.6
	Minimum	40	35	33	33	6	1	2	1	5	3	12	16	13	14	23	30	28	27	32	25	27	20	24	25	45	38	30	35	41	37	25	23.4
Louisiana	Maximum	65	53	47	43	42	31	20	15	17	23	26	27	31	30	50	60	50	57	65	55	42	40	43	65	73	66	57	60	73	62	62	46.8
	Minimum	50	43	38	39	14	7	8	8	9	8	11	20	14	19	26	33	32	20	30	32	33	26	28	27	46	44	34	32	33	56	30	27.4
Macon§§	Maximum	48	42	40	42	22	12	21	15	19	25	28	29	43	35	51	60	48	50	63	48	32	41	45	66	72	58	58	64	76	53	55	43.9
	Minimum	43	38	35	35	8	4	4	4	6	4	9	17	13	15	19	33	30	28	33	27	30	23	24	30	43	39	34	35	42	45	25	25.0
Mexico §§	Maximum	50	46	40	43	24	20	24	18	22	28	31	27	46	47	55	60	47	57	67	67	35	45	48	67	74	54	55	64	76	60	56	46.9
	Minimum	39	40	36	36	13	6	6	6	7	7	9	16	14	15	17	23	30	25	31	28	30	21	24	30	35	42	35	35	39	44	29	24.8
St. Louis(1)	Maximum	55	51	43	48	47	22	26	23	24	29	31	28	42	35	51	64	44	57	69	48	44	44	50	65	73	62	50	62	74	64	52	47.6
	Minimum	47	43	40	39	19	10	11	10	9	13	19	20	17	20	28	38	34	34	35	31	31	29	33	34	49	42	38	40	45	41	33	30.1
Unionville	Maximum	60	44	40	39	34	18	16	14	17	25	24	23	38	36	50	55	44	45	55	45	36	35	40	58	70	65	56	62	73	66	56	43.2
	Minimum	35	32	33	34	6	− 2	− 2	0	5	0	6	10	11	14	22	30	32	26	32	24	28	18	22	24	40	35	30	23	40	35	25	21.5
Warrenton	Maximum	62	49	43	46	44	20	22	21	21	26	29	28	43	42	55	63	53	59	70	66	48	41	45	66	72	71	52	61	76	72	52	49.0
	Minimum	46	42	37	37	15	8	8	9	7	8	15	19	12	16	23	37	31	28	35	29	32	24	29	33	46	46	35	36	39	40	29	27.5
Southeast Lowlands																																	
Campbell	Maximum	80	70	55	52	48	36	36	33	26	37	37	33	44	42	57	62	59	55	69	80	80	68	62	67	75	67	60	67	72	65	61	56.6
	Minimum	46	48	44	40	23	16	17	20	21	14	21	20	15	22	21	42	40	25	34	40	57	33	29	29	39	55	41	35	34	51	31	32.4
Caruthersville	Maximum	67	75	75	61	50	50	35	35	33	29	36	36	35	40	46	59	63	64	54	66	77	77	69	57	62	73	73	59	65	79	79	57.4
	Minimum	45	53	59	48	44	28	20	21	24	13	18	28	26	17	27	29	48	44	32	41	48	62	36	35	40	46	58	44	37	46	55	37.8
Doniphan	Maximum	80	70	56	53	49	40	37	35	26	38	42	38	47	48	64	68	62	60	74	70	..	..	..	72	74	75	61	74	71	73	70	°58.1
	Minimum	59	49	41	42	26	19	19	20	10	16	22	22	11	24	20	41	42	27	31	42	..	..	..	40	51	58	43	29	33	51	38	°33.1
Jackson	Maximum	64	59	48	45	45	27	26	25	20	29	29	26	38	36	51	60	56	55	62	60	72	52	53	62	68	66	52	60	69	62	48	49.2
	Minimum	42	43	41	37	19	13	11	14	5	11	18	19	10	17	20	39	33	22	32	35	41	28	24	25	42	51	38	24	30	30	31	27.3
Poplar Bluff §§	Maximum	68	53	52	49	39	36	31	26	37	40	32	43	45	58	64	55	56	69	70	80	56	65	67	75	67	52	68	73	64	63	74	55.7
	Minimum	50	48	46	42	26	16	18	20	10	14	25	23	16	23	39	45	35	26	31	41	48	34	30	30	38	47	38	30	34	47	35	32.4
Sikeston	Maximum	73	73	59	50	50	33	34	32	27	32	35	34	39	40	55	62	62	54	67	68	75	75	60	64	73	73	63	66	71	71	57	55.7
	Minimum	48	49	46	40	23	17	16	20	10	15	21	22	16	24	24	42	40	29	37	40	50	33	30	35	41	57	44	33	44	42	36	33.0
Cairo, Ill	Maximum	69	64	49	48	48	31	30	27	25	31	33	29	37	36	55	62	50	54	66	67	74	49	57	64	72	66	47	63	72	63	54	51.4
	Minimum	52	49	45	42	20	19	16	16	11	17	24	22	17	23	29	48	36	33	42	41	41	34	35	41	48	47	43	37	45	44	38	34.0
Ozark Plateau																																	
Arcadia §§	Maximum	68	68	53	43	47	30	31	31	25	23	34	35	28	48	41	55	64	51	55	70	58	75	51	37	64	73	55	51	64	72	63	50.4
	Minimum	41	46	39	36	21	11	10	11	5	7	11	18	8	15	16	25	32	21	27	33	35	26	23	25	28	48	37	26	29	45	30	25.3
Aurora	Maximum	72	64	49	53	51	26	26	22	22	26	29	28	47	47	70	68	54	61	71	80	73	50	58	66	77	74	57	70	73	66	62	54.6
	Minimum	55	44	43	41	10	10	13	12	6	9	20	17	14	20	29	45	32	32	32	44	33	28	30	41	43	49	40	39	45	39	31	30.5
Birchtree	Maximum	75	65	49	46	46	33	30	27	27	32	35	38	45	42	58	68	62	56	70	68	75	56	58	65	75	70	55	65	72	65	59	54.4
	Minimum	46	48	44	40	22	15	15	15	8	11	20	17	11	21	24	41	38	40	33	41	48	28	28	35	45	51	43	30	59	44	33	32.1
Eldon §§	Maximum	62	45	40	38	24	21	25	13	21	27	29	28	..	46	60	51	49	59	70	54	43	46	53	68	76	59	57	66	77	58	52	°47.2
	Minimum	43	45	40	38	12	10	10	9	8	8	11	17	13	..	18	21	31	28	28	33	32	25	25	32	36	47	37	37	40	44	29	°26.9
Farmington	Maximum	64	57	45	47	44	28	31	24	22	31	31	28	43	38	55	66	56	57	70	61	77	48	55	67	75	66	50	62	73	63	54	51.2
	Minimum	45	45	40	38	20	13	11	15	6	13	17	20	11	18	21	38	34	24	36	33	37	28	25	30	43	50	37	31	36	41	31	28.6
Koshkonong	Maximum	78	69	53	47	45	34	31	30	25	32	35	32	44	43	60	68	60	57	70	77	76	52	60	65	75	70	60	67	72	65	60	55.2
	Minimum	52	57	44	41	23	16	17	18	8	12	22	20	14	22	26	45	40	32	40	43	43	29	33	40	45	54	43	37	47	46	34	33.6
Lebanon	Maximum	67	59	44	45	45	28	25	25	22	28	29	27	45	42	58	56	57	58	68	67	69	47	53	60	70	76	55	63	74	64	57	51.1
	Minimum	52	40	38	35	12	10	8	9	4	7	15	15	11	16	25	44	29	27	31	35	34	24	27	36	46	45	36	36	42	37	26	27.5
Mountain Grove §§	Maximum	70	62	46	44	42	31	32	23	22	32	36	29	43	44	56	67	54	56	71	67	71	61	56	62	72	70	57	64	71	63	60	52.7
	Minimum	49	45	41	37	19	13	11	12	5	9	18	17	11	18	27	43	34	30	36	40	40	26	30	37	43	49	39	36	42	39	31	29.9
Neosho	Maximum	69	69	49	51	50	24	24	24	22	26	28	31	49	47	67	66	55	53	72	81	79	42	57	62	80	77	57	70	75	69	61	54.4
	Minimum	51	45	45	44	11	11	12	13	8	10	21	18	11	20	21	41	32	29	34	45	30	29	27	40	48	49	43	31	46	41	28	30.1
Rolla	Maximum	65	58	46	45	45	24	25	24	22	27	28	28	43	43	55	63	52	58	69	66	56	46	52	66	73	71	54	62	74	68	54	50.4
	Minimum	52	44	39	38	16	12	10	13	7	12	18	20	12	18	24	44	32	26	36	34	37	26	30	34	48	50	38	35	40	39	31	29.5
Springfield	Maximum	67	57	45	48	30	22	24	18	21	26	27	25	44	40	63	64	50	57	67	71	69	45	53	63	76	60	53	64	71	60	57	49.6
	Minimum	57	44	41	30	14	15	11	7	5	10	19	18	14	20	32	42	32	34	37	45	29	27	34	41	47	45	40	39	49	38	32	30.6
Southwest Plain																																	
Appleton City	Maximum	69	64	42	43	40	22	22	20	21	27	29	28	43	39	63	56	53	56	69	58	51	46	53	66	75	68	59	69	72	65	61	50.0
	Minimum	56	42	38	37	12	13	9	9	7	8	18	16	13	18	25	42	27	30	30	32	30	26	32	37	42	44	38	33	45	38	30	28.3
Clinton	Maximum	60	66	43	43	43	24	20	20	21	25	28	22	50	38	62	62	48	48	65	53	50	42	48	72	77	68	70	60	50	57	67	48.5
	Minimum	54	42	40	38	12	12	10	11	8	10	19	17	14	19	25	40	28	28	48	33	32	26	31	38	45	45	40	36	39	35	35	29.4
Harrisonville§§	Maximum	68	44	42	41	27	20	22	20	26	28	32	30	46	41	62	55	65	54	71	52	32	44	50	68	75	54	62	69	74	56	61	48.1
	Minimum	43	40	36	35	10	10	6	7	6	7	7	12	11	13	16	25	25	26	30	29	30	22	24	30	38	41	36	34	37	39	28	24.3
Lamar§§	Maximum	75	49	48	52	28	27	25	25	19	31	30	31	49	46	70	64	52	60	67	78	45	48	57	68	78	56	59	73	75	55	64	51.7
	Minimum	50	45	43	41	14	13	12	12	8	8	11	18	16	19	20	32	30	30	33	37	40	29	29	30	41	47	42	36	36	50	30	29.1
Lamonte	Maximum	61	51	43	41	34	19	22	20	22	27	26	24	45	38	61	55	49	54	69	52	41	31	47	67	75	61	57	65	75	63	57	46.8
	Minimum	48	40	38	33	11	9	7	9	8	9	16	16	13	17	24	38	27	30	34	31	29	18	30	37	45	42	37	34	44	38	27	27.1
Marshall	Maximum	69	49	43	42	40	24	24	20	23	28	32	26	38	43	55	56	51	52	67	54	45	39	49	66	74	72	66	63	76	72	55	48.8
	Minimum	42	39	36	36	10	7	5	5	9	8	11	15	15	15	23	39	26	30	35	30	30	22	30	35	46	41	41	36	44	37	28	26.6
Nevada	Maximum	72	65	63	44	34	22	23	19	29	27	29	30	47	41	66	59	52	60	68	65	56	47	54	67	77	66	59	69	74	65	62	52.0
	Minimum	50	41	40	33	12	16	10	10	7	9	18	17	16	19	27	36	28	36	36	37	30	28	30	40	43	46	40	36	48	39	30	29.3
Warrensburg	Maximum	66	60	44	42	41	24	24	22	26	29	28	29	45	40	62	55	53	55	71	53	48	45	49	66	75	75	58	66	74	64	57	49.9
	Minimum	47	39	35	35	9	8	7	8	6	7	15	13	11	11	20	41	26	28	34	28	27	22	29	35	45	41	35	35	41	36	30	25.9
Warsaw	Maximum	64	64	..	..	..	..	..	18	26	28	29	29	47	43	64	56	53	58	70	67	55	48	54	67	77	71	58	67	78	70	60	°54.7
	Minimum	54	41	39	38	13	12	10	11	8	10	18	18	13	18	25	35	28	26	35	34	31	27	27	38	48	46	39	36	45	40	26	28.7
Northwest Plateau																																	
Chillicothe §§	Maximum	49	39	40	38	21	17	21	14	19	27	23	28	37	40	40	59	51	48	62	44	32	40	47	64	71	71	59	64	76	52	56	43.5
	Minimum	42	35	34	35	6	4	2	1	4	3	6	14	11	21	19	22	22	29	32	25	27	20	24	27	43	37	31	33	40	35	26	22.9
Grant City	Maximum	52	47	37	37	29	16	12	9	16	21	23	25	36	30	49	50	45	50	51	46	37	36	35	54	66	59	59	63	69	65	59	41.4
	Minimum	41	33	34	29	6	3	1	0	5	3	13	13	12	14	29	33	26	31	34	25	25	18	19	25	35	36	33	35	44	32	38	23.4
Kansas City	Maximum	67	46	40	40	22	18	20	15	20	26	26	25	39	38	60	56	53	51	67	47	35	40	42	64	71	52	59	66	73	63	58	45.1
	Minimum	46	39	37	21	11	9	8	5	8	7	16	15	18	17	26	34	29	38	34	29	26	25	30	40	48	40	38	41	52	36	33	27.6
Kidder	Maximum	50	40	38	37	18	15	18	12	18	23	20	26	33	35	52	56	47	48	61	45	32	37	37	60	68	52	57	62	72	49	55	41.1
	Minimum	42	37	35	35	10	7	5	3	3	4	4	10	11	15	16	23	26	28	33	26	27	17	18	23	35	37	32	34	37	37	28	22.5
Lexington	Maximum	64	48	42	41	38	22	24	19	24	28	27	27	34	40	60	56	52	49	69	49	32	42	46	67	74	58	60	67	74	55	57	46.6
	Minimum	42	40	37	37	10	8	6	6	7	8	9	13	13	17	18	27	26	30	39	29	30	27	26	30	42	41	36	38	42	40	30	25.9
Maryville	Maximum	57	50	40	38	26	30	19	15	18	24	26	25	36	32	54	54	49	53	60	54	39	41	42	64	70	59	59	65	75	66	59	45.1
	Minimum	43	33	33	26	5	3	0	− 1	5	1	12	8	10	14	21	29	24	30	30	24	24	17	22	27	38	35	32	31	43	31	24	21.7
Oregon	Maximum	64	53	40	39	23	18	20	14	20	26	27	26	38	40	62	52	55	55	61	49	41	42	46	66	72	62	62	67	75	69	59	46.5
	Minimum	47	35	35	24	7	6	2	1	7	5	15	10	15	13	23	36	25	35	37	27	21	19	23	31	45	38	36	35	48	33	29	24.6
St. Joseph	Maximum	58	45	40	39	21	15	19	12	19	25	25	24	38	38	57	54	51	51	62	46	34	41	39	63	71	54	58	66	73	62	59	43.8
	Minimum	43	37	36	18	9	6	4	2	8	6	15	11	14	17	24	32	28	35	33	28	27	22	25	34	46	39	33	39	50	34	31	25.4
Trenton	Maximum	54	48	40	44	33	17	20	14	20	21	25	25	40	33	51	57	49	48	60	44	33	38	40	62	69	59	60	63	74	61	57	43.8
	Minimum	44	36	35	32	8	5	4	3	8	5	12	15	13	16	23	32	22	31	33	22	21	20	25	30	42	39	32	37	41	35	27	24.1

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXVI COLUMBIA, MO., APRIL, 1932 No. 4

GENERAL SUMMARY

The month of April, 1932, averaged warmer and drier than normal in practically all the State of Missouri. The excesses, however, were not large, except during the first six or seven days the daily departures ranged from 11° to more than 20°. During the second decade temperatures were mainly below the normal values, and alternated above and below during the last decade.

There was a nearly general freeze on the 27th, with much heavy frost, damaging potatoes and other tender vegetation that was sufficiently advanced to be exposed above ground. The 1st, and 13th, were the other cool days, limited to the northern half of the State with some local frost. The 2d and 21st were the warmest days when afternoon maxima ranged in the high 80s generally and in the low 90s at four stations.

Though quite markedly deficient in all sections of the State the precipitation was favorably distributed geographically as well as timely. Practically all the rain fell as gentle to moderate showers most of it entering the top soil with little loss as runoff. The subsoil moisture, however, is drying out, as deep soil soaking rains have been few and far between since the beginning of the year, except fairly so in the northwestern plateau.

The weather was favorable for preparing seed beds and planting. Because of low humidities and brisk wind movement there was some complaint of poor germination in central, east-central and southern counties. Wheat made fair advance, but showing some local damage by the March freezes.

TEMPERATURE

The monthly temperature for the State, based upon the reports of 69 stations, was 57.6°, or 2.5° warmer than normal. The highest local monthly mean was 63.4° at Doniphan; and the lowest local monthly mean was 53.2° at Grant City. The highest recorded temperature was 95°, at Doniphan on the 21st; and the lowest recorded was 22°, at Steffenville on the 1st, and Elsberry on the 13th. Maximum temperatures reached 90° or higher at four stations on one day, the 21st, or 22d; and the minimum dropped to 32° or lower at 48 stations on one to three days.

PRECIPITATION

The average precipitation for the State, 119 stations reporting, was 2.57 inches, or 1.24 inches less than the 60 years' average, and the third consecutive April drier than normal. The deficiency was marked in all divisions, the northwestern plateau with 83 per cent of normal being the best watered section. The Ozark Plateau with 53 per cent of normal rainfall was the driest section. The greatest local monthly amount was 5.79 inches at Caruthersville; and the least local monthly amount was 1.12 inches at Canton. The greatest amount in any twenty-four consecutive hours was 1.95 inches, at Unionville on the 20th and 21st.

MISCELLANEOUS PHENOMENA

Fogs, dense.—None reported.
Frost, light.—8th, 9th, 11th, 12th, 13th, 14th, 15th, 18th, 27th, and 28th.
Frost, heavy.—12th, 13th, 14th, and 27th. Ice locally on 27th.
Hail.—April 27th.—At Brunswick large hail fell for short time; no damage reported. Same date from about 12.30 to 2 p. m. hail fell locally in a narrow strip in Ralls County from north of Center to between New London and Saverton. Stones about the size of peas but some "quite large". Some damage to gardens but too small to estimate.
Halos, lunar.—13th, and 15th. Solar.—2d, 3d, 4th, 6th, 9th, 10th, 13th, 15th, 16th, 18th, 19th, 22d, 24th, and 28th.
Thunderstorms.—6th, 7th, 15th, 16th, 17th, 20th, 21st, 22d, 23d, 24th, and 25th.

ERRATA

In report for February, 1932, page 7.
Downing highest temperature 73 on 29th.
Hailey, prevailing wind direction E. At Harrisonville E.
Unionville days .01 precipitation or more 6.
In report for March, 1932, page 12.
Arcadia date of highest temperature 22d.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	29.96	74	48	47	261	66	7,003	9.7	25	sw.	4
Hannibal	29.97	75	48	..	...	..	7,110	9.9	30	sw.	2
Kansas City	29.94	70	51	52	258	65	7,904	11.0	32	sw.	1
St. Joseph	29.94	75	49	51	255	64	7,519	10.4	30	nw.	4
St. Louis	29.96	70	49	49	265	67	8,768	12.2	40	sw.	4
Springfield	29.94	69	47	51	282	72	8,057	11.2	30	sw.	24
Cairo, Ill.	29.97	76	57	56	...	..	7,070	9.8	32	sw.	2
Keokuk, Iowa	29.99	74	50	50	262	66	6,232	8.7	24	w.	2

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR APRIL

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**55.1**	.....	**92**	**19**	**3.81**	.....	**3.60**	**0.7**	**9**	**12**	**8**	**10**
1888	57.9	+ 2.8	91	20	1.83	−1.98	....	....	5	..	..	..
1889	55.7	+ 0.6	90	26	2.52	−1.29	....	....	8	..	..	..
1890	56.2	+ 1.1	93	24	3.17	−0.64	....	....	8	..	..	..
1891	56.8	+ 1.7	93	15	3.90	+0.09	....	....	9	..	..	..
1892	53.1	− 2.0	88	26	5.66	+1.85	4.25	....	11	9	8	13
1893	53.9	− 1.2	95	19	7.84	+4.03	5.50	....	12	8	9	13
1894	56.1	+ 1.0	93	20	3.17	−0.64	2.49	T.	8	12	10	8
1895	57.9	+ 2.8	100	24	1.95	−1.86	2.88	T.	7	14	8	8
1896	61.9	+ 6.8	92	17	3.51	−0.30	3.00	0.0	9	11	12	7
1897	54 4	− 0.7	88	21	4.55	+0.74	3.50	T.	10	10	11	9
1898	52.5	− 2.6	90	14	3.65	−0.16	3.25	T.	10	12	9	9
1899	54.0	− 1.1	96	6	3.70	−0.11	3.76	3.8	8	12	9	9
1900	56.7	+ 1.6	89	21	3.36	−0.45	3.82	0.7	9	11	10	9
1901	53.3	− 1.8	94	24	2.85	−0.96	2.23	1.8	8	14	7	9
1902	53.9	− 1.2	95	19	2.66	−1.15	4.35	T.	11	13	11	6
1903	55.9	+ 0.8	91	26	3.54	−0.27	4.06	1.2	9	11	10	9
1904	49 0	− 6.1	84	19	5.75	+1.94	6.10	2.7	9	15	6	9
1905	54.9	− 0.2	92	20	3.19	−0.38	4.00	0.3	6	14	8	8
1906	59.5	+ 4.1	93	22	2.24	−1.57	2.45	0.0	8	17	7	6
1907	48.7	− 6.4	89	16	3.43	−0.38	2.75	T.	8	11	8	11
1908	56.6	+ 1.5	90	18	5.30	+1.49	3.30	T.	11	11	8	11
1909	54.8	− 0.3	93	19	4.35	+0.54	3.80	T.	8	13	9	8
1910	54.8	− 0.3	95	21	3.51	−0.30	3.50	0.9	11	12	7	11
1911	53.5	− 1.6	89	20	4.99	+1.18	4.27	T.	10	12	8	10
1912	56.0	+ 0.9	97	24	5.98	+2.17	4.50	0.7	10	13	7	10
1913	56.2	+ 1.2	94	25	3.33	−0.48	3.90	T.	7	16	5	9
1914	55.2	+ 0.1	91	18	3.14	−0.67	3.00	T.	8	12	7	11
1915	61.9	+ 6.5	96	18	2.03	−1.78	2.08	T.	7	16	8	6
1916	53.5	− 1.6	93	21	3.23	−0.58	2.35	1.9	10	11	8	11
1917	53.2	− 1.9	89	19	5.97	+2.16	4.80	1.2	12	12	6	12
1918	50.8	− 4.3	93	19	5.10	+1 29	3.50	0.9	11	12	6	12
1919	55.3	+ 0.2	94	20	3.01	−0.80	3.25	T.	9	12	7	11
1920	50.2	− 4.9	89	4	3.95	+0.14	2.98	4.8	11	11	7	12
1921	56.0	+ 0.9	91	19	5.37	+1.56	4.20	1.1	10	13	7	10
1922	57.3	+ 2.2	91	24	6.21	+2.40	5.49	T.	11	13	6	11
1923	54.2	− 0.9	91	16	3.12	−0.69	2.50	0.4	8	14	8	8
1924	56.6	+ 1.5	95	11	2.07	−1.74	2.35	T.	6	14	8	8
1925	61.0	+ 5.9	92	24	4.11	+0.30	3.51	0.0	10	12	9	9
1926	49.9	− 5.2	91	11	2.46	−1.35	3.19	2.4	8	14	6	10
1927	57.7	+ 2.6	94	18	8.46	+4.65	4.85	T.	14	10	7	13
1928	51.6	− 3.5	88	16	4.79	+0.98	3.78	0.2	8	13	7	10
1929	57.4	+ 2.3	96	27	6.15	+2.34	4.35	0.0	12	11	8	11
1930	59.1	+ 4.0	96	23	2.03	−1.78	2.50	0.0	8	14	8	8
1931	54.8	− 0.3	90	22	3.07	−0.74	2.40	T.	9	14	6	10
1932	57.6	+ 2.5	95	22	2.57	−1.24	1.95	0.0	8	14	8	8

Climatological Data for April, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	58.8	+ 4.6	84	6	34	12†	48	3.73	+0.18	1.15	0	9	18	1	11	ne.	O. K. Benecke
Clifton Hill	Randolph	731	33	55.4	+ 1.9	84	1	26	14	51	2.15	−1.71	0.54	0	11	15	7	8	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	57.4	+ 2.5	84	6	33	14	41	2.04	−1.73	0.53	0	10	8	9	13	e.	U. S. Weather Bureau
Downing	Schuyler	876	11	54.0	+ 0.8	82	6	29	13	42	3.59	−0.17	0.86	0	8	14	12	4	e.	James Taylor
Elsberry	Lincoln	449	1	56.2	.....	85	6	22	13	44	3.10	.....	1.61	0	7	11	9	10	se.	Ray E. Mills
Fayette	Howard	661	52	56.0	+ 1.8	85	2	26	1	56	1.91	−1.71	0.55	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	57.0	+ 2.4	85	6	29	13	40	2.39	−1.79	0.53	0	10	17	6	7	se.	Chamber of Commerce
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	1.83	−2.00	0.72	0	8	11	5	14	se.	J. W. Pulliam
Hannibal	Marion	534	49	55.8	+ 2.4	83	6	32	14	37	2.20	−0.99	1.55	0	9	8	10	12	e.	U. S. Weather Bureau
Jefferson City	Cole	557	42	57.9	+ 1.9	85	6†	32	13	42	2.17	−1.68	0.85	0	8	9	12	9	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	53.8	+ 1.9	82	6	30	12†	41	2.94	−0.65	1.60	0	6	17	7	6	e.	Prof. J S. Stokes
Louisiana	Pike	469	38	57.2	+ 3.2	85	6	24	13	44	2.98	−0.46	1.35	0	6	20	5	5	w.	Stark Bros. Nurseries
Macon	Macon	875	33	54.4	+ 1.3	84	6	30	12†	43	2.15	−1.21	0.90	0	8	13	9	8	e.	W. C. Brown
Mexico	Audrain	800	43	55.0	+ 1.2	85	6	29	14	44	2.41	−1.25	0.91	0	9	20	2	8	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	2 27	−1.44	1.52	0	7	12	8	10	n.	J. S. Conway
St. Charles	St. Charles	456	44	57.6	+ 2.0	86	2	30	14	40	2.60	−1.05	1.35	0	7	12	10	8	se.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	58.0	+ 1.9	84	2	38	14	33	3.19	−0.62	1.66	0	7	11	13	6	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	58.0	+ 2.8	84	2	37	27	33	3.35	−0.79	1.84	0	8	17	7	6	e.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	1.95	−1.63	1.05	0	7	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	54.4	+ 1.3	83	6	22	1	54	1.89	−1.80	1.40	0	6	9	17	4	e.	Frank Hall
Unionville	Putnam	1,062	39	54.6	+ 3.6	84	6	30	12†	43	2.90	−0.82	1.95	0	7	15	6	9	sw.	Geo. W. Davis
Warrenton	Warren	816	50	57.8	+ 3.0	84	2†	30	27	41	1.41	−2.75	0.45	0	7	7	15	8	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	53.3	+ 1.0	80	6	32	27	39	1.20	−1.79	0.64	0	8	5	11	14	e.	U. S. Weather Bureau
Section means and	extremes	.....	..	56.1	+ 2.2	86	2	22	1†	56	2.45	−1.27	1.95	0	8	13	9	7	e.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	60.5	.....	90	22	32	13	37	3.54	.....	0.96	0	12	19	3	8	s.	Jeff. King
Caruthersville	Pemiscot	265	36	62.0	+ 1.8	91	22	41	1	30	5.79	+1.34	1.80	0	7	18	4	8	s.	Sam Smith
Doniphan	Ripley	344	28	63.4	+ 4.9	95	21	33	13	48	2.45	−2.93	0.85	0	5	19	4	7	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	60.0	+ 2.9	88	24	25	13	40	3.57	−0.97	1.23	0	7	4	6	20	s.	John G. Putz
Marble Hill	Bollinger	470	37	60.0	+ 2.8	88	25	28	1†	50	3.79	−0.93	1.10	0	4	10	12	8	s.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	3.18	−1.90	0.99	0	8	18	5	7	n.	John A. Spence
Poplar Bluff	Butler	339	27	60.4	+ 0.9	87	21	32	13	39	2.39	−2.31	1.14	0	6	23	3	4	w.	J. H. Wolpers
Sikeston	Scott	318	25	60.8	+ 2.7	83	5†	34	13†	32	2.51	−1.97	1.50	0	8	18	4	8	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	60.3	+ 2.2	82	22	40	27	28	3.28	−0.44	1.04	0	7	6	9	15	s.	U. S. Weather Bureau
Section means and	extremes	....	..	60.3	+ 1.9	95	21	25	13	50	3.39	−1.26	1.80	0	7	15	6	9	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	56.8	+ 1.5	83	2†	25	13	46	2.86	−1.82	0.77	0	8	22	1	7	nw.	Arcadia College
Aurora	Lawrence	1,370	31	61.5[f]	+ 5.4	83	21	34	27	39	2.63	−1.82	1.02	0	6	14[f]	3[f]	7[f]	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	60.2	+ 3.1	87	21	34	13†	41	1.59	−3.21	0.70	0	4	22	3	5	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	63.0	.....	85	2†	37	8	41	2.46	.....	0.99	0	10	23	4	3	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	2.11	.....	0.75	0	5	1	20	9	n.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	28	58.6	+ 1.9	84	21	30	12	42	2.46	−2.14	0.68	0	5	15	9	6	ne.	H. E. Dean
Eldon	Miller	934	37	56.6	+ 1.2	87	21	29	1	54	1.76	−2.80	0.49	0	9	10	14	6	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	57.8	+ 0.9	86	20	28	13	41	3.18	−1.06	1.28	0	8	11	15	4	sw.	Robert Forsyth
Goodland	Iron	1,000	39	57.4	+ 2.4	88	21	25	13	50	1.73	−3.27	0.75	0	5	18	6	6	s	F. M. Adams
Greenville	Wayne	381	23	57.6	+ 1.0	89	21	27	13	42	2.14	−2.85	1.21	0	3	20	4	6	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	3.73	−1.29	1.30	0	4	18	3	9	.....	A. W. Madison
Koshkonong	Oregon	958	31	62.2	+ 3.7	88	21	38	27	38	2.50	−2.77	0.75	0	6	17	6	7	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	55.9	+ 0.4	85	22	26	1	40	2.99	−1.37	0.80	0	7	19	2	9	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	59.8	+ 3.3	82	5†	34	27	34	2.87	−1.44	0.94	0	5	20	2	8	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	58.9	+ 4.0	87	21	31	27	35	2.07	−2.89	0.94	0	6	16	7	7	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	60.0	+ 1.7	85	21	32	10	42	1.98	−2.46	0.64	0	6	15	9	6	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	59.6	+ 3.7	89	21	33	13	37	1.47	−3.15	0.67	0	9	5	10	15	se.	F. H. Lane
Salem	Dent	1,173	28	58.8	+ 2.8	90	21	30	13†	41	1.25	−3.38	0.48	0	5	12	12	6	s.	E. E. Martin
Seligman	Barry	1,542	31	59.6[a]	+ 3.0	84	22	35	27	34	2.71	−1.63	0.86	0	5	18	7	5	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	57.3	+ 1.6	84	21	33	27	38	2.53	−1.76	0.87	0	5	20	3	7	s.	Ira H. Hailey
Springfield	Greene	1,324	54	58.9	+ 2.9	82	22	37	27	29	3.26	−0.60	1.52	0	6	17	9	4	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	58.5	.....	85	21	29	14	41	2.72	.....	0.66	0	8	7	12	11	s.	I. M. Wilson
Section means and	extremes	.....	..	59.0	+ 2.4	90	21	25	13	54	2.42	−2.20	1.52	0	6	16	7	7	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	58.8	+ 2.7	85	2†	32	27	42	2.35	−2.06	0.69	0	6	7	18	5	ne.	W. G. Bigelow
Clinton	Henry	765	39	58.7	+ 2.4	86	22	34	27	44	3.32	−0.99	1.02	0	9	14	11	5	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	55.7	+ 1.8	85	2	31	1	53	2.08	−1.46	0.58	0	10	5	7	18	e.	John H. Patterson
Lamar	Barton	980	44	58.6	+ 2.0	86	5	31	1	51	3.00	−1.48	0.81	0	7	17	2	11	se.	Jesse A. Mann
Lamonte	Pettis	867	31	56.8	+ 1.6	85	21	31	14†	47	2.52	−1.39	0.52	0	8	16	6	8	se.	J. E. Wheeler
Marshall	Saline	779	45	57.7	+ 2.9	83	5†	32	14†	42	2.29	−1.55	0.58	0	8	18	9	3	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	60.0	+ 4.3	84	2†	33	27	40	3.20	−1.00	0.80	0	6	15	5	10	s.	George A. Kaupp
Warrensburg	Johnson	878	45	56.6	+ 0.5	86	22	30	3†	45	2.25	−1.10	0.78	0	7	18	4	8	ne.	E. A. Markey
Warsaw	Benton	687	31	60.1	+ 3.4	86	21	32	27	45	2.35	−2.23	1.08	0	8	13	5	12	e.	Everett Martin
Section means and	extremes	.....	..	58.3	+ 2.5	86	5†	30	3†	53	2.60	−1.48	1.08	0	10	13	8	9	ne.	
Northwest Plateau																				
Bethany	Harrison	916	37	54.3	+ 2.8	81	1	27	12	45	2.93	−0.34	1.90	0	7	15	11	4	ne.	A. S. Cumming
Chillicothe	Livingston	779	23	54.8	+ 1.7	85	6	27	14	49	1.49	−2.80	0.51	0	10	14	13	3	se.	Wm. J. Olenhouse
Conception	Nodaway	980	43	55.0	+ 2.8	83	2	29	12	44	2.78	−0.07	0.72	0	9	11	13	6	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	55.1[b]	+ 1.3	79	21	30	12†	45	2.72	−0.73	1.31	0	6	16	5	9	n.	Fred L. Stiff
Grant City	Worth	1,134	28	53.2	+ 1.0	78	1	29	12	41	3.28	+0.26	0.93	0	9	9	18	3	se.	W. P. Spillman
Kansas City	Jackson	963	43	57.8	+ 3.0	82	1	35	27	33	2.50	−0.64	1.25	0	9	10	9	11	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	55.0	+ 2.8	81	6	29	27	50	1.51	−1.67	0.57	0	10	11	8	11	se.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	1.62	−2.73	0.47	0	8	..	..	..	.....	H. L. Yates
Lexington	Lafayette	688	47	59.2	+ 4.6	85	21	33	27	41	2.91	−0.81	1.40	0	11	12	15	3	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	54.7	+ 3.9	82	1	27	27	50	4.36	+1.31	1.19	0	10	9	13	8	se.	J. R. Brink
Oregon	Holt	1,048	76	57.2	+ 4.5	84	1	30	27	44	3.97	+0.65	1.64	0	9	15	9	6	ne.	Mina Wright
St. Joseph	Buchanan	967	24	56.3	+ 2.2	83	1	33	27	42	2.82	−0.39	1.42	0	11	14	5	11	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	55.0	+ 2.8	82	1	29	12	47	2 80	−0.35	0.84	0	8	13	5	12	se.	Albert Volker
Trenton	Grundy	822	36	55.4	+ 2.7	82	6	30	12	48	3.41	−0.06	1.42	0	8	12	12	6	s.	W. H. Estes
Section means and	extremes	.....	..	55.6	+ 2.8	85	6†	27	12†	50	2.79	−0.60	1.90	0	9	12	11	7	se.	
State means and	extremes	.....	..	57.6	+ 2.5	95	21	22	1†	56	2.57	−1.24	1.95	0	8	14	8	8	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for April, 1932

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi																																
Boonville	Missouri							.47									.30	.14			.35			.24	.12	.01	.06			.19	T.		1.88
Bowling Green	Mississippi							.11									.30		.17		.08	1.50	.09	.06		.07				.03	.15		2.56
Brunswick	Grand							.30									.42	1.15			.40	.22		.20	.22		.67			.15			3.73
Canton	Mississippi						.19										.08			.05	.69			.11									1.12
Clifton Hill	Chariton							.20									.43	.35		.03	.26	.54		.15	.01	.08	.01			.09			2.15
Columbia***	Missouri							.43								.12	.41	.35		.14	.01	.12		.29		.02				.15			2.04
Downing	Mississippi							.85									.07	.86			.47	.80		.02	.37					.15			3.59
Edina	....do							.55									T.		T.		.62	1.25	.05		.10	T.	T.			.15			2.72
Elsberry	....do							.18									.91	.11			.09	1.61		.02		T.				.18			3.10
Fayette	Missouri							.32									.55	.17			.34	.05		.13	.08		.13			.14			1.91
Fulton	....do							.29									.26	.53			.06	.44		.09	.05	.08				.45	.14		2.39
Gorin	Mississippi							.31								.12	.20				.20	.72		.04	.04					.20			1.83
Hannibal***	....do							.12								.02	.23			.06	.40	1.15		.04	.01	.17				T.	T.		2.20
Hermann	Missouri							.17									.02	.44	.10		.09	.42		.08	.04		.30			.04	.51		2.21
Jefferson City	....do							.16										.85	.06		.36	.02					.05			.25	.42		2.17
Kahoka	Mississippi							.34									.04				.20	.45				.10				.12			1.25
Kirksville	....do							.58									.04				.50	1.60				.12				.10			2.94
LaBelle	....do								.20								.18		.25		.15	1.22					.16			.08			2.24
Laddonia	....do							.04									.34	.20			.02	.94	.03		.06	.10							1.73
Louisiana	....do						.10									.33			.27			1.35				.70				.23			2.98
Lucerne	Grand							.24										.38			.31	1.82		.17	.14		.21			.12	.08		3.47
Macon	Chariton							.40									.10	.25			.30	.90			.05	.05				.10			2.15
Memphis	Mississippi							.80									T.	T.			.40	.64			T.	T.							1.84
Mexico	....do							.30									.63	.15			.05	.91	.06		.18	.06				.07			2.41
Milan	Grand							.18									.09	.24			.35	1.40	.08	.10	.07					T.	.60		3.11
Monroe City	Mississippi							.20									.30	.07				1.52	.07			.05				.06			2.27
New London	....do							.14	T.								.24	.12			.12	1.31			.08		.53				.10		2.64
Pacific	Meramec							.27	T.								T.	.60	.21		T.	.40		.03	.01		.10				.82		2.44
Palmyra	Mississippi								.14								.18	.07			.05	1.20			.07					T.	.11		1.82
Paris	....do							.21									.28	.07			.07	.55	.38		.11	.18				.08	.06		1.99
Perry	....do							.12									.39	.14		T.	T.	1.32	.22	.23			.16			.03			2.61
Philadelphia	....do								.07								.29	.32				1.24			.10					T.	T.		2.02
St. Charles	Missouri							.17									.32	.15				1.35		.01		.10				.50			2.60
St. Louis (1)***	Mississippi	T.						.12			T.						.45	.03		T.	.03	1.63		.02	T.	T.	T.				.91		3.19
St. Louis (2)*	....do							.10									.53	.05		T.	.06	1.84		.02	T.	.01				.74			3.35
Shelbina	....do							.14									.33	.12			.10	1.05			.14					.07			1.95
Steffenville	....do							.15									.10	.12			.02	1.40		.10				T.					1.89
Troy	....do							.16									.25	.35		.14		1.25		.08							.25		2.48
Union	Meramec							.07									.02	.66	.57		.03	.19		.01			.17				.68		2.40
Unionville	Chariton							.10									T.	.60			.40	1.55		T.	.10	.10				.05			2.90
Valley Park	Meramec							.14	T.								.04	.73	.08		T.	.99	.09	T.	.04	T.	T.	T.		T	.74		2.85
Warrenton	Mississippi							.06									24	.23			.13	.45		.05						.25			1.41
West Ely	....do						.04	T.								.22				T.	1.40			T.		T.			T.	T.			1.66
Winfield	....do																.75					1.95									.33		3.03
Keokuk, Ia.***	....do							.64				T.				T.	.03	T		.04	.01	.25		.04	.16	T.				.03			1.20
Southeast Lowlands																																	
Bragg City	St. Francis								1.98									.73	.05						.58	.45				.78			4.57
Campbell	....do							.77	.70	.02	.30							.21	.27		.05			.05	.11	.08				.02	.96		3.54
Cape Girardeau	Mississippi								1.32	.02								.42	.20			.03		.04	.76						.98		3.77
Caruthersville	....do								1.80									.75	.20				.04	1.30	1.13						.57		5.79
Dexter	St. Francis								1.40									.50	T.						.23						1.41		3.54
Doniphan	Black							.85	.60		T.							.42							.10					.48			2.45
Fisk	St. Francis								.97									.51	T.	T.		T.								.05	.53		2.06
Jackson	Mississippi							.47	1.23									.60				.10		.08	.36					.73			3.57
Marble Hill	....do							1.10	1.05									.82												.82			3.79
Morehouse	....do							.52	.81									.64			T.			.04	.03	.08				.99	.07		3.18
New Madrid	....do								2.13	.05								.45	.31		.05			.05	.70	.18				.01	.67		4.60
Parma	St. Francis								1.52	.03								.10	.44						.15	.27					.61		3.12
Poplar Bluff	Black							.04	1.14			T.						.31	.27						T.					.03	.60		2.39
Sikeston	Mississippi							1.50	.10								.25	.27				.05	.02	.22	.10								2.51
Cairo, Ill.***	....do							.68	.40			T.						.40		T.	T.	T.	.03	.07	.82	T.	T.			.88			3.28
Ozark Plateau																																	
Arcadia	St. Francis							.05	.77									.15	.75					T.	.20	.16				.12	.66		2.86
Aurora	Neosho							1.02										.63		.16				.13		.08				.61			2.63
Birchtree (near)	Black							.70	.20									.33												.36			1.59
Buffalo	Osage							.99	.03								.16	.14		.24	.02			.22		.07	.02			.57			2.46
Caplinger Mills	....do							.75									.52	.30		.39										.15			2.11
Chaonia	St. Francis							.90	1.20									.14	.06					.02	.10					.02	.39		2.83
Dean	Neosho							.68									T.	.36	T.	.38				.42					T.	.62			2.46
Eldon	Missouri							.15										.49			.34	02		.02	.15		.15			.21	.23		1.76
Farmington	St. Francis							.17	.48									1.28			T			.16	.36	.05	.16			.52			3.18
Fredericktown	....do							.12	.72									.42	.08					.17	T.					.30	T.		1.81
Galena	White							.45	.28									.87			.43				.35					.78	.16		3.32
Goodland	Black							.07	.39									.75								.10				.42			1.73
Greenville	St. Francis							1.21										.50								T.				.43			2.14
Hailey	White							1.20	T.									.89		.34										1.30			3.73
Koshkonong	Black							.66	.43		.75							.31						.04						.31			2.50
Lakeside	Osage							.15	T.								.01	.46			.28	.03		.02	.10		.44			.55	.07		2.11
Lebanon	....do							.80	.41			T						.41			.51			T.	.20	T.				.30	.36		2.99
Leeper	Black								.54									.36	.29					T	T.					.29	.23		1.71
Lockwood	Osage							.77									T.	.55		.47				.94		T.	T.			.14			2.87
Mountain Grove	White							.94	.36								T.	.41		.04				.04		T.				.28			2.07
Neosho	Neosho							.50	.08									.64		.32				.37						.07			1.98
Owensville	Gasconade						T.	T.										.75	.22		.27			T.						.25	.30		1.79
Ozark Beach	White							T.	.97									.45							.32					T.	.42		2.16
Rolla	Meramec							.10	.08									.20	.02		.15	.02					.20			.03	.67		1.47
St. Thomas (near)	Osage																	.61			.19	.03					.21			.69	.09		1.82
Salem	Meramec							.37									T.	.29		.05						.06				.48			1.25
Seligman	Neosho							.58									T.	.86		.13				.34						.80			2.71
Seymour (near)	White							.87	.38		.31						T.	.37		T.				T.		T.	T.			.60			2.53
Springfield***	....do							1.52									.38	.04		.45				.21		T.	T.			.66			3.26
Steelville	Meramec							.12	.11									.07	.73						T.						.65		1.68
Stover	Missouri							.30									.13	.55			.30			.31			.12			.11			1.82
Tuscumbia	Osage							.10	T.								T.	.49			.19	.04		.40	.04		.19			.54	.10		2.09
Williamsville	Black							.48	.87									.21	.08					.02	.03		.05			.02	.55		2.31
Willow Sprgs. (near)	White							.07	1.23									.27			.06				.05		.11			.07	.16		2.02
Versailles	Osage							.62									.66	.13		.48	.12			.32		.26				.18			2.72

Continued on next page

Daily Precipitation for April, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																	
Appleton City	Osage							.43									.50	.23		.69				.29					T.	.21			2.35
Clinton	do							.40									1.02	.15		.55	.15			.68	.09	.03				.25			3.32
Concordia‖	Missouri						.23										.43	.10		.24				.30	.22	.34				.23			2.09
Harrisonville‖	Osage							.24									.58	.24		.03	.33	.09		.11	.36		.08			.02			2.08
Joplin‖	Neosho							.56									.30	.47		.55			.05	.76						.05			2.74
Lamar‖	do						.68	.12										.54			.81			.40	.30					.15			3.00
Lamonte	Missouri							.35									.48	.30		.45	.04			.52		.18				.20			2.52
Marshall	do							.20									.58	.23		.16	.24			.39	.39					.10			2.29
Nevada	Osage							.80									.54	.38		.70				.58						.20			3.20
Osceola‖	do							.23									.16	1.40			.48			.33	.21					.23			3.04
Warrensburg	Missouri							.15									.78			.41	.10			.48	.12				.21				2.25
Warsaw	Osage							.20									.05	1.08			.42			.12	.26		.06			16			2.35
Waverly ‖	Missouri							.25									.40	1.25			.37	.10		.20	.04		.20						2.81
Northwest Plateau																																	
Bethany	Grand						T.	.23										.32		.16	.14	.12		1.90	.06								2.93
Chillicothe ‖	do							.11									.09	.51			.28	.28		.09	.03	.02	.02			.06			1.49
Conception	Missouri						.30	.45								T.	.72			.35	.21			.38	.22	T.	.03		T.	.12			2.78
Edgerton	do						T.	.33									1.31			.77	.12			.16	.03								2.72
Gallatin ‖	Grand							.10										1.12			.35			.08	.02								1.67
Grant City	do						.86									T.	.48	.02		.22	.20	.29		.93		.05				.23			3.28
Kansas City***	Missouri						.06	.06								T.	1.15	.10	T.	.73	.01		.01	.32	T.	.01	T.		T.	.05			2.50
Kidder ‖	Grand							.16									.06	.57		.05	.35	.02		.04	.15	.03				.08			1.51
King City	Missouri						.04	.34									.34			.47	.13			.13	T.	.03	T.			.14			1.62
Lexington ‖	do							.10									.19	1.40	.06		.39	.06		.25	.26	.04	.06			.10			2.91
Maryville	do						.37	1.19									.88	.91			.51	.08			.09	.07	.05			.21	T.		4.36
Oregon	do						.43	.43								T.	1.41	.17		.90	.09			.21		.14				.19			3.97
St. Joseph***	do						.37	.01								.05	1.39	.01		.78	.02	T	T.	.08	T	.01	T.		.01	.09	T.		2.82
Tarkio	do							.31									.78			.84	.22			.44		.14			.03	.04			2.80
Trenton	Grand						.11										T.	.81		T.	.27	.66		1.42	.05	.03			.06				3.41

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for April, 1932

(See precipitation data in table, page 18)

Station	Data	Day of month																													Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.123	.352	.253	.319	.169	.131	.391	.082	.184	.172	.118	.211	.200	.204	.192	.249	.028	.063	.253	.069	.134	.162	.198	.054	.324	.089	.094	.188	.252	.036	....	5.294
	Mean temperature	56	66	60	64	64	70	66	57	52	52	52	50	54	53	55	53	56	55	58	63	71	71	68	67	56	50	49	56	60	57	..	58.7
	Wind movement	42	119	110	75	82	42	78	69	45	31	88	72	36	48	28	50	60	44	69	46	31	45	46	46	64	83	47	43	71	39	..	1,749

Observations taken at 7 a. m. Wind movement corrected to true velocities.

DESCRIPTION OF THE COOPERATIVE EVAPORATION STATION AT LAKESIDE, MO.

"Lakeside," the settlement that has recently grown up at the north end of the Osage Dam, Miller County, Missouri, is situated in latitude 38° 12′, longitude 92° 38′; elevation 595 feet above sea level. The evaporation outfit is below and about 375 feet southeast from the Osage Dam, the nearest permanent landmark.

The equipment is standard and is installed in accordance with Weather Bureau plan as described in Circular L, i. e., the pan is cylindrical, made of 26 BWG iron, 48 inches in diameter, 10 inches deep, which is filled to the approximate depth of 8 inches. The pan rests upon 2x4 wood on concrete base, and there is good ventilation under the pan.

The instrumental equipment consists of hook gage, stillwell, anemometer, maximum and minimum thermometers, thermometer shelter, and rain gage, tipping bucket pattern. Additional instruments in use are, dry bulb thermometer, temperature detector and indicator, wind direction and velocity and rainfall recorder. The anemometer cups are 5 inches above the rim of the pan; the rain gage is 2 feet distant, and the instrument shelter is 6 feet west of the pan, bottom of shelter 3.5 feet above ground. The surrounding country is typical northern Ozark topography, the region being traversed by the Osage River. See U. S. G. S. Topographic Map Versailles Sheet.

The opening of this station on a cooperative basis, under the general supervision of the Weather Bureau Office at Columbia, Mo., was approved by the Chief of the Weather Bureau on January 25, 1932. Observations began November 7, 1931. They have not been published, prior to this report, but are available at the Office of the Osage Plant, Eldon, Mo., and the Weather Bureau Office, Columbia, Mo.

The observer is W. S. Frame. The supervising official in charge of the work is Albion Davis, Chief Hydraulic Engineer, Union Electric Light and Power Company, 12th and Locust Streets, St. Louis, Mo.

Daily Temperatures for April, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	83	79	72	82	81	81	80	65	66	67	64	62	71	65	73	72	69	69	63	69	82	80	76	76	70	56	59	70	67	69	..	71.4
	Minimum	35	59	39	53	43	59	51	39	38	41	39	34	34	34	37	54	58	39	42	51	57	60	63	58	49	43	34	40	56	47	..	46.2
Columbia	Maximum	81	82	66	80	81	84	70	61	64	60	59	57	68	61	73	62	61	63	63	74	82	78	70	80	63	49	57	69	66	67	..	68.4
	Minimum	40	51	42	54	46	62	47	40	38	44	42	35	38	33	39	53	48	40	47	52	58	62	62	58	47	40	34	42	52	49	..	46.5
Fayette	Maximum	82	85	69	82	82	84	58	64	65	65	61	60	71	65	73	66	63	65	64	73	83	82	70	80	64	54	59	70	66	71	..	69.9
	Minimum	26	29	40	42	45	47	52	39	36	38	42	31	29	33	30	38	50	38	44	48	57	59	62	55	52	43	31	40	44	43	..	42.1
Hannibal	Maximum	77	79	62	76	74	83	69	59	63	58	58	52	59	60	67	63	57	62	65	72	72	76	66	80	66	50	58	67	62	67	..	66.0
	Minimum	40	46	39	48	47	56	49	42	40	44	43	35	33	32	38	52	45	38	44	54	58	60	62	59	45	41	35	39	55	51	..	45.7
Jefferson City §§	Maximum	80	83	76	79	83	85	78	64	69	61	60	59	74	65	76	68	60	65	66	76	85	82	74	81	71	52	62	71	67	70	..	71.4
	Minimum	41	45	42	45	48	48	55	40	38	41	35	32	34	36	42	49	40	43	48	52	57	61	57	56	44	33	38	46	49	..	..	44.4
Kirksville	Maximum	77	77	65	79	72	82	71	61	62	60	59	57	57	63	65	70	58	62	64	66	73	75	71	73	65	52	58	65	63	65	..	66.2
	Minimum	36	56	33	43	39	47	45	37	34	37	37	30	30	33	35	40	40	33	40	48	53	56	60	54	45	38	31	38	49	45	..	41.4
Louisiana	Maximum	80	75	73	80	79	85	78	69	60	56	60	63	57	58	66	66	62	60	63	67	72	79	77	81	79	62	65	67	63	67	..	69.0
	Minimum	36	56	37	45	50	54	65	40	29	44	43	44	24	26	29	50	49	34	47	50	57	59	63	67	57	41	32	33	52	50	..	45.4
Macon §§	Maximum	79	79	65	82	77	84	59	63	66	61	60	55	65	64	70	70	62	67	66	68	77	77	68	78	58	50	60	70	64	67	..	67.7
	Minimum	36	44	37	47	41	48	50	39	34	35	40	30	31	30	34	44	43	35	37	39	50	57	58	56	53	40	30	32	43	45	..	41.1
Mexico §§	Maximum	79	83	65	78	79	85	56	62	65	61	61	61	62	64	72	71	61	64	66	76	81	77	69	82	67	49	57	71	63	70	..	68.6
	Minimum	36	39	38	39	43	44	54	32	35	37	41	32	30	29	33	43	47	35	37	44	51	55	58	56	52	42	30	36	42	48	..	41.3
St. Louis(1)	Maximum	74	84	64	79	77	81	68	61	65	56	59	55	59	61	70	63	58	63	68	78	76	76	69	81	75	50	58	68	58	72	..	67.5
	Minimum	41	56	42	48	55	58	49	42	40	49	45	40	40	38	48	50	47	39	47	56	57	59	63	61	50	43	39	46	52	54	..	48.5
Unionville	Maximum	78	75	64	76	77	84	75	70	66	65	65	66	60	61	65	67	60	64	65	65	73	80	70	74	67	50	60	65	65	70	..	68.1
	Minimum	35	53	31	44	36	56	45	35	36	35	34	30	30	31	33	54	40	33	40	48	50	53	60	52	44	36	30	37	50	44	..	41.2
Warrenton	Maximum	75	84	80	76	79	84	81	61	64	63	59	56	64	61	71	67	59	64	68	77	80	77	77	81	77	61	58	70	67	70	..	70.4
	Minimum	38	64	39	48	48	55	50	40	34	43	42	32	33	31	42	50	48	35	41	50	56	57	60	57	53	42	30	39	52	50	.	45.3
Southeast Lowlands																																	
Campbell	Maximum	72	78	76	77	84	82	74	64	71	66	65	65	68	62	70	75	71	68	70	86	87	90	82	84	80	64	65	73	61	80	..	73.7
	Minimum	38	54	47	47	54	50	57	54	42	45	46	38	32	39	33	44	50	41	42	52	57	58	61	60	58	49	34	37	47	54	..	47.3
Caruthersville	Maximum	57	73	77	78	74	81	78	75	60	65	67	64	66	74	72	63	78	73	73	73	87	91	87	81	79	69	58	60	70	66	..	72.3
	Minimum	41	43	56	53	57	60	60	59	48	50	50	50	42	44	47	40	52	53	48	49	59	63	61	61	59	54	42	45	46	56	..	51.6
Doniphan	Maximum	82	90	76	81	90	88	75	72	80	66	70	71	71	73	78	84	73	75	77	94	95	91	82	84	88	77	74	70	61	79	..	78.9
	Minimum	34	55	47	55	45	57	60	48	39	49	46	35	33	43	34	45	52	46	45	50	57	59	64	46	53	52	34	48	51	51	..	47.8
Jackson	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	30	52	44	50	51	53	56	40	38	40	43	35	25	34	28	44	45	34	37	53	54	56	60	59	55	45	28	30	46	50	..	43.8
Poplar Bluff	Maximum	74	79	75	76	78	81	70	67	72	66	66	66	69	66	70	77	64	67	73	85	87	86	77	84	78	67	63	71	59	81	..	73.1
	Minimum	35	59	49	52	51	52	54	47	43	46	47	39	32	42	34	43	49	43	43	50	58	59	63	63	55	44	35	36	50	55	..	47.6
Sikeston	Maximum	72	77	77	75	83	83	79	62	64	64	60	62	64	64	67	74	72	65	73	83	83	83	83	79	79	76	60	70	70	77	..	72.7
	Minimum	40	56	50	55	53	56	59	45	45	49	39	34	39	36	45	51	42	41	58	60	59	62	62	59	51	34	40	52	52	..	..	49.0
Cairo, Ill	Maximum	71	76	70	75	81	80	68	53	63	57	60	60	61	59	67	72	62	63	73	81	75	82	74	81	78	58	58	69	61	76	..	68.8
	Minimum	43	61	52	57	60	63	52	45	46	50	50	44	41	44	45	52	48	46	48	60	63	62	64	63	58	44	40	44	55	54	..	51.8
Ozark Plateau																																	
Arcadia	Maximum	76	83	74	76	83	80	74	62	69	60	61	61	66	63	71	73	61	65	70	83	82	83	76	81	75	57	61	68	63	75	..	71.1
	Minimum	30	57	44	44	53	49	50	43	36	36	42	36	25	35	28	47	46	31	35	47	49	52	59	56	46	43	32	29	49	47	..	42.5
Aurora	Maximum	80	79	79	76	..	..	..	..	..	..	64	67	82	68	79	77	70	70	65	80	83	82	77	78	73	59	63	68	70	70	..	[f]73.3
	Minimum	47	60	62	59	..	..	..	..	..	..	39	38	45	41	40	58	53	45	46	52	52	63	57	57	53	46	34	46	50	49	..	[f]49.7
Birchtree	Maximum	77	82	77	76	82	82	75	63	69	64	63	65	72	67	70	78	69	65	68	82	87	84	74	82	71	59	62	68	64	75	..	72.4
	Minimum	36	57	51	59	48	57	50	46	39	48	56	40	34	40	36	50	50	40	45	46	61	58	58	62	50	43	34	40	52	52	..	47.9
Eldon §§	Maximum	83	82	70	78	84	84	57	67	67	62	56	63	72	66	75	55	58	56	67	77	87	85	89	80	62	51	64	70	64	69	..	70.0
	Minimum	29	45	41	45	45	50	57	40	37	38	41	36	34	32	35	42	50	39	39	38	51	56	61	57	51	44	32	34	41	50	..	43.1
Farmington	Maximum	76	84	76	78	83	81	72	60	64	58	59	58	69	61	72	71	57	62	69	86	82	81	72	80	74	60	61	72	57	75	..	70.3
	Minimum	36	58	43	48	57	53	53	44	35	41	43	34	28	34	31	40	47	37	40	52	57	57	60	59	57	44	32	34	51	50	..	45.2
Koshkonong	Maximum	78	82	79	79	84	81	75	63	69	62	61	65	78	69	71	78	71	69	69	71	88	86	84	82	71	62	65	70	69	71	..	73.4
	Minimum	42	58	53	57	57	57	53	47	42	49	47	42	42	43	43	52	51	44	44	54	62	62	61	59	58	49	38	41	59	61	..	50.9
Lebanon	Maximum	51	70	71	69	67	75	82	73	50	65	61	58	61	75	62	72	68	60	68	63	79	85	84	70	78	67	57	60	69	66	..	67.9
	Minimum	26	40	59	44	57	57	53	47	42	49	47	42	42	43	43	52	51	44	44	54	62	62	61	59	58	49	38	41	59	61	..	50.9
Mountain Grove	Maximum	76	80	75	70	80	81	73	64	69	63	59	64	72	69	69	71	62	68	62	80	87	83	72	78	72	63	62	67	63	73	..	70.9
	Minimum	41	56	48	55	50	55	48	40	36	46	42	36	39	37	40	49	50	39	48	51	61	59	59	55	52	44	31	41	51	48	..	46.9
Neosho	Maximum	73	76	76	76	77	83	76	61	66	69	71	58	66	77	77	75	72	71	71	81	85	84	81	75	75	67	61	66	68	70	..	72.8
	Minimum	42	42	45	61	51	59	52	39	33	32	45	39	42	44	35	56	54	50	48	45	52	60	59	58	53	48	39	45	51	40	..	47.3
Rolla	Maximum	76	82	78	74	82	83	78	61	67	63	59	58	70	69	73	68	60	67	69	82	89	84	81	83	78	57	61	70	68	71	..	72.0
	Minimum	39	60	44	55	52	58	51	42	38	41	44	37	33	36	36	52	49	39	45	49	59	60	64	54	54	45	35	40	56	49	..	47.2
Springfield	Maximum	75	78	77	71	79	80	67	60	63	61	56	61	75	61	72	69	60	67	60	80	80	82	67	75	63	56	60	65	66	67	..	68.4
	Minimum	46	60	51	59	55	60	47	41	42	48	41	41	46	40	43	54	48	43	49	54	64	64	56	58	48	41	37	46	49	51	..	49.4
Southwest Plain																																	
Appleton City	Maximum	82	85	79	81	83	82	72	63	65	61	58	64	82	71	76	70	58	68	62	74	81	85	75	71	67	49	60	66	68	65	..	70.8
	Minimum	40	59	45	60	49	59	50	40	38	41	39	36	41	34	40	52	50	42	48	43	58	62	57	57	49	42	32	45	48	46	..	46.7
Clinton	Maximum	80	80	75	83	82	83	70	60	65	63	64	54	75	72	73	70	60	60	60	73	85	86	75	73	68	52	60	60	65	63	..	69.6
	Minimum	36	60	65	57	55	60	50	40	38	42	38	37	45	35	38	52	50	42	51	45	55	63	58	58	50	46	34	40	50	43	..	47.8
Harrisonville §§	Maximum	84	85	72	83	83	84	58	66	63	63	63	66	80	65	77	66	58	66	54	68	82	81	68	72	56	49	57	59	69	70	..	68.9
	Minimum	31	41	42	44	45	50	49	38	38	40	36	34	36	33	33	45	50	41	43	45	45	58	60	56	50	40	32	33	44	44	..	42.5
Lamar §§	Maximum	84	84	85	80	86	84	62	63	66	62	61	67	80	65	79	66	63	69	64	81	81	83	71	74	60	59	61	67	67	72	..	71.5
	Minimum	31	43	52	52	51	55	51	39	40	42	39	39	37	39	39	42	54	46	46	44	46	62	57	59	53	47	37	37	48	45	..	45.7
Lamonte	Maximum	82	83	70	71	82	84	69	63	64	58	60	60	76	64	77	68	65	65	62	73	85	84	74	74	74	49	59	70	69	65	..	70.0
	Minimum	36	36	42	42	46	60	50	37	36	37	38	33	36	31	38	38	49	41	48	49	58	63	60	60	48	38	31	38	49	44	..	43.7
Marshall	Maximum	82	81	81	82	83	83	79	77	73	68	62	59	70	67	75	76	74	70	62	71	82	82	78	75	50	53	58	62	64	67	..	71.5
	Minimum	40	60	50	40	45	57	48	39	38	37	38	33	35	32	41	49	47	39	47	49	50	61	61	49	42	41	32	38	37	42	..	43.9
Nevada	Maximum	83	84	84	84	83	82	72	64	65	61	61	66	80	66	77	67	61	68	61	80	78	81	73	79	71	54	60	63	71	68	..	71.6
	Minimum	43	60	58	60	50	59	50	39	43	39	39	44	36	45	55	52	43	47	44	59	64	59	58	51	43	33	46	49	48	..	..	48.5
Warrensburg	Maximum	82	83	72	83	82	81	75	64	65	60	61	62	76	65	76	76	62	66	61	67	83	86	78	72	51	60	70	67	68	65	..	70.6
	Minimum	50	48	30	38	43	53	48	40	34	38	37	35	36	30	40	40	50	39	47	47	56	51	56	46	40	31	39	48	45	41	..	42.5
Warsaw	Maximum	83	84	75	81	85	85	81	65	69	64	63	63	78	72	77	78	63	69	64	75	86	85	84	76	73	55	63	70	69	70	..	73.5
	Minimum	38	60	46	60	44	61	52	40	35	40	40	34	36	34	33	53	51	42	50	47	59	62	61	60	52	43	32	43	50	44	..	46.7
Northwest Plateau																																	
Chillicothe	Maximum	83	79	66	80	81	85	62	67	63	61	65	60	65	66	74	69	62	64	63	70	81	75	69	77	54	54	60	65	69	66	..	68.5
	Minimum	34	35	32	44	44	47	47	38	37	37	34	29	33	27	33	52	42	37	38	45	48	58	61	56	51	40	28	38	48	43	..	41.2
Grant City	Maximum	78	74	59	72	74	74	72	62	58	55	61	56	65	58	66	64	58	63	59	63	76	75	70	64	52	48	53	58	65	66	..	63.9
	Minimum	37	54	34	52	39	54	45	38	37	38	32	29	34	34	39	50	41	37	46	46	54	53	59	51	43	39	31	41	49	43	..	42.6
Kansas City	Maximum	82	79	69	77	81	80	60	63	60	57	60	62	74	64	75	64	60	63	54	68	80	80	69	70	61	47	55	60	68	65	..	66.9
	Minimum	49	54	44	59	52	59	48	44	45	42	38	38	43	39	50	58	47	45	48	50	58	65	58	60	47	41	35	46	53	49	..	48.6
Kidder	Maximum	80	75	65	77	80	81	71	63	62	59	60	57	68	62	72	67	61	62	59	64	80	76	72	73	60	48	57	65	67	66	..	67.0
	Minimum	30	53	38	40	42	58	47	37	37	38	32	30	34	30	40	56	45	39	45	46	48	60	62	56	51	38	29	39	50	42	..	43.1
Lexington	Maximum	83	82	71	81	84	83	76	68	67	61	62	63	77	66	79	70	64	66	61	71	85	83	76	74	67	53	61	64	69	69	..	71.2
	Minimum	42	61	41	57	48	60	50	40	40	42	37	34	37	35	44	54	47	41	49	50	58	62	62	59	53	41	33	41	50	46	..	47.1
Maryville	Maximum	82	78	63	74	79	79	63	65	61	57	65	59	71	65	69	66	61	64	58	65	78	77	69	72	67	49	58	61	70	68	..	67.1
	Minimum	32	48	37	50	37	59	42	36	39	38	30	28	36	28	40	52	41	40	44	45	59	60	58	55	43	37	27	40	48	39	..	42.3
Oregon	Maximum	84	81	69	75	82	76	65	70	68	60	64	64	75	68	72	67	61	66	59	68	83	81	69	67	63	52	63	59	72	68	..	69.0
	Minimum	40	57	41	54	45	61	45	39	42	43	33	32	34	34	48	51	46	42	45	46	56	64	60	57	45	39	30	43	49	43	..	45.5
St. Joseph	Maximum	83	78	67	73	82	77	62	65	63	58	62	60	73	64	74	63	61	63	55	66	81	78	67	70	56	48	58	59	70	65	..	66.7
	Minimum	41	49	43	53	46	51	47	41	42	42	34	35	40	36	48	52	46	43	46	47	58	65	59	56	45	40	33	44	50	46	..	45.9
Trenton	Maximum	81	78	63	77	77	82	62	64	62	61	61	57	65	64	70	68	61	64	63	65	78	75	70	74	60	53	58	60	67	65	..	66.8
	Minimum	38	54	32	51	40	57	47	37	40	40	35	30	33	32	36	56	43	39	48	43	55	60	62	59	46	41	31	41	51	42	..	44.0

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 5-19-32—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

GEORGE REEDER, Meteorologist

VOL. XXXVI COLUMBIA, MO., MAY, 1932 No. 5

GENERAL SUMMARY

May, as a whole, was a noticeably dry month in all the State of Missouri, and had rather pronounced tendency to warmth, especially in sections along and north of the Missouri River and in the whole of the southwestern plain, although in all sections there were occasional moderate swings to lower and subnormal temperatures. Frost, moderately damaging to gardens and truck crops, occurred at about 15 to 20 stations on the 2d.

Over all the State the rainfall was scanty, the average, 1.91 inches, amounting to only 41 per cent of the normal. The northwest plateau, with 76 per cent of normal, was the best watered, and the southeast lowlands, with only about 20 per cent of the usual May rains, suffered the most. The rainfall deficiency was pronounced throughout the State up to the closing days of the month, when splendid and rather general rains fell over northern and western areas, and scattered light rains over most of the Ozark region and the east-central counties. Drought continued at the close of the month over most of the eastern half of the State from on a line with Marion County south to the southern border extending westward to Phelps and Howell Counties. It was the fourth driest May of record running back more than 60 years, those of 1914, 1911, and 1901, being somewhat drier, though up to the 26th the current May was perhaps the driest since the beginning of climatological records in the State of Missouri.

The lack of moisture adversely affected all growing crops and vegetation, corn, which was just starting in growth, being the exception. Small grains especially wheat and oats, in addition to having to contend with lack of moisture, were handicapped by a poor start in March because of freezes, and the general outlook was poor. Fruits, both large and small, were rated as inferior because of the general unfavorable spring weather.

TEMPERATURE

The monthly mean temperature for the State, as shown by records of 69 stations, was 66.1°, or 1.7° above the normal, and 5° warmer than the same month in 1931. The highest local monthly mean was 70.4° at Caruthersville; and the lowest local monthly mean was 63.5° at Seymour. The highest temperature reported was 98°, at St. Charles on the 23d; and the lowest was 31°, occurring at three stations, Elsberry, Arcadia, and Goodland, on the 2d. These extremes vary little from the normals. Maximum temperatures reached 90° and higher on about five days.

PRECIPITATION

The average precipitation for the State, 124 stations reporting, was 1.91 inches, or 2.76 inches less than the 60 years' average, and the largest deficiency for any May since 1914. The whole State was dry but the northwestern plain, with 76 per cent of normal moisture, fared better than other parts. The greatest local monthly amount was 5.58 inches at Gallatin; and the least local monthly amount was 0.32 inch at Parma. The greatest amount that fell in any twenty-four hours was 4.00 inches, at Gallatin on the 31st.

MISCELLANEOUS PHENOMENA

Aurora.—At Fulton, Mo., 10.30 to 11 p. m. on 29th. Also at Kirksville, St. Louis, and Cairo, same date. At Salem 30th, 31st.

Frost.—Locally on the 2d.

Holos, lunar.—15th, and 16th. Halos, solar.—2d, 3d, 4th, 5th, 12th, 15th, and 18th.

Hail.—Light and scattered on the 8th, 15th, 26th, and 31st.

Thunderstorms.—Local 3d, 15th, 21st, 24th, 25th, 26th, and 30th. General on 6th, 7th, 8th, 9th, and 31st.

(Continued on Page 24)

JUL
UNIVERSITY OF ILLINOIS

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.03	70	41	42	345	78	5,913	7.9	24	sw.	3
Hannibal	30.03	71	42	..	...	..	6,314	8.8	24	nw.	8
Kansas City	30.01	66	49	50	349	79	6,730	9.0	31	nw.	8
St. Joseph	29.99	71	48	48	355	80	6,509	8.7	36	nw.	8
St. Louis	30.02	65	43	43	341	77	8,996	12.1	32	sw.	15
Springfield	30.02	70	45	47	345	78	7,424	10.0	26	se.	31
Cairo, Ill.	30.03	76	51	52	...	..	6,526	8.8	25	n.	11
Keokuk, Iowa	30.02	65	42	44	366	82	5,626	7.6	24	s.	15

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR MAY

Year	Temperature: Mean	Temperature: Departure	Temperature: Highest	Temperature: Lowest	Precipitation: Mean	Precipitation: Departure	Precipitation: Greatest in 24 hours	Precipitation: Total snowfall, unmelted	Number of days: With .01 inch or more	Number of days: Clear	Number of days: Partly cloudy	Number of days: Cloudy
Normals	**64.4**	.....	**96**	**30**	**4.67**	.....	**4.17**	**T.**	**9**	**13**	**10**	**8**
1888	62.1	− 2.3	93	30	5.35	+0.68	....	0	5	..	..	..
1889	63.5	− 0.9	96	28	6.56	+1.89	....	0	5	..	..	..
1890	62.8	− 1.6	96	32	3.47	−1.20	....	0	6	..	..	..
1891	61.5	− 2.9	97	28	4.26	−0.41	....	0	8	..	..	..
1892	60.7	− 3.7	91	28	7.80	+3.13	3.90	0	17	5	9	17
1893	66.8	+ 2.4	94	30	5.89	+1.22	5.83	0	10	11	11	9
1894	63.7	− 0.7	95	22	3.99	−0.68	4.20	0	8	13	11	7
1895	64.6	+ 0.2	103	28	4.08	−0.59	3.43	0	9	13	12	6
1896	70.1	+ 5.7	96	32	9.09	+4.42	4.66	0	12	12	12	7
1897	62.4	− 2.0	93	28	2.56	−2.11	3.82	0	7	16	11	4
1898	65.2	+ 0.8	97	31	7.90	+3.23	5.50	0	14	12	10	9
1899	66.9	+ 2.5	96	34	6.26	+1.59	5.28	0	2	10	13	8
1900	66.3	+ 1.9	97	29	3.69	−0.98	4.00	0	10	14	11	6
1901	63.8	− 0.6	98	30	1.47	−3.20	3.04	0	6	15	10	6
1902	69.4	+ 5.0	98	39	5.03	+0.36	4.35	0	11	13	11	7
1903	65.1	+ 0.7	92	23	7.10	+2.43	3.10	0	15	9	10	12
1904	63.1	− 1.3	95	32	5.03	+0.36	4.33	0	12	13	10	8
1905	64.9	+ 0.5	94	34	4.87	+0.20	4.55	0	10	12	11	8
1906	66.3	+ 1.9	98	27	2.16	−2.51	3.83	0	7	15	10	6
1907	59.5	− 4.9	91	17	5.56	+0.89	4.33	0	10	14	6	11
1908	66.1	+ 1.7	96	24	6.92	+2.25	5.65	0	12	12	10	9
1909	63.3	− 1.1	96	23	5.34	+0.67	5.26	0	9	15	9	7
1910	60.1	− 4.3	94	32	6.62	+1.95	4.30	0	13	11	8	12
1911	68.8	+ 4.4	101	27	1.55	−3.12	2.06	0	5	19	7	5
1912	67.6	+ 3.2	97	30	3.86	−0.81	4.90	0	7	18	8	5
1913	65.8	+ 1.4	101	33	3.05	−1.62	2.95	0	8	16	7	8
1914	66.6	+ 2.2	98	31	1.47	−3.20	3.00	0	5	17	9	5
1915	63.7	− 0.7	97	30	7.86	+3.19	7.10	0	12	12	7	12
1916	65.6	+ 1.2	96	33	5.61	+0.94	4.10	0	11	15	8	8
1917	58.7	− 5.7	91	30	4.33	−0.34	2.60	0	10	15	7	9
1918	68.3	+ 3.9	100	28	5.49	+0.82	5.25	0	10	16	8	7
1919	62.0	− 2.4	93	35	5.80	+1.13	4.50	0	13	10	10	11
1920	63.8	− 0.6	97	32	4.85	+0.18	3.70	0	12	9	9	13
1921	66.4	+ 2.0	102	28	3.69	−0.98	4.12	0	7	17	8	6
1922	67.2	+ 2.8	97	38	3.17	−1.50	2.50	0	10	14	10	7
1923	62.7	− 1.7	97	25	4.59	−0.08	3.48	T.	12	11	10	10
1924	58.6	− 5.8	96	31	4.67	0.00	3.90	0	10	13	8	10
1925	61.2	− 3.2	98	24	2.14	−2.53	2.86	0	7	14	9	8
1926	67.0	+ 2.6	100	32	2.73	+0.06	5.80	0	7	16	9	6
1927	64.6	+ 0.2	94	34	6.98	+2.31	4.62	0	12	11	10	10
1928	65.8	+ 1.4	95	29	2.84	−1.83	2.80	0	8	16	9	6
1929	61.7	− 2.7	95	28	7.52	+2.85	6.00	0.3	13	9	10	12
1930	64.7	+ 0.3	95	33	3.43	−1.24	2.88	0	9	16	8	7
1931	61.0	− 3.4	96	29	4.51	−0.16	4.70	0	10	15	6	10
1932	66.1	+ 1.7	98	31	1.91	−2.76	4.00	0	6	18	9	4

Climatological Data for May, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	67.6	+ 3.4	92	24	40	2	35	2.97	−1.76	1.07	0	8	23	1	7	sw.	O. K. Benecke
Clifton Hill	Randolph	731	33	64.2	+ 0.6	93	15	36	2	46	2.25	−2.29	0.98	0	8	20	6	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	66.3	+ 2.0	90	24	40	2	34	1.67	−2.79	0.70	0	7	15	9	7	sw.	U. S. Weather Bureau
Downing	Schuyler	876	11	65.4	+ 2.7	90	14†	40	2	33	3.14	−0.59	1.02	0	9	22	5	4	s.	James Taylor
Elsberry	Lincoln	449	1	65.6	.....	92	14	31	2	45	1.21	.....	0.45	0	5	14	1	16	s.	Ray E. Mills
Fayette	Howard	661	52	64.9	+ 1.1	93	24	34	2	46	1.89	−2.66	0.66	0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	64.4	− 0.2	89	14†	36	2	40	2.13	−2.69	1.35	0	8	23	6	2	sw.	Chamber of Commerce
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	3.48	−0.79	1.45	0	8	14	9	8	sw.	J. W. Pulliam
Hannibal	Marion	534	49	66.4	+ 1.8	90	14	38	2	37	1.68	−2.67	0.70	0	8	18	5	8	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	66.6	+ 1.9	90	15†	39	2	38	2.68	−1.84	1.35	0	7	15	14	2	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	65.2	+ 2.9	89	14	37	2	35	2.69	−2.07	1.79	0	5	21	6	4	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	38	65.9	+ 2.2	88	4	32	1†	39	1.98	−2.50	0.85	0	6	27	1	3	w.	Stark Bros. Nurseries
Macon	Macon	875	33	65.3	+ 1.8	91	14†	39	2	38	2.02	−2.38	0.60	0	6	16	11	4	se.	W. C. Brown
Mexico	Audrain	800	43	65.0	+ 1.0	92	24	36	2	39	1.44	−3.25	0.50	0	5	26	0	5	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	1.28	−2.33	0.42	0	5	19	6	6	ne.	J. S. Conway
St. Charles	St. Charles	456	44	67.2	+ 4.1	98	23	40	2	49	0.70	−3.60	0.25	0	7	18	9	4	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	68.0	+ 1.0	89	14	48	2	33	2.09	−2.25	0.84	0	8	18	8	5	sw.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	67.8	+ 1.7	90	14	47	2	32	1.39	−2.82	0.40	0	8	23	7	1	e.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	2.13	−2.52	0.80	0	8	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	34	65.3	+ 1.5	90	24	36	2	35	3.52	−1.10	0.75	0	7	18	10	3	s.	Frank Hall
Unionville	Putnam	1,062	39	64.8	+ 2.7	90	3†	36	2	37	2.59	−1.89	1.25	0	6	18	8	5	sw.	Geo. W. Davis
Warrenton	Warren	816	50	66.6	+ 1.7	91	14	40	2	35	1.31	−3.33	0.86	0	4	13	16	2	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	65.3	+ 1.5	90	14	41	2	32	2.50	−1.43	0.76	0	8	15	8	8	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	65.9	+ 1.9	98	23	31	2	49	2.12	−2.25	1.79	0	7	19	7	5	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	67.8	.....	94	23	38	2	42	0.62	.....	0.29	0	5	17	9	5	s.	Jeff. King
Caruthersville	Pemiscot	265	36	70.4	+ 0.6	89	15†	45	3	32	1.61	−2.91	1.30	0	5	21	3	7	s.	Sam Smith
Doniphan	Ripley	344	28	70.0	+ 3.5	95	14†	40	19	49	0.80	−3.63	0.35	0	4	22	4	5	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	....	.....	..	..	34	2	..	0.96	−3.48	0.40	0	6	12	11	8	s.	John G. Putz
Marble Hill	Bollinger	470	37	66.8	+ 1.2	92	30	35	2	50	0.57	−3.78	0.42	0	3	17	11	3	w.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	0.81	−4.01	0.49	0	3	20	7	4	n.	John A. Spence
Poplar Bluff	Butler	339	27	67.0	− 0.5	89	14	38	2	39	0.85	−4.21	0.66	0	3	21	10	0	s.	J. H. Wolpers
Sikeston	Scott	318	25	68.6	+ 0.1	88	14†	42	2	34	1.07	−3.29	0.65	0	3	24	5	2	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	68.4	0.0	87	31	48	2	27	0.50	−3.21	0.27	0	3	7	13	11	s.	U. S. Weather Bureau
Section means and	extremes	....	..	68.4	+ 0.8	95	14†	34	2	50	0.87	−3.56	1.30	0	4	18	8	5	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	62.4	− 1.7	86	14	31	2	41	1.19	−3.51	0.61	0	5	27	2	2	s.	Arcadia College
Aurora	Lawrence	1,370	31	65.7	− 0.1	86	14	44	17	35	1.31	−4.20	0.47	0	5	19	9	3	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	65.5	+ 0.5	87	4	40	18	37	1.14	−3.23	0.87	0	2	25	5	1	ne.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	69.4	.....	88	14†	51	1	26	2.28	.....	1.08	0	7	..	..	..	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	3.06	.....	2.20	0	7	10	19	2	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	66.0	+ 0.3	91	25	36	17	44	0 46	−5.37	0.21	0	4	24	6	1	e.	H. E. Dean
Eldon	Miller	934	37	65.3	+ 1.1	88	15	40	2	43	1.75	−2.92	1 11	0	7	14	16	1	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	65.4	+ 1.7	88	14†	35	2	39	1.33	−4.12	0.38	0	7	17	11	3	sw.	Robert Forsyth
Goodland	Iron	1,000	39	64.3	+ 0.3	89	14	31	2	49	1.40	−3.44	0.35	0	7	21	8	2	s.	F. M. Adams
Greenville	Wayne	381	23	64.8	− 1.1	89	14†	34	2	45	0.45	−3.74	0.30	0	2	22	8	1	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	1.54	−4.39	0.70	0	4	26	5	0	.....	A. W. Madison
Koshkonong	Oregon	958	31	68.4[a]	+ 1.8	91	25	41	2	32	1.31	−3.26	0.85	0	3	12	11	8	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	64.7	− 0.2	88	14†	36	2	41	3.36	−2.09	1.60	0	5	22	4	5	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	66.8	+ 2.4	89	23	42	17	37	3.18	−1.78	1.95	0	6	19	11	1	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	31	65.8	+ 2.0	88	14	39	17	42	1.53	−3.30	0.84	0	7	15	11	5	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	65.8	− 0.2	89	14†	35	17	46	3.34	−2.52	2.57	0	5	16	12	3	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	66.2	+ 1.7	88	14	39	2	32	0.80	−4.19	0.36	0	3	5	16	9	se.	F. H. Lane
Salem	Dent	1,173	28	65.5	+ 1.0	91	14	33	2	47	1.86	−2.84	1.23	0	7	15	15	1	s.	E. E. Martin
Seligman	Barry	1,542	31	66.2[1]	+ 1.7	85	26	40	17	..	0.50	−5.14	0.20	0	5	14	14	3	ne.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	63.5	− 0.2	85	14†	36	2	39	2.48	−2.77	0.95	0	6	23	4	4	s.	Ira H. Hailey
Springfield	Greene	1,324	54	65.5	+ 1.0	84	23	46	28	27	3.18	−2.01	2.06	0	7	21	8	2	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	66.4	.....	90	14	38	2	36	1.60	.....	1.07	0	7	14	12	5	sw.	I. M. Wilson
Section means and	extremes	.....	..	65.6	+ 0.7	91	14†	31	2	49	1.76	−3.41	2.57	0	5	18	10	3	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	66.0	+ 1.0	88	14	44	28	34	2.84	−2.34	1.54	0	6	12	18	1	sw.	W. G. Bigelow
Clinton	Henry	765	39	65.8	+ 0.3	90	13†	43	1	36	3.33	−2.00	1.65	0	8	12	14	5	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	65.4	+ 1.6	89	14†	42	28	35	2.31	−2.22	0.59	0	7	11	6	14	sw.	John H. Patterson
Lamar	Barton	980	44	66.8	+ 1.2	90	22†	43	1	38	1.24	−4.13	0.28	0	5	20	8	3	ne.	Jesse A. Mann
Lamonte	Pettis	867	31	65.4	+ 0.8	86	15†	41	2†	38	2.76	−2.19	0.86	0	5	23	4	4	se.	J. E. Wheeler
Marshall	Saline	779	45	66.2	+ 2.0	90	14†	34	3	50	2.53	−2.32	0.80	0	5	20	8	3	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	66.2	+ 1.7	87	14†	42	17	34	1.46	−3.85	0.49	0	7	16	7	8	sw.	George A. Kaupp
Warrensburg	Johnson	878	45	66.4	+ 1.4	91	23	42	2†	40	3.73	−0.81	2.10	0	6	20	9	2	ne.	E. A. Markey
Warsaw	Benton	687	31	67.2	+ 1.7	91	14†	40	17	43	1.34	−3.78	0.38	0	6	20	7	4	s.	Everett Martin
Section means and	extremes	.....	..	66.2	+ 1.3	91	14†	34	3	50	2.39	−2.63	2.10	0	6	17	9	5	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	63.8	+ 1.3	89	14	38	2	41	2.91	−1.52	1.16	0	7	15	14	2	s.	A. S. Cumming
Chillicothe	Livingston	779	23	65.4	+ 0.2	93	14†	35	2	44	2.67	−1.31	1.59	0	6	16	12	3	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	65.0	+ 2.9	90	14	40	1†	33	3.90	−0.47	2.39	0	7	12	17	2	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	66.8[n]	+ 3.8	92	28	..	..	..	2.26	−2.03	0.95	0	6	21	8	2	s	Fred L. Stiff
Grant City	Worth	1,134	28	63.9	+ 1.9	88	14	40	1†	32	3.04	−1.22	1.52	0	5	12	17	2	sw.	W. P. Spillman
Kansas City	Jackson	963	43	67.0	+ 2.2	89	14	45	16	31	2.63	−2.02	1.05	0	12	16	9	6	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	65.0	+ 2.4	90	14	39	28	34	4.44	−0.23	2.12	0	8	18	7	6	se.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	3.62	−0.83	2.05	0	9	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	67.8	+ 3.4	91	14†	43	28	34	2.18	−2.85	0.61	0	10	19	12	0	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	64.4	+ 3.1	92	14	37	28	42	4.53	−0.46	3.44	0	7	14	11	6	ne.	J. R. Brink
Oregon	Holt	1,048	76	67.0	+ 3.8	91	14†	41	1†	34	4.21	−0.47	2.02	0	11	18	12	1	se.	Mina Wright
St. Joseph	Buchanan	967	24	66.0	+ 2.1	90	14	43	28	34	3.21	−0.91	1.36	0	9	15	11	5	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	64.5	+ 1.9	90	14	40	16†	37	4.70	−0.41	2.23	0	8	12	9	10	sw.	Albert Volker
Trenton	Grundy	822	36	65.4	+ 1.9	91	15	38	2	40	4.06	−0.75	1.25	0	8	19	9	3	s.	W. H. Estes
Section means and	extremes	.....	..	65.5	+ 2.4	93	14†	35	2	44	3.45	−1.07	3.44	0	8	16	11	4	s.	
State means and	extremes	.....	..	66.1	+ 1.7	98	23	31	2	50	1.91	−2.76	4.00	0	6	18	9	4	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [n], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for May, 1932

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Bethel	Mississippi							.98	.74	.24							.09										1.22					.22	3.49
Boonville	Missouri							.10		.25							.20						.12				.33	.06					1.06
Bowling Green	Mississippi							.13		.37								.23									.29	.03					1.05
Brunswick	Grand			.04				1.07	.52	.12							.20									.35	.55					.12	2.97
Canton	Mississippi								.80	.37	.36						.11									.11	.13	.48				.77	3.13
Clifton Hill	Chariton						.36	.18	.01	.04							.06									.36	.98					.26	2.25
Columbia***	Missouri						T.	.17	.09	.02						.43	.20					T.					.70				T.	.06	1.67
Downing	Mississippi			.08				.49	.16	.12							.16								.66	.38					.07	1.02	3.14
Edina	do							.80	.15	.10							.10									T.	T.					.73	1.88
Elsberry	do			T.				.31		.09		.04					T.					T.				T.	.45					.32	1.21
Fayette	Missouri							.34	.05	.65							.16										.66	T.				.03	1.89
Fulton	do							.09		.06	.03						.21						.28				1.35	.05				.06	2.13
Gorin	Mississippi			.05				1.45		.31							.15								.04		.06				.80	.62	3.48
Hannibal***	do			T.			.01	.07	.41	.01	T.					T.	.28								.01		.19				T.	.70	1.68
Hermann	Missouri							.06			T.						.16										.77	.07					1.06
Jefferson City	do							.50		.07	.02						.50						.09				1.35	.15					2.68
Kahoka	Mississippi							1.04	.37	.25																	.10					.30	2.06
Kirksville	do							.45	.30	.15																					.33	1.46	2.69
LaBelle	do						.50	.92	.08																	.04	.30					.95	2.79
Laddonia	do								T.	.32																	.74						1.06
Louisiana	do							.18	.25		.07						.20										.43					.85	1.98
Lucerne	Grand							1.44	.78	.06							.64									.05						1.05	4.02
Macon	Chariton							.45	.60	.15							.06										.33					.43	2.02
Memphis	Mississippi						.32	T.	.25																	.50						.38	1.45
Mexico	do							.25		.42	T.						.16					T.					.50	.11					1.44
Milan	Grand							.68	.30	.36							.33										T.					.78	2.45
Monroe City	Mississippi							.23	.42								.19										.32				T.	.12	1.28
New London	do							.24		.53							.28										.24	.05					1.34
Pacific	Meramec							.02					.10					.12									.06	.20					0.50
Palmyra	Mississippi			.05				.15		.58							.22									.14	.10	.11			T.		1.35
Paris	do							.17		.16	.04							.18									.31					.06	0.92
Perry	do							.12		.26	T.						.27										.30						0.95
Philadelphia	do							.21	.98								.21										.89	.04			T.	T.	2.33
St. Charles	Missouri						.01	.09		.14							.01									.15	.05					.25	0.70
St. Louis (1)***	Mississippi			T.				.19	T.	.14	T.	.01					.02					.64				.03	.37					.69	2.09
St. Louis (2)*	do			T.				.20		.06		.02					.02					.38				.02	.40					.29	1.39
Shelbina	do	.02						.31	.57	.11							.16										.80	.04				.12	2.13
Steffenville	do						.72	.57	.65	.17	T.						.10										.75				T.	.56	3.52
Troy	do								.27	.05							.16										.52	.04					1.04
Union	Meramec							T.		.06							T.	.13					.98				.12	.06					1.35
Unionville	Chariton							1.25		.05							.35									.04					.20	.70	2.59
Valley Park	Meramec							T.		.13								.10				T.	.24				.05	.35				T.	0.87
Warrenton	Mississippi						T.	.07		T.							.21					T.			.17	T.	.86					T.	1.31
West Ely	do						.27		.19							.29									.04	.20					T	.35	1.34
Winfield	do								.10																		.40	.04					0.54
Keokuk, Ia.***	do	T.		.38			.51	.52	.07	T.	T.					T.	.08									T.	.23				.09	.62	2.50
Southeast Lowlands																																	
Bragg City	St. Francis							.40												.03							.53						0.96
Campbell	do								.29		.01		.01														.26	.05					0.62
Cape Girardeau	Mississippi								.04				.05					.19									.14	.54					0.96
Caruthersville	do								.15		.02							.10				.04					1.30						1.61
Dexter	St. Francis								.40																			.18					0.58
Doniphan	Black							.35	.10	T.												T.			T.	.25	.10	T.					0.80
Fisk	St. Francis								.71	T.			T.			T.	T.	T.									T.	.18					0.89
Jackson	Mississippi							.03			.14						.03					.03				.40	.33						0.96
Marble Hill	do										.10															.05	.42						0.57
Morehouse	do						T.		.49																	.14	.18						0.81
New Madrid	do								.10	.07			.02														.01	.50					0.70
Parma	St. Francis												.32																				0.32
Poplar Bluff	Black								.66																		.05	.14					0.85
Sikeston	Mississippi							.65																			.18					.24	1.07
Cairo, Ill.***	do	T.						.03	.24	T.	T.	T.										T.	T.			T.	.23					T.	0.50
Ozark Plateau																																	
Arcadia	St. Francis								.35	.10	T.	.05					T.										.08	.61					1.19
Aurora	Neosho					T.		T.		.40							T.					T.				.31	.47	.04		T.		.09	1.31
Birchtree (near)	Black							.87																			.27						1.14
Buffalo	Osage									.38						.22	.09										.12	.36			.03		1.08	2.28
Caplinger Mills	do							.07	.02	.31							.06					T.			.12	.28						2.20	3.06
Chaonia	St. Francis								.20																		.09	.10					0.39
Dean	Neosho							.08								.05										.12	.21					T	0.46
Eldon	Missouri							.11		.10							.15						.13				1.02	.09				.15	1.75
Farmington	St. Francis							.11		T.		.13					.13					T.				.30	.38	.24				.04	1.33
Fredericktown	do								.50	.20								.06					.27				.05	.07					1.15
Galena	White									.84														.23		.41		1.56					3.04
Goodland	Black							.15									.05					.35				.25	.31	.17				.12	1.40
Greenville	St. Francis							.15				T.					T.									T.	.30						0.45
Hailey	White									.40													.04				.40	.70					1.54
Koshkonong	Black							.85																			.28					.18	1 31
Lakeside	Osage							.05		.12							.08									T.	.50	.06		T.			0.81
Lebanon	do						T.										.62						.12			.53	.49				T.	1.60	3.36
Leeper	Black								.44																	T.	T.	.16					0.60
Lockwood	Osage					T.	T.	T.	T.	.40							.05					.05	T.		T.	.49	.24			T.		1.95	3.18
Mountain Grove	White					T.	T.	.10		.06							.05									.10	.84	.24				.14	1.53
Neosho	Neosho		.01													T.	.15					T.	.15			.46				T.	2.57	3.34
Owensville	Gasconade															.15											.30	T.					0.45
Ozark Beach	White								.08	.40																		1.53					2.01
Rolla	Meramec								T.								.10										.36	.34					0.80
St. Thomas (near)	Osage									.13							.29										.75	.14					1.31
Salem	Meramec							.03		T.							.05					.27				.05	1.23	.05				.18	1.86
Seligman	Neosho							.11																		.20	.05	.07				.07	0.50
Seymour (near)	White					T.		.06		.40						.15	T.					T.				.11	.95					.81	2.48
Springfield***	do		T.			T.	T.	.01		.06						.08	.01					T.	T.		T.	.05	.91			T.	2.06	3.18
Steelville	Meramec									.09	T.						.12										.07	.26					0.54
Stover	Missouri									.11							.20							.05			.70	.04					1.12
Tuscumbia	Osage							.06		.14							.32						.13				.70	.13					1.48
Williamsville	Black								.40								.04										.11	.16					0.71
Willow Sprgs. (near)	White									.46																	.21	.28					0.95
Versailles	Osage							.06	.02	.13						.05						.02					1.07					.25	1.60

Continued on next page

Daily Precipitation for May, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																																
Appleton City	Osage		T.				T.	.06	.04	.69	T.					T.	.21					T.				T.	.30			T.		1.54	2.84
Clinton	do						T.	.09	.03	.60							.37					.05					.51			.03		1.65	3.33
Concordia‖	Missouri							.05		.18							.45									1.05						.48	2.21
Harrisonville‖	Osage							.40	.03	.54							.59										.52			.08		.15	2.31
Joplin‖	Neosho		.07					.04								.15	.30									.06	.37			.05		.26	1.30
Lamar‖	do							.28		.27							.21										.23	.25					1.24
Lamonte	Missouri							.40		.42							.22										.86			T.		.86	2.76
Marshall	do						T.	.63		.80							.10								T.		.58					.42	2.53
Nevada	Osage								.07	.06							.17					T.	.12			T.	.43			.12	T.	.49	1.46
Osceola‖	do							.08	.02	.30							.27										.09						0.76
Warrensburg	Missouri						T.	.06		.33							.60					.13					.51					2.10	3.73
Warsaw	Osage						T.	.04	.38	.31						T.	.16										.38	.07		T.			1.34
Waverly ‖	Misouri							.42	.12	.20	T.						.50									.20	.29	.04				.12	1.89
Northwest Plateau																																
Bethany	Grand							.83	.06							.15	.67										.04				.81	.35	2.91
Chillicothe ‖	do			T.				.49	.14	.21	T.						.21										.03					1.59	2.67
Conception	Missouri			T.			T.	.35	T.	.16						.55	.03										T.			.03	2.39	.39	3.90
Edgerton	do						.40									.95										.19				.03	.59	.10	2.26
Gallatin ‖	Grand							.60	.33	.07							.58															4.00	5.58
Grant City	do			T.			T.	.52		T.						.14	.50								T.					1.52	.36	3.04
Kansas City***	Missouri		T.	.06			.91	.23	.08		.01					.47	.01							.02		.19	T.		.11	.44	.10	2.63
Kidder ‖	Grand		.02				.80	.05	.25	T.						.98									.07			T.		2.12	.15	4.44
King City	Missouri						.35		.01	.03						.04	.84										.09			.01	2.05	.20	3.62
Lexington ‖	do				.02			.61	.46	.24							.45									.11	.10	.02			.05	.12	2.18
Maryville	do							.37			.02						.37									.15	.04			T.	.14	3.44	4.53
Oregon	do			.03				.82	.37	.02						.03	.51									.21	.11			.02	2.02	.07	4.21
St. Joseph***	do		T.	.13			.51	.17	.06		T.					.79									T.	.17		T.	.02	1.20	.16	3.21
Tarkio	do				.25		.84	.60								.15										.26	.05				2.23	.32	4.70
Trenton	Grand			T.			T.	1.17	.03	.16						.95										.02	.03			T.	.45	1.25	4.06

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for May, 1932

(See precipitation data in table, page 23)

Station	Data	Day of month																													Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.237	.221	.223	.290	.285	.328	.266	.216	.317	.258	.103	.244	.258	.247	.300	.274	.251	.272	.297	.264	.....	.223	.276	.282	.160	.235	.072	.254	.214	.210	.297	7.374
	Mean temperature	56	56	71	69	70	73	72	73	67	58	63	62	66	70	70	60	59	61	62	66	70	72	70	68	74	68	61	59	62	68	68	65.9
	Wind movement	76	74	81	84	75	82	103	74	84	111	60	67	54	41	55	97	67	61	62	53	51	63	59	49	56	76	72	88	59	69	77	2,180

Observations taken at 73.0 a. m. Wind movement corrected to true velocities. For description see April, 1932 report.

Continued from Page 21

SPECIAL STORM NOTES

May 6.—About 1 p. m. a severe hailstorm occurred north of Louisiana, Pike County, in the Salt River and Sugar Creek districts. Stones were large, breaking a number of window panes, and piled up deep on the ground—"that it could be gathered up in a scoop-shovel." Damage was small, chiefly because the hail crossed over lands of small value. Estimated loss about $200.

May 8.—During the late evening of May 8th, quite a severe hailstorm crossed the northern part of Livingston County, in the vicinity of Chula. The storm area approximately was two miles wide and about twenty miles long. Stones were not abnormally large but drifted to considerable depths, in some places as much as two feet deep. Fruit and shade trees were stripped; gardens, and field truck, also some oats and wheat, were considerably damaged. Total loss put at about $10,000.

May 30.—A hailstorm of wide extent occurred in St. Joseph, Mo., and vicinity, from about 2.30 p. m. to 3 p. m., May 30, 1932.

"The storm moved eastward from the Missouri River for a distance approximately six miles and was more than four miles wide in places. Just south of South St. Joseph and in the eastern part of the city and farther eastward the hail was heavy, resulting in much damage to greenhouses and growing truck crops, especially tomato plants. Fruit was knocked from trees, but the trees escaped without serious injuries. At State Hospital No. 2, where the hail was most severe, there was also considerable soil washing as a result of excessive rainfall. Field crops were generally not much injured. The estimated loss caused by the hail amounted to $18,000." O. I. C. St. Joseph.

ERRATA

In report for April, 1932, page 17:
Caruthersville, lowest temperature 40° on 16th.
Fulton, mean maximum temperature 67.9°; monthly mean 56.4°.

Daily Temperatures for May, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	62	71	85	86	83	83	80	79	76	69	75	79	81	91	89	77	76	78	82	85	88	87	87	92	87	81	73	69	74	73	73	79.7
	Minimum	45	40	59	60	57	62	62	56	55	52	64	47	53	60	62	47	47	53	72	50	56	58	55	60	60	64	47	43	55	56	60	55.4
Columbia	Maximum	62	71	85	88	85	86	81	80	68	64	75	76	84	90	87	66	71	75	78	82	82	80	83	90	87	73	66	67	72	77	76	77.6
	Minimum	45	40	59	63	62	65	66	59	55	52	50	47	50	62	60	50	45	49	50	50	59	58	54	60	68	61	49	43	53	55	65	55.0
Fayette	Maximum	61	71	86	88	85	85	81	82	70	65	77	81	88	91	88	69	77	79	82	87	87	83	88	93	88	75	68	71	77	77	75	79.8
	Minimum	42	34	40	56	60	61	64	56	51	52	50	43	46	47	57	47	41	46	44	43	48	57	52	51	55	64	46	40	47	53	57	50.0
Hannibal	Maximum	62	70	84	87	83	84	81	79	62	66	73	75	83	90	86	68	72	74	78	83	86	78	83	90	87	77	65	67	74	77	71	77.3
	Minimum	47	38	59	64	63	67	65	61	56	53	50	49	53	64	64	50	45	48	47	46	58	56	54	57	70	62	51	49	50	60	64	55.5
Jefferson City §§	Maximum	70	65	73	87	89	85	85	82	84	76	65	78	81	87	90	87	73	74	79	80	86	86	84	87	90	87	75	69	69	75	81	80.0
	Minimum	46	39	47	58	60	64	56	60	54	51	49	49	48	56	62	49	45	48	46	49	57	58	54	56	64	64	49	43	50	53	63	53.1
Kirksville	Maximum	65	72	82	83	82	82	78	77	71	69	75	77	85	89	86	78	74	79	79	84	84	81	82	83	88	78	74	70	72	71	68	78.0
	Minimum	42	37	57	61	57	57	60	53	50	50	49	47	54	60	62	45	45	52	50	52	57	53	50	55	60	63	44	42	50	55	57	52.5
Louisiana	Maximum	65	80	85	88	85	85	86	82	76	65	70	75	80	85	85	75	70	75	80	85	87	83	85	87	85	77	72	69	80	85	80	79.6
	Minimum	32	32	54	54	62	60	59	55	57	55	54	43	45	60	60	50	43	40	50	60	54	55	51	48	66	65	50	46	41	50	67	52.2
Macon §§	Maximum	64	73	84	88	86	84	79	78	61	67	74	78	85	91	89	68	74	79	81	86	90	82	87	91	90	75	65	71	76	74	71	78.7
	Minimum	42	39	46	59	60	60	60	54	52	50	50	49	51	53	61	46	46	51	49	50	54	54	50	53	61	64	45	42	46	54	58	51.9
Mexico §§	Maximum	65	71	85	89	85	85	81	82	68	67	75	77	85	91	88	68	72	76	78	83	85	85	85	92	80	75	67	67	74	79	76	78.6
	Minimum	44	36	48	57	60	61	64	56	53	49	48	46	49	55	61	48	41	46	44	44	54	54	47	55	64	64	47	43	48	53	57	51.5
St. Louis(1)	Maximum	61	70	84	87	84	85	79	83	73	67	73	73	81	89	85	71	71	72	77	81	81	78	82	88	81	76	72	68	73	77	83	77.6
	Minimum	51	48	51	65	66	67	68	65	57	55	55	55	54	61	66	53	53	54	53	60	65	59	52	64	70	67	52	49	52	58	61	58.3
Unionville	Maximum	65	70	90	87	82	80	75	75	70	70	75	80	85	90	85	75	75	76	78	77	90	80	85	88	90	80	70	70	75	70	72	78.4
	Minimum	40	36	55	58	55	57	58	52	50	46	47	50	51	60	61	44	45	48	48	47	53	48	48	60	63	60	44	40	48	58	56	51.2
Warrenton	Maximum	66	69	83	88	85	83	81	83	78	65	74	75	83	91	87	82	72	75	79	85	85	80	85	89	84	77	72	67	75	76	77	79.1
	Minimum	46	40	52	60	61	62	65	61	58	51	50	51	51	56	63	49	45	48	45	54	59	55	52	59	67	64	51	43	49	53	59	54.2
Southeast Lowlands																																	
Campbell	Maximum	73	72	82	84	85	88	83	88	85	70	76	80	81	92	87	79	76	75	87	70	84	92	94	93	88	90	85	76	77	88	93	83.0
	Minimum	43	38	42	52	49	63	64	60	59	50	46	45	44	50	52	56	54	48	49	58	63	59	55	57	63	64	60	49	45	46	50	52.7
Caruthersville	Maximum	79	81	69	81	87	85	86	84	82	86	79	75	77	81	89	87	85	74	74	76	77	85	88	88	86	88	80	83	72	85	89	81.9
	Minimum	56	52	45	50	58	58	64	67	66	62	53	49	52	56	57	62	63	60	56	56	64	64	64	65	67	67	64	56	54	55	61	58.8
Doniphan	Maximum	65	78	85	94	90	88	88	92	88	77	83	75	80	95	93	79	83	81	86	85	88	79	94	95	92	93	82	83	75	94	91	85.5
	Minimum	54	52	43	52	51	65	65	60	58	51	45	45	44	60	64	55	50	41	40	57	66	61	57	58	65	67	63	55	45	45	58	54.6
Jackson	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	42	34	42	49	53	61	61	60	57	51	44	41	40	45	52	55	45	41	39	52	63	59	46	56	63	61	61	46	41	43	52	50.2
Poplar Bluff	Maximum	73	71	81	85	84	85	81	86	85	71	78	82	84	89	86	71	76	76	81	79	82	86	86	86	83	80	84	76	71	81	81	80.6
	Minimum	45	38	44	52	50	67	67	61	60	52	48	45	47	50	54	57	49	46	45	56	64	61	55	60	64	65	62	50	46	46	52	53.5
Sikeston	Maximum	78	70	80	84	85	85	84	81	82	80	71	71	78	88	88	88	73	72	80	79	80	82	84	86	85	83	80	79	79	80	88	80.7
	Minimum	47	42	47	55	61	63	63	62	62	55	53	47	50	54	59	61	54	50	50	59	65	63	55	65	66	62	64	51	48	52	63	56.4
Cairo, Ill	Maximum	68	68	77	83	83	84	80	83	81	65	71	72	77	85	85	76	71	71	77	76	82	80	82	85	85	82	78	66	69	78	87	77.6
	Minimum	53	48	51	63	61	66	68	64	62	57	52	51	53	58	64	60	58	53	51	63	67	65	57	67	68	64	63	53	51	56	64	59.1
Ozark Plateau																																	
Arcadia	Maximum	66	70	80	85	81	81	76	83	77	66	70	75	79	86	82	75	70	71	75	78	77	78	81	83	77	75	74	66	68	76	77	76.1
	Minimum	44	31	45	54	51	62	62	55	55	52	46	44	39	49	53	49	38	37	34	45	58	56	45	50	60	63	56	45	39	43	49	48.7
Aurora	Maximum	67	70	83	84	79	80	77	83	80	70	76	78	83	86	80	71	72	74	77	81	79	83	84	83	80	75	70	69	68	80	82	77.5
	Minimum	45	45	57	56	58	64	63	62	55	48	46	46	48	60	66	48	44	48	49	54	57	57	59	57	61	58	50	45	51	52	62	53.9
Birchtree	Maximum	71	70	80	87	83	84	79	84	80	71	76	78	80	86	84	75	70	71	74	82	76	84	86	86	82	76	74	70	69	70	80	78.0
	Minimum	50	56	50	56	55	63	67	57	59	50	47	46	47	49	50	54	46	40	44	56	62	60	56	57	61	63	56	50	44	45	46	53.0
Eldon §§	Maximum	67	72	85	87	85	85	85	87	73	63	77	82	86	85	88	70	74	78	83	79	85	85	84	85	74	73	51	71	76	81	76	78.5
	Minimum	46	40	42	44	58	62	66	60	56	51	50	49	53	54	58	49	44	46	45	48	53	58	55	56	58	64	50	45	45	53	56	52.1
Farmington	Maximum	65	74	83	87	82	81	76	87	78	65	71	74	82	88	88	74	71	73	79	78	83	81	84	88	81	81	77	68	72	81	78	78.4
	Minimum	46	35	49	58	56	57	64	59	58	51	51	54	43	55	64	51	43	42	42	54	59	59	48	54	63	59	60	44	45	45	54	52.3
Koshkonong	Maximum	74	70	82	86	83	84	78	83	79	69	76	79	82	88	85	75	74	69	80	79	77	85	87	87	91	79	..	79	71	81	88	[a]80.0
	Minimum	48	41	51	59	58	64	62	63	60	53	50	53	53	57	61	58	49	50	48	58	66	62	60	64	66	74	..	50	50	52	60	[a]56.7
Lebanon	Maximum	65	69	83	84	81	78	76	84	78	65	78	79	85	88	83	67	73	78	80	83	83	85	88	86	87	73	70	70	73	81	77	78.4
	Minimum	40	36	52	66	57	69	64	60	55	45	42	40	44	56	57	40	38	40	60	47	53	58	53	50	62	57	47	41	47	50	56	51.0
Mountain Grove	Maximum	69	69	85	84	80	81	75	86	78	69	79	81	87	88	84	78	75	77	79	83	78	85	87	85	82	74	76	75	69	77	82	79.3
	Minimum	43	48	49	57	55	61	62	58	55	50	43	42	45	59	60	49	39	45	42	48	61	57	54	60	63	59	54	44	49	52	60	52.4
Neosho	Maximum	69	66	84	82	81	77	81	85	80	73	71	86	86	89	87	75	73	75	82	78	78	84	89	86	83	88	72	77	76	84	82	80.0
	Minimum	40	50	42	56	64	63	62	65	60	45	41	40	43	49	55	49	35	49	41	45	53	53	55	55	60	61	50	47	50	52	66	51.5
Rolla	Maximum	68	71	84	86	83	85	80	82	81	66	74	75	81	88	85	80	70	72	76	80	80	81	84	85	83	77	70	66	70	77	78	78.0
	Minimum	45	39	54	62	61	65	68	60	62	53	47	49	48	56	63	49	46	45	44	52	59	59	56	55	67	65	53	44	49	54	59	54.5
Springfield	Maximum	63	68	81	82	76	79	75	81	72	64	73	76	81	84	79	66	70	73	76	79	78	82	84	82	77	74	69	67	66	76	80	75.3
	Minimum	49	46	55	62	60	66	63	62	56	50	47	50	54	61	62	48	49	51	51	57	61	62	60	63	64	58	50	46	52	54	59	55.7
Southwest Plain																																	
Appleton City	Maximum	65	65	83	84	80	81	78	82	75	63	75	81	86	88	84	68	73	78	79	82	84	84	87	84	85	75	70	68	68	81	76	77.8
	Minimum	45	49	54	58	59	64	61	54	55	51	48	50	52	58	60	47	47	50	49	52	59	61	58	59	63	60	47	44	54	55	60	54.3
Clinton	Maximum	62	60	82	82	75	75	76	77	77	64	74	83	90	88	80	77	76	82	80	82	83	86	90	90	80	77	75	73	72	70	70	77.7
	Minimum	43	45	62	55	55	62	60	53	55	50	47	50	55	58	55	55	44	46	50	50	60	62	57	58	62	60	48	46	53	58	60	54.0
Harrisonville §§	Maximum	68	65	84	85	80	82	79	81	70	62	77	82	88	89	81	70	71	76	78	82	84	82	87	89	86	73	68	68	64	78	76	77.6
	Minimum	43	47	51	56	58	61	59	52	53	49	47	50	53	57	58	43	44	52	53	53	58	61	59	61	62	59	46	42	43	55	63	53.2
Lamar §§	Maximum	69	68	84	86	84	83	77	86	79	69	75	79	86	89	83	68	78	82	82	84	85	90	89	90	90	78	70	71	73	82	84	80.4
	Minimum	43	46	52	59	60	63	63	57	55	48	47	46	48	52	60	48	44	44	49	50	52	61	60	60	63	59	50	47	48	54	58	53.1
Lamonte	Maximum	63	72	84	85	82	80	80	81	70	61	74	79	85	85	86	84	74	78	81	83	85	86	85	85	86	74	63	69	74	79	67	78.1
	Minimum	42	41	53	58	58	61	62	53	53	49	49	45	52	58	58	46	44	49	47	51	58	52	52	60	65	61	47	41	53	55	60	52.7
Marshall	Maximum	65	74	84	87	83	84	81	80	78	75	74	77	85	90	87	77	73	76	73	82	85	81	85	90	87	81	73	68	72	73	75	79.2
	Minimum	44	38	34	59	60	60	63	55	54	52	49	49	55	61	62	46	46	53	50	52	59	59	55	61	65	62	48	42	49	51	53	51.3
Nevada	Maximum	66	67	83	83	80	79	76	82	75	64	75	79	85	87	80	69	73	78	79	82	84	85	87	87	86	71	70	71	69	83	76	77.8
	Minimum	46	51	57	58	60	65	63	54	54	47	47	47	51	61	60	47	42	50	58	50	56	61	60	64	64	58	48	44	51	54	62	54.5
Warrensburg	Maximum	63	68	84	84	80	84	79	81	72	62	76	82	86	89	85	74	75	80	85	85	88	85	91	90	90	78	70	72	74	80	80	79.7
	Minimum	43	42	50	58	57	62	61	52	52	51	49	46	46	58	59	45	47	51	50	53	57	59	57	61	64	60	46	42	54	54	57	53.0
Warsaw	Maximum	63	71	87	89	84	85	83	83	77	66	78	82	88	91	88	74	77	81	82	87	89	90	91	91	88	79	72	74	75	84	80	81.6
	Minimum	46	41	54	61	61	65	64	56	57	52	46	41	45	57	61	49	40	44	43	45	49	54	57	55	65	62	49	42	52	54	67	52.7
Northwest Plateau																																	
Chillicothe	Maximum	66	75	86	86	85	84	79	79	64	67	76	83	89	93	85	69	78	82	84	87	88	81	90	93	92	80	65	73	77	70	73	80.0
	Minimum	41	35	56	58	53	58	58	50	49	47	47	41	50	60	61	42	41	50	47	43	53	55	53	57	65	60	43	37	51	54	56	50.7
Grant City	Maximum	63	66	80	82	79	74	73	73	68	65	73	80	86	88	81	63	72	75	78	84	78	79	82	78	83	80	62	65	70	65	77	74.9
	Minimum	40	43	57	59	58	61	62	50	51	47	51	51	57	60	54	40	40	51	52	56	55	56	56	63	64	59	43	41	54	54	55	52.9
Kansas City	Maximum	64	66	84	84	80	81	76	78	67	63	75	79	85	89	81	67	71	77	78	81	83	83	88	86	86	72	64	67	65	74	79	76.5
	Minimum	47	53	61	64	63	61	60	57	56	52	53	56	65	68	50	45	55	57	58	60	62	63	63	67	68	54	47	46	57	56	61	57.6
Kidder	Maximum	63	68	83	86	82	80	76	77	65	65	73	80	86	90	83	62	73	77	81	84	85	80	87	88	87	81	63	71	73	67	76	77.2
	Minimum	40	44	57	59	54	62	59	50	51	49	49	50	54	64	58	42	46	52	51	50	58	58	54	61	61	59	42	39	53	56	56	52.8
Lexington	Maximum	66	70	85	87	81	84	79	80	77	66	78	83	88	91	86	73	76	80	83	86	89	85	91	91	89	80	73	73	72	73	77	80.4
	Minimum	44	46	58	62	58	63	61	55	55	53	51	50	57	64	62	45	48	54	54	52	59	61	58	64	66	62	47	43	45	56	60	55.3
Maryville	Maximum	65	70	84	85	82	80	71	79	69	69	78	83	90	92	86	70	76	80	85	86	87	82	90	84	87	80	61	72	70	66	82	78.7
	Minimum	39	41	56	58	57	65	56	46	49	48	46	43	50	50	51	38	42	50	51	48	49	58	52	61	60	57	40	37	52	50	57	50.2
Oregon	Maximum	68	70	84	84	82	82	75	79	65	69	78	84	90	91	87	71	76	80	86	88	90	87	91	87	87	85	64	74	68	63	84	79.6
	Minimum	41	49	58	62	63	65	58	51	52	49	48	51	57	63	54	40	49	54	56	54	56	61	59	64	63	59	41	41	54	55	59	54.4
St. Joseph	Maximum	66	67	83	84	80	80	72	78	64	67	76	81	89	90	82	68	74	77	81	84	86	84	88	84	87	73	62	70	67	62	84	77.1
	Minimum	44	51	59	65	63	62	58	54	53	50	51	47	60	65	49	43	48	56	56	52	56	61	60	66	68	50	44	43	54	56	61	55.0
Trenton	Maximum	66	72	84	83	82	81	76	78	62	70	75	83	87	87	91	79	74	78	80	85	86	81	86	89	89	78	64	71	73	68	76	78.5
	Minimum	43	38	58	60	55	60	61	52	52	49	49	49	53	51	51	43	45	50	48	47	54	57	55	59	65	61	44	41	54	56	57	52.2

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 6-21-32—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

O. R. ROGERS, Meteorologist, Temporarily in Charge

VOL. XXXVI COLUMBIA, MO., JUNE, 1932 No. 6

GENERAL SUMMARY

June, 1932, was warmer and wetter than normal. Rain fell somewhere in the State on every day except one, the 23d. Following a dry April and a drier May, when but one-half the usual rainfall was received, the generous and general showers of this June were of especial economic importance.

The rainfall was unevenly distributed. The western and northern parts of the State were liberally and even excessively watered, while central and eastern counties located south of the Missouri River generally received much less than normal rainfall. Thirteen counties in the west and north received more than eight inches rainfall, while about eight counties in the southeast received less than one-fourth so much. But due in part to mellow, well cultivated soil and deeply rooted plants, and in part to the character and distribution of the rainfall, there was general and material improvement in crop conditions, even in the drier counties.

TEMPERATURE

The monthly mean temperature, 69 stations reporting, was 75.2°, and 2.0° warmer than the 40 year average. The highest mean temperature was 80.2° at Caruthersville. The lowest mean temperature was 72.4° at Grant City and Arcadia. The highest temperature was 103° at Campbell on the 24th; the lowest was 47° at Kirksville on the 5th. Day temperatures reached 100° at six stations on one to three days; only one station, Farmington, being outside the southeast lowlands. Readings of 90° or higher were quite general on ten days, ranging from two days at some northern stations to twenty or more days in the southeast.

PRECIPITATION

The average precipitation for the State, 123 stations reporting, was 4.95 inches, 0.08 inch more than the 60 year average. The rainfall was above normal at 39 western and northern stations having ten or more years' record, and below normal at 50 such stations in central and eastern parts of the State. Joplin received 14.12 inches, Springfield, 10.08 inches; these amounts were the heaviest recorded in the Ozarks since 1928. Caruthersville had the least monthly rainfall, 1.57 inches, and only 37 per cent of the normal. The greatest rainfall in any twenty-four consecutive hours was 6.23 inches at Springfield, on the 26-27th. The average number of days with 0.01 inch or more precipitation was 10.

MISCELLANEOUS PHENOMENA

Fogs, dense.—At Hannibal on the 2d, at Kansas City and St. Joseph on the 22d.

Hail.—Heavy at Buffalo on 13th, "severe damage to several fields"; light to moderate, with little damage, St. Louis and Aurora on 1st, Jefferson City on 19th, Warrensburg on 20th and 30th.

Halos.—Solar, 1st, 12th, 13th, 16th, 17th, 19th, 20th, 23d, 24th, and 26th. Lunar, 12th.

Thunderstorms.—Occurred somewhere in the State every day, except 23d. More or less general on 2d, 3d, 7th, 8th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 25th, and 26th.

Tornadoes.—Near Rushville, Mo. at about 3 p. m. of 9th, observed over Missouri River and waste lands; Bean Lake, Mo. at about 8 p. m. to 8.30 p. m. of 13th. This storm touched earth several times, doing $8,000 damage west of DeKalb.

Windstorms.—Thunderstorm squalls occasioned some local damage on several dates, Mexico on 4th, Gorin, Kirksville and DeKalb on the 17th, Oregon on the 18th, Fulton, Farmington, Salem, Appleton City, and Chillicothe on 19th, and at Farmington and Versailles on the 20th. The squalls were rather severe and damaged trees, wires and poles, and outbuildings at Oregon, Kirksville, and Fulton. At Fulton, damage estimated at $5,000.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity 7 a. m.	noon	7 p. m.	Sunshine Total hours	Percentage of possible	Wind Total movement miles	Average hourly velocity	Max. velocity Miles per hour	Direction	Date
Columbia	29.87	83	60	67	324	73	4,463	6.2	24	w.	19
Hannibal	29.89	81	59	..	...	..	4,942	6.9	27	sw.	4
Kansas City	29.87	77	52	56	322	72	5,431	7.5	30	nw.	8
St. Joseph	29.86	83	59	63	319	71	4,635	6.4	27	nw.	2
St. Louis	29.88	74	52	54	296	66	6,226	8.6	35	sw.	2
Springfield	29.89	82	61	67	302	69	5,745	8.0	30	nw.	20
Cairo, Ill.	29.89	80	56	59	...	..	5,153	7.2	25	sw.	27
Keokuk, Iowa	29.90	75	55	62	349	78	4,325	6.0	38	w.	17

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR JUNE

Year	Temperature Mean	Departure	Highest	Lowest	Precipitation Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	Number of days With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**73.2**	.....	**103**	**41**	**4.87**	.....	**4.63**	**0**	**9**	**14**	**10**	**6**
1888	72.6	− 0.6	103	37	6.20	+1.33	....	0	7	..	..	..
1889	70.7	− 2.5	100	38	4.66	−0.21	....	0	6	..	..	..
1890	77.2	+ 4.0	105	50	2.59	−2.28	....	0	6	..	..	..
1891	73.3	+ 0.1	103	46	6.94	+2.07	....	0	13	..	..	..
1892	74.5	+ 1.3	100	38	3.18	−1.69	4.25	0	7	15	9	6
1893	72.6	− 0.6	98	42	4.61	−0.26	3.60	0	9	12	12	6
1894	74.5	+ 1.3	105	30	3.92	−0.95	3.48	0	7	16	11	3
1895	73.2	0.0	100	42	5.77	+0.90	3.85	0	10	12	11	7
1896	72.5	− 0.7	101	45	8.32	+3.45	5.60	0	9	12	11	7
1897	73.6	+ 0.4	102	38	6.18	+1.31	6.40	0	12	9	14	7
1898	75.3	+ 2.1	100	42	5.88	+1.01	6.05	0	9	13	12	5
1899	74.3	+ 1.1	101	42	3.87	−1.00	4.48	0	9	15	10	5
1900	73.3	+ 0.1	103	44	4.79	−0.08	5.06	0	10	12	12	6
1901	77.9	+ 4.7	110	40	2.13	−2.74	2.99	0	6	18	10	2
1902	70.9	− 2.3	100	37	6.57	+1.70	6.08	0	12	11	10	9
1903	67.3	− 5.9	95	36	3.25	−1.62	4.90	0	9	15	9	6
1904	70.5	− 2.7	93	45	6.42	+1.55	5.41	0	11	12	12	6
1905	75.2	+ 2.0	103	42	3.09	−1.78	4.80	0	7	15	10	5
1906	72.7	− 0.5	101	40	4.95	+0.08	4.07	0	10	15	9	6
1907	71.2	− 2.0	97	40	5.84	+0.97	3.90	0	11	14	10	6
1908	72.3	− 0.9	98	43	6.30	+1.43	5.30	0	11	13	10	7
1909	73.9	+ 0.7	98	49	5.21	+0.34	4.12	0	11	11	13	6
1910	70.4	− 2.8	99	38	3.92	−0.95	3.70	0	8	16	7	7
1911	78.9	+ 5.7	112	43	1.78	−3.09	2.07	0	6	18	8	4
1912	69.5	− 3.7	100	42	4.78	−0.09	5.60	0	9	14	8	8
1913	75.4	+ 2.2	107	33	2.57	−2.30	3.05	0	6	18	8	4
1914	79.3	+ 6.1	106	43	2.37	−2.50	3.50	0	5	18	7	5
1915	70.8	− 2.4	98	38	6.51	+1.64	4.86	0	12	11	10	9
1916	70.0	− 3.2	100	42	6.99	+2.12	6.75	0	10	14	9	7
1917	71.0	− 2.2	103	35	3.78	−1.09	4.19	0	8	19	7	4
1918	77.2	+ 4.0	110	48	3.15	−1.72	4.28	0	7	17	8	5
1919	75.0	+ 1.8	104	44	5.59	+0.72	4.21	0	11	14	10	6
1920	72.7	− 0.5	104	41	2.35	−2.52	3.74	0	6	18	7	5
1921	76.6	+ 3.4	105	44	5.71	+0.84	4.14	0	12	12	10	8
1922	76.5	+ 3.3	108	43	1.66	−3.21	2.30	0	5	19	8	3
1923	73.5	+ 0.3	103	45	5.48	+0.61	4.42	0	11	14	9	7
1924	72.5	− 0.7	101	38	7.39	+2.52	4.39	0	14	12	12	6
1925	76.5	+ 3.3	103	46	6.10	+1.23	8.14	0	9	15	10	5
1926	70.9	− 2.3	101	37	3.62	−1.25	2.94	0	8	15	9	6
1927	70.3	− 2.9	99	41	5.77	+0.90	5.23	0	10	15	7	8
1928	67.7	− 5.5	91	40	11.17	+6.30	7.34	0	15	8	11	11
1929	71.3	− 1.9	99	39	5.77	+0.90	6.25	0	10	16	8	6
1930	72.4	− 0.8	109	36	3.83	−1.04	5.20	0	7	18	8	4
1931	77.1	+ 3.9	107	40	2.94	−1.93	4.90	0	6	19	8	3
1932	75.2	+ 2.0	103	47	4.95	+0.08	6.23	0	10	12	12	6

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Climatological Data for June, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	76.7	+ 3.7	96	17	56	4	31	3.92	−1.57	1.85	0	11	18	2	10	sw.	O. K. Benecke
Clifton Hill	Randolph	731	33	....	.....	..	..	55	13†	..	3.10	−1.79	1.20	0	10	14	9	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	75.1	+ 2.3	95	17	60	28	27	6.28	+1.52	1.92	0	11	9	10	11	sw.	U. S. Weather Bureau
Downing	Schuyler	876	11	73.7	+ 2.3	95	30	57	10	30	3.95	−1.51	1.23	0	12	19	10	1	e.	James Taylor
Elsberry	Lincoln	449	1	75.2	.....	98	30	53	12	35	2.80	.....	0.75	0	9	6	5	19	se.	Ray E. Mills
Fayette	Howard	661	52	75.3	+ 2.5	97	17	55	11	37	2.34	−2.45	0.65	0	8	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	75.0	+ 1.8	96	17	58	2†	29	5.55	+0.88	1.55	0	8	16	8	6	se.	Chamber of Commerce
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	5.52	+1.23	1.51	0	8	12	9	9	sw.	J. W. Pulliam
Hannibal	Marion	534	49	75.0	+ 2.5	94	17	57	2	28	6.71	+2.81	1.68	0	12	9	15	6	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	75.5	+ 1.7	99	18	55	21	34	3.10	−1.17	1.20	0	13	12	12	6	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	73.0	+ 1.3	93	17†	47	5	43	4.33	−0.38	1.54	0	6	20	5	5	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	38	73.5	+ 1.4	96	30	53	10	31	7.15	+2.96	2.07	0	10	18	8	4	s.	Stark Bros. Nurseries
Macon	Macon	875	33	74.3	+ 1.9	95	17	58	1†	33	6.58	+1.69	1.80	0	12	13	10	7	e.	W. C. Brown
Mexico	Audrain	800	43	74.4	+ 1.2	97	17	57	28	34	5.10	+0.02	1.35	0	10	20	1	9	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	7.90	+2.83	1.53	0	10	19	3	8	n.	J. S. Conway
St. Charles	St. Charles	456	44	76.7	+ 2.8	98	17	58	2	32	2.67	−1.45	1.19	0	11	12	12	6	n.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	77.6	+ 2.6	94	30	64	9	23	2.45	−1.37	0.75	0	13	10	15	5	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	77.2	+ 2.3	94	17†	63	1	23	1.65	−2.02	0.31	0	12	16	13	1	w.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	5.32	+0.31	1.70	0	12	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	73.9	+ 1.3	93	30	56	2	27	6.66	+2.18	1.53	0	15	15	13	2	s.	Frank Hall
Unionville	Putnam	1,062	39	73.8	+ 2.5	95	30	55	15	31	4.22	−0.87	1.91	0	12	19	3	8	sw.	Geo. W. Davis
Warrenton	Warren	816	50	75.7	+ 2.3	96	17	57	2	32	2.01	−2.21	0.73	0	9	6	19	5	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	74.5	+ 2.0	94	30	58	2	26	5.51	+1.38	1.41	0	13	5	13	12	e.	U. S. Weather Bureau
Section means and	extremes	.....	..	75.1	+ 2.1	99	18	47	5	43	4.56	+0.05	2.07	0	11	14	9	7	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	79.0	.....	103	24	54	12	40	2.62	−3.14	0.92	0	9	16	10	4	s.	Jeff. King
Caruthersville	Pemiscot	265	36	80.2	+ 1.8	100	22	60	11	34	1.57	−2.45	0.75	0	5	12	11	7	s.	Sam Smith
Doniphan	Ripley	344	28	78.8	+ 3.8	100	18	54	12	37	3.23	−1.36	1.03	0	6	18	6	6	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	76.8°	+ 2.7	100	18	51	11†	41	4.17	−0.55	1.73	0	8	3	11	16	s.	John G. Putz
Marble Hill	Bollinger	470	37	77.5	+ 3.5	102	22	51	6	43	3.59	−1.12	1.08	0	7	6	22	2	w.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	1.99	−3.04	1.33	0	7	17	11	2	sw.	John A. Spence
Poplar Bluff	Butler	339	27	77.6	+ 2.2	98	23	56	11†	32	3.23	−1.44	1.55	0	7	17	12	1	s.	J. H. Wolpers
Sikeston	Scott	318	25	79.0	+ 4.7	98	18†	57	11	29	2.92	−1.31	1.58	0	6	0	14	16	n.	John A. LaFont
Cairo, Ill	Alexander, Ill	358	58	78.2	+ 1.9	97	22	63	9	25	1.78	−2.05	0.70	0	11	3	13	14	s.	U. S. Weather Bureau
Section means and	extremes	....	..	78.1	+ 2.9	103	24	51	6†	43	2.79	−1.83	1.73	0	7	10	12	8	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	72.4	+ 0.6	93	18	49	11†	33	2.34	−2.35	0.62	0	9	19	7	4	w.	Arcadia College
Aurora	Lawrence	1,370	31	74.4	+ 1.1	91	19†	58	1†	29	9.04	+3.78	3.15	0	14	13	6	11	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	76.2	+ 3.5	95	18†	56	1	32	2.91	−1.67	1.20	0	4	20	9	1	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	73.0	.....	91	18	50	1	30	9.61	.....	1.99	0	16	15	11	4	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	9.20	.....	1.85	0	12	5	19	6	s.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	28	74.8	+ 2.1	97	8	52	15	36	7.67	+1.63	1.82	0	13	7	18	5	sw.	H. E. Dean
Eldon	Miller	934	37	75.5	+ 2.5	96	17†	58	12	30	2.84	−1.78	0.94	0	9	4	15	11	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	75.9	+ 3.1	101	18	52	12	38	2.06	−2.59	1.00	0	11	13	16	1	sw.	Robert Forsyth
Goodland	Iron	1,000	39	74.3	+ 2.4	96	8	49	12	39	3.58	−0.68	1.32	0	10	21	5	4	s.	F. M. Adams
Greenville	Wayne	381	23	76.1	+ 2.5	99	18	51	12	37	3.26	−1.52	0.78	0	7	22	6	2	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	6.06	+0.04	2.08	0	8	18	1	11	.....	A. W. Madison
Koshkonong	Oregon	958	31	77.8	+ 3.4	97	2	61	1†	31	2.26	−2.45	0.56	0	9	8	11	11	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	73.1	+ 0.4	93	17†	52	4	35	3.88	−1.37	1.23	0	9	14	10	6	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	74.8	+ 1.2	91	17	59	15	25	8.89	+3.55	1.92	0	11	13	13	4	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	74.4	+ 2.6	92	8†	56	12	30	8.19	+3.41	2.16	0	14	8	20	2	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	75.1	+ 1.3	91	30	56	15	33	6.02	+0.21	1.82	0	9	10	18	2	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	75.0	+ 2.0	94	17	59	14	25	3.58	−0.68	1.45	0	13	3	12	15	s.	F. H. Lane
Salem	Dent	1,173	28	75.3	+ 2.9	96	18	53	12	33	4.18	−0.52	2.24	0	7	14	14	2	s.	E. E. Martin
Seligman	Barry	1,542	31	73.2	+ 0.8	91	8†	54	14†	32	6.16	+1.81	2.20	0	10	11	12	7	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	72.6	+ 0.9	87	18†	53	12	30	8.24	+2.84	3.79	0	10	20	6	4	s.	Ira H. Hailey
Springfield	Greene	1,324	54	74.2	+ 1.7	89	23	59	13	21	10.08	+5.40	6.23	0	15	14	13	3	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	75.4	.....	96	18	57	28	28	4.56	.....	1.25	0	13	6	15	9	sw.	I. M. Wilson
Section means and	extremes	.....	..	74.7	+ 1.9	101	18	49	11†	37	5.66	+0.37	6.23	0	11	12	12	6	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	75.0	+ 0.6	93	7	60	1†	26	3.31	−1.94	0.86	0	14	4	26	0	se.	W. G. Bigelow
Clinton	Henry	765	39	75.3	+ 1.5	95	29	60	1†	28	4.14	−0.88	1.25	0	11	12	18	0	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	74.8	+ 1.7	93	7†	58	11	28	6.22	+1.59	2.56	0	9	3	10	17	s.	John H. Patterson
Lamar	Barton	980	44	75.0	+ 0.8	91	17†	60	1†	30	7.46	+2.21	2.30	0	12	11	14	5	se.	Jesse A. Mann
Lamonte	Pettis	867	31	74.1	+ 0.1	87	7	59	10†	26	6.00	+1.17	1.53	0	13	20	7	3	se.	J. E. Wheeler
Marshall	Saline	779	45	75.2	+ 2.0	96	17	59	28	30	3.82	−0.81	1.68	0	7	14	15	1	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	74.6	+ 1.1	91	17	57	5	26	5.69	+0.17	1.88	0	11	10	11	9	sw.	George A. Kaupp
Warrensburg	Johnson	878	45	74.6	+ 0.7	92	7†	51	4	35	6.23	+1.20	1.94	0	11	14	11	5	sw.	E. A. Markey
Warsaw	Benton	687	31	76.2	+ 2.4	99	18	57	28	31	5.11	−0.27	1.06	0	13	15	3	12	e.	Everett Martin
Section means and	extremes	.....	..	75.0	+ 1.2	99	18	51	4	35	5.33	+0.27	2.56	0	11	11	13	6	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	73.0	+ 1.0	93	30	57	28	32	5.45	+0.63	3.03	0	8	15	12	3	se.	A. S. Cumming
Chillicothe	Livingston	779	23	74.7	+ 1.8	98	29	55	11	38	5.57	−0.27	2.18	0	12	13	11	6	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	74.0	+ 2.5	94	29	58	3†	25	8.77	+3.83	3.00	0	13	10	12	8	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	73.4	+ 1.5	93	29	56	28	33	4.58	+0.08	1.40	0	12	15	11	4	s.	Fred L. Stiff
Grant City	Worth	1,134	28	72.4	+ 1.6	92	23	54	1	24	5.32	+0.41	1.70	0	10	13	16	1	se.	W. P. Spillman
Kansas City	Jackson	963	43	76.5	+ 2.9	94	30	62	19	21	2.73	−2.26	1.17	0	11	7	18	5	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	73.8	+ 2.0	93	29†	59	11†	30	3.40	−1.60	1.31	0	9	12	13	5	s.	Roscoe L. Terry
King City	Gentry	1,095	6	..	.....	..	..	..	..	..	6.25	+0.83	1.60	0	8	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	77.3	+ 4.4	97	29	60	28	30	4.41	−0.71	0.82	0	9	15	15	0	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	73.2	+ 3.4	95	30	55	20	33	6.29	+1.20	3.37	0	10	14	7	9	e.	J. R. Brink
Oregon	Holt	1,048	76	75.0	+ 2.8	96	29	58	20	31	5.19	+0.18	2.27	0	11	17	9	4	se.	Mina Wright
St. Joseph	Buchanan	967	24	74.8	+ 1.0	94	29	60	28	26	6.09	+1.11	1.69	0	14	13	11	6	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	73.2	+ 1.4	94	30	58	20†	29	3.11	−1.99	0.83	0	10	9	11	10	se.	Albert Volker
Trenton	Grundy	822	36	75.0	+ 2.8	95	29	58	11	34	4.82	−0.18	1.16	0	11	20	9	1	s.	W. H. Estes
Section means and	extremes	.....	..	74.3	+ 2.2	98	29	54	1	38	5.14	+0.09	3.37	0	11	13	12	5	s.	
State means and	extremes	.....	..	75.2	+ 2.0	103	24	47	5	43	4.95	+0.08	6.23	0	10	12	12	6	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for June, 1932

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi	.63	.05	1.29	.22	.41			.36							2.00			2.67	.05	1.42							.77					9.87
Boonville	Missouri	.37	.20	.60	.34	.02								T.	.02	.05				.28	.80	.02					1.00					3.70
Bowling Green	Mississippi	.41	.44	.48	.17		.08		.26							.38			.35		1.23						1.15					4.95
Brunswick	Grand	.48		.45	.12									.12	.05	.08			.15	.17	.38	.07					1.85					3.92
Canton	Mississippi	.16	.47	.74	.73			.21								.11		.56		.92											.16	5.07
Clifton Hill	Chariton	.01		.55									.40	.08	.02				.13	.25	.08						1.20	.38				3.10
Columbia***	Missouri	.14	1.07	1.25	.06		T.				T.		.45	.02	T.	.77	T.			1.33	.13	T.					1.05	.01			T.	6.28
Downing	Mississippi		.15	1.23	.10	.09		.72	.68						.15			.03	.17	.41	.08					.14					3.95
Edina	do	.62		1.23	.42	1.16			.42						.18	T.			.90	T.	1.44							.45			T	6.82
Elsberry	do	.75	.37	.10				.07	.04						.18				.20	T.	.74							.35				2.80
Fayette	Missouri	.32	.53	.19										.05	.07	.03				.50	.65							T.				2.34
Fulton	do		.28	1.45	.13	.05										T.	.36			.48	1.25							1.55				5.55
Gorin	Mississippi		1.51	.30	.10			.64							1.12				.70	1.04							11					5.52
Hannibal***	do	.37	1.00	.75	.23			.24							.52	.03		.31	1.37	.95	.06						.88			T.		6.71
Hermann	Missouri	.12	.44	.12	.22				.03							1.80				.72	1.00	.09				.30		.45				5.29
Jefferson City	do	.02	.23	.27	.19	.30									.05	.03	.02			.15	1.20	.12				.04		.48				3.10
Kahoka	Mississippi	.60		.85	.70				.35						.36				.84		.56											4.26
Kirksville	do		.05	.33	.05			.86											1.54	1.50												4.33
LaBelle	do	1.12	.02	1.15	.67	.85			.20							.20	.09		.77	.05	.95						2.00					8.07
Laddonia	do	.75	.20	1.28	.15	.30			.66											.66	.68						.80					5.48
Louisiana	do	1.00	.15					.50	.65						.03	.20		.90	.30	1.35						2.07					7.15
Lucerne	Grand	.34		1.55		.02									.28	.16			.03		.26						2.25					4.89
Macon	Chariton	.62		1.80	.60	.31		.12	.10					.08		.65			1.05	.08	.33						.84					6.58
Memphis	Mississippi	.63		1.80	.70	T.			.60							.20			T.	T.	.60						.65					5.18
Mexico	do	.07	.16	1.35	.50	.05		.35								.18				.60	.61						1.23					5.10
Milan	Grand	.34		2.05	.55						T.			.15	.18				.47		1.12						1.24					6.10
Monroe City	Mississippi	.35	1.53	1.40	.94			1.07	.28						T.				.77	.07	.41					1.08						7.90
New London	do	1.68	.56	2.47	.31	.26			.31							.24			1.14		1.48							.75					9.20
Pacific	Meramec	.06	.64		.20				.84							.60				.15	.75	.05						.55					3.84
Palmyra	Mississippi	.74	.30	1.68	.47				.12						.21	.34			1.93		1.75							.97			.09		8.60
Paris	do		.56	2.50	.70	.42			.94										.45	.09	.27							1.46					7.39
Perry	do	.60	.90	2.55	.15				1.10												T.	.79						1.35					7.44
Philadelphia	do	.30	.07	1.87	.17	T.			1.02							.90			3.24		1.05							1.36					9.98
St. Charles	Missouri	.16	.11	.10				T.	.01						.05	.07				.04	.83	.08				.03		1.19					2.67
St. Louis (1)***	Mississippi	.24	.03	.15			.14	.01	.42						.29	.02				.38	.37	.05				T.	.31	.04					2.45
St. Louis (2)*	do	.28	.01	.20				.01	.31						.05	.05				.25	.16	.04				T.	.24	.05					1.65
Shelbina	do	.09	.07	1.70	.24	.27	T.		.27						.01	.08			.85	.07	.53							1.14					5.32
Steffenville	do	.10	.70	.65	.43	.10		.05	.35						.62	.05		1.22	1.53		.07						.54	.05		.20			6.66
Troy	do	.30	.47	.04					.08							.33				.18	1.05							.37					2.82
Union	Meramec	.05	.23		.43				.22							.13				.12	1.45	.29						.94					3.86
Unionville	Chariton		.80	.40	.03	.10	.03		.10						1.85	.06			.25	.20						.30	.10					4.22
Valley Park	Meramec	.20	.24	.03	.35		T.		.08							.02	.15			.02	.87	.05						.52	T.				2.53
Warrenton	Mississippi	.26	T.	.03				.11	.05						.05	.12				.13	.73	T.						.53					2.01
West Ely	do	.30	1.34	.52	.08			.93							1.98	.03	.04	.89	.06	1.07						1.29			T.			8.53
Winfield	do	.33	.34	.16											1.67						1.00							.50					4.00
Keokuk, Ia.***	do	.01	.24	1.24	.76			.44	T.					.55	.09	.01		.61	T.	.13							.11	1.30			.02		5.51
Southeast Lowlands																																	
Bragg City	St. Francis							.03								.25					.03				.90		.46				.43		2.10
Campbell	do	.01			.27					.70							.18			.08							.08	.10	.92		.28		2.62
Cape Girardeau	Mississippi	.01		.04														.64		.03	.34						.42		.55				2.03
Caruthersville	do									.53																.75	.03	.13	.13				1.57
Dexter	St. Francis									.25					.36					.23							.45	.50					1.79
Doniphan	Black			.30											.32	T.				1.03		.55				.60	T.	.43	T.		T.		3.23
Fisk	St. Francis	T.	T.		T.					.34					T.	.02				.33	.14					T.	.13	.19	.55				1.70
Jackson	Mississippi	.15		.05										.03		.28					.40					.05		1.48		1.73			4.17
Marble Hill	do	.40		.86				.22						.20												.05		1.08	.78				3.59
Morehouse	do	.07	.02	.03					T.											T.						1.33	.11	.19	.24				1.99
New Madrid	do			.26						15	.92						.08	.63		.26	.17							.15	.35		.31		3.28
Parma	St. Francis			.35						.18						.06				.21						.10	T.	.60	.77				2.27
Poplar Bluff	Black				1.55											.90	T.			.13			.15			.04	.25		.21				3.23
Sikeston	Mississippi	.02	.20																	.02						1.58	.17	.93					2.92
Cairo, Ill.***	do	T.	.03				.13	.09	.01					.15	.01	T.	T.		T.	.03	.29					.10	.24	.70	T.				1.78
Ozark Plateau																																	
Arcadia	St. Francis	.34		T.			T.		.05						.21	.41	.06			.52	T.	T.				T.		.11	.62		.02		2.34
Aurora	Neosho	3.15			.04			.24	1.96	.35	.13		.28		.25	T.					1.00	T.			.15	.04	.68	.52	.25				9.04
Birchtree (near)	Black	.75														.71						.25					1.20					2.91
Buffalo	Osage	1.09		.22	.01				.26	.05	1.45			1.46	.10	.05				.72	.64	.23			1.08		1.05	.94	.26				9.61
Caplinger Mills	do	.53	1.85	.33	.71				1.15	.57				1.03	T.					.42	.76	.84					.83	.18					9.20
Chaonia	St. Francis	.13			.82					.07										.11			.06					.12	1.21				2.52
Dean	Neosho	1.78				T.	T		1.82	T.			.21	.08	.05				.05	.03	.18	.24			.85	.21	.62	1.55			T.		7.67
Eldon	Missouri		.33	.07	.20	.01		T.	T.						.21					.16	.94	.30						.62					2.84
Farmington	St. Francis	.14		.19			T.	T.						.01	.18	.06				.21	.02	.05				.16		1.00	.04				2.06
Fredericktown	do	.84			.14										.32				.55									.19	1.64				3.68
Galena	White	1.97			.17				.88						.80						1.07	.68				.32		1.34	.10				7.33
Goodland	Black	.24		.18											.18	.49					.53	.22				.03	.24	1.32	.15				3.58
Greenville	St. Francis	.65		.50					.34							T.				.23		.33					.43	.78					3.26
Hailey	White							.10		1.00			.05		.82						.68				2.08			.98		.35			6.06
Koshkonong	Black	.32		.09	.18										.17	.41										.20	.29	.56			.04		2.26
Lakeside	Osage	.25	.21	.02	.12	.01		.40			.08	T		.25	.44	.13	.01			.37	1.90	.33					T.	.41	.07				5.00
Lebanon	do	.43	T.	.06			T.	T.		.05	T.			.36					.49	.43	.51					1.23	.32			T.		3.88
Leeper	Black	.69	T.		.15					.81					.02	.28	.30			.07								.29	.16				2.77
Lockwood	Osage	1.55	.02		T.				1.15	.35	.09				1.14				T.	.46	1.92	.28			T.		1.20	.73					8.89
Mountain Grove	White	1.08	.25	.04	.05		T.			T.	.63			.69	.07	.80				.12	.06	1.35			T.	T.	1.31	.85			.89		8.19
Neosho	Neosho								.58	.05				.22					T.	.02	.73	.08			.88	T.	1.64	1.82					6.02
Owensville	Gasconade	.25	.30		.20															.15								1.90					2.80
Ozark Beach	White	.98	.10						1.42		.20				.58	.13					.30	.85	.63			.31	.06	.38	.51				6.45
Rolla	Meramec	.52	.18		.23										.08	.01	.12			.45	.22	.08	.02			.15		1.45	.07				3.58
St. Thomas (near)	Osage	.09	.31	.06	.17										.13					.24	1.50	.28					.14	.35					3.27
Salem	Meramec	.52		.37	T.											.53				.30	.02	.20				T.		2.24					4.18
Seligman	Neosho	1.62		.10					T.	.27	.48		T.		.26				T.		.11	.20			2.20		.26	.66					6.16
Seymour (near)	White	2.15		T.						.14	.07			1.01	.24					.22	.11	.08				T.	.43	3.79					8.24
Springfield***	do	1.93	T.	.08				T.	.24	.01	T.		.01	.44	.12				T	.43	.44	.03			.02	.05	5.20	1.07			.01		10.08
Steelville	Meramec	.06	.60		.09				.05											.26	.05	.21				.22	T.	1.30	.25				3.09
Stover	Missouri	.28	.21	.28	.43								.12		.30		.22			.15	1.64	.08					T.	.33					4.04
Tuscumbia	Osage	.14	.32	T.	.06			.38							.17	.01	T.			.20	2.36	.81						.67					5.12
Williamsville	Black	.63			.21				.06	.44						.23	.23			.33		.01	.08					.34	.21				2.77
Willow Sprgs. (near)	White	1.42	.20		.25						.01			.02	.91		.02					.49	.08			.08		.68	.12				4.28
Versailles	Osage	.33		.29	.97					.05	.04			.49	.05	.12				.27	1.25	.10					.19	.41					4.56

Continued on next page

Daily Precipitation for June, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																	
Appleton City	Osage	.05	T.	.20	T.	.42	....	.01	.65	.09	....	....	.02	.25	.05	.04	....	....	....	.32	.86	.16	....	....	....	T.	.19	....	....	....	....	....	3.31
Clinton	do	.10	....	.32	....	.10	....	....	.36	.25	.13	....	....	.63	....	....	....	....	....	.72	1.25	.07	....	....	....	....	.21	....	....	....	....	....	4.14
Concordia‖	Missouri	....	.82	....	.28	....	....	....	....	....	.72	....	.28	.03	....	.08	....	....	....	.40	1.24	....	....	....	....	....	....	.18	....	....	....	....	4.03
Harrisonville‖	Osage	.64	....	.37	....	....	....	....	....	1.78	....	....	....	.20	.05	....	....	....	....	.20	2.56	.02	....	....	....	....	.40	....	....	....	....	....	6.22
Joplin‖	Neosho	3.56	....	.12	.02	....	....	....	2.90	.20	....	....	....	.05	....	....	....	....	....	.38	2.19	.78	....	....	.30	....	3.50	.12	....	....	....	....	14.12
Lamar‖	do	2.30	....	....	.21	.42	....	....	....	.48	.21	....	....	.08	.06	.06	....	....	....	.48	1.35	.88	....	....	....	T.	T.	.93	T.	....	....	....	7.46
Lamonte	Missouri	.05	....	.65	....	....	.93	....	....	.20	....	....	.05	....	.24	.05	....	....	....	.90	1.53	.03	....	....	....	....	1.25	.02	....	.10	....	....	6.00
Marshall	do	....	....	.31	.21	....	....	....	....	T.	.10	....	.05	....	.62	....	....	....	....	....	.85	....	....	....	....	....	1.68	....	....	....	....	....	3.82
Nevada	Osage	.89	.04	.03	.42	....	....	....	.56	T.	....	....	.18	....	.07	....	....	....	....	.50	1.88	.33	....	....	....	....	.79	....	....	....	....	....	5.69
Osceola‖	do	1.16	.15	.05	.14	.12	....	....	....	.17	1.26	....	....	....	.33	.06	....	....	....	.93	.79	1.24	....	....	....	....	....	.49	....	....	....	....	6.89
Warrensburg	Missouri	.03	....	.98	....	....	.09	....	T.	.43	.81	....	.01	.08	....	....	....	....	....	.68	1.94	....	....	....	....	....	.52	....	....	....	.66	....	6.23
Warsaw	Osage	.49	.07	.17	.36	....	....	.47	....	.03	.21	.78	....	T.	.02	....	....	....	....	.53	1.06	.37	....	....	....	T.	....	.55	....	....	....	....	5.11
Waverly ‖	Missouri	.18	....	.72	.33	....	....	....	....	....	....	....	....	....	.69	....	....	....	....	.66	.38	....	....	....	....	....	....	.48	....	....	....	....	3.44
Northwest Plateau																																	
Bethany	Grand	....	.80	2.23	T.	....	....	....	....	....	....	....	1.24	.03	.17	....	....	....	.05	.49	....	....	....	....	....	....	.44	....	....	....	....	....	5.45
Chillicothe ‖	do	.13	....	2.18	.16	....	....	....	....	.19	.72	....	....	.74	T.	.20	.02	....	.41	.03	.41	....	....	....	....	....	.38	....	....	....	....	....	5.57
Conception	Missouri	....	.94	3.00	....	....	....	....	.03	1.71	.25	....	.47	.26	.80	....	....	....	.26	.56	....	....	....	....	.32	....	.11	.06	....	....	....	....	8.77
Edgerton	do	....	.11	.10	....	....	1.40	....	....	.58	.11	....	.24	.53	.45	.10	....	....	....	.91	.01	....	....	....	....	....	.04	....	....	....	....	....	4.58
Gallatin ‖	Grand	....	....	.77	.27	.09	....	....	....	....	.09	....	....	.27	.06	.25	....	....	.75	....	1.04	....	....	....	....	....	....	.15	....	....	....	....	3.74
Grant City	do	....	1.27	1.70	....	....	....	....	T.	.44	.20	....	.33	T.	.22	....	....	....	....	.37	.12	....	....	....	T.	....	.62	.05	....	....	....	....	5.32
Kansas City***	Missouri	....	.13	.06	....	....	....	....	.05	.09	T.	.42	.04	.21	.04	T.	....	....	.09	1.08	....	T.	....	....	....	....	.52	....	....	....	....	....	2.73
Kidder ‖	Grand	....	.65	.26	....	....	....	....	....	.16	....	....	.33	.03	.02	....	....	.38	.26	1.31	....	....	....	....	....	T.	....	....	....	....	T.	....	3.40
King City	Missouri	....	1.49	1.60	....	....	....	.08	....	....	T.	....	....	.45	....	....	....	....	.79	.77	....	....	....	....	.90	....	.17	....	....	....	..	....	6.25
Lexington ‖	do	.56	....	.36	....	.18	....	....	....	....	.82	.80	....	.15	.53	....	....	....	....	.38	.63	....	....	....	....	....	....	....	....	....	....	....	4.41
Maryville	do	....	....	3.37	.04	....	....	....	....	....	.62	....	....	....	.58	.66	....	....	.05	.20	.44	....	....	....	....	.03	....	.30	....	....	....	....	6.29
Oregon	do	....	.72	.48	....	....	....	....	.64	.25	.29	....	T.	.09	.02	....	T.	....	1.46	.81	....	....	....	.09	....	.34	....	....	....	....	....	....	5.19
St. Joseph***	do	....	1.68	.11	T.	....	.28	....	.13	1.00	.02	T.	.28	.67	.03	....	T.	.30	.08	1.42	....	....	....	....	T.	....	.08	.01	....	....	T.	....	6.09
Tarkio	do	....	.31	.05	....	....	....	....	.20	.73	.49	.05	.01	....	....	....	....	.14	....	.83	....	....	....	....	....	....	....	....	....	....	.30	....	3.11
Trenton	Grand	....	1.16	.88	.64	....	....	....	....	.26	.18	....	.16	.02	.02	....	....	....	.34	....	.67	....	....	....	....	....	.49	....	....	....	....	....	4.82
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for June, 1932

(See precipitation data in table, page 28)

Station	Data	Day of month																													Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.081	.072	.230	.176	.173	.265	.222	.224	.252	.090	.064	.256	.281	.098	.163	.164	.250	.382	.334	.475	.076	.176	.252	.282	.217	.195	.179	.176	.247	.260	....	6.312
	Mean temperature	72	72	75	75	77	76	77	76	72	67	74	72	68	70	70	76	80	86	78	72	75	78	78	78	79	78	77	72	75	78	..	75.1
	Wind movement	77	47	69	54	45	42	47	44	37	41	36	50	46	59	41	43	54	95	66	96	51	40	40	42	44	42	65	53	38	45	..	1,549

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932 report.

Daily Temperatures for June, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	88	85	88	87	90	91	92	90	84	80	87	89	88	88	92	89	96	93	86	81	83	90	94	93	91	89	85	85	93	94	..	88.5
	Minimum	59	62	63	56	67	69	67	64	66	65	60	63	61	62	61	63	69	66	67	66	64	64	66	69	72	71	71	61	64	70	..	64.9
Columbia	Maximum	71	86	85	87	89	89	88	82	80	78	84	85	83	80	80	84	95	90	85	78	80	86	88	89	88	81	82	81	90	92	..	84.5
	Minimum	62	62	66	66	68	67	67	65	65	63	62	61	61	63	61	62	71	73	66	66	66	66	68	69	70	71	67	60	63	73	..	65.7
Fayette	Maximum	73	82	85	87	90	92	92	86	84	82	88	88	88	82	85	89	97	94	84	80	85	82	92	92	92	85	94	95	94	94	..	87.8
	Minimum	59	60	63	63	65	64	63	63	64	63	55	57	58	59	61	59	61	71	64	64	63	63	65	67	67	69	70	58	59	67	..	62.8
Hannibal	Maximum	69	85	84	87	89	91	87	77	80	82	83	84	84	80	81	84	94	87	81	80	82	88	91	85	90	84	82	83	90	93	..	84.6
	Minimum	61	57	65	68	70	70	70	65	63	59	64	60	64	62	63	63	67	66	68	67	65	66	68	67	69	70	70	61	66	71	..	65.5
Jefferson City	Maximum	87	78	85	85	88	88	92	91	87	84	81	87	90	82	85	86	90	99	94	88	83	83	91	92	92	90	87	85	86	91	..	87.6
	Minimum	61	60	65	64	68	65	66	64	66	62	58	60	59	61	60	61	69	77	67	61	55	57	61	58	67	71	70	62	64	63	..	63.4
Kirksville	Maximum	79	83	84	85	90	89	90	77	77	79	82	80	85	77	81	82	93	86	79	78	83	88	91	89	91	86	83	85	93	93	..	84.6
	Minimum	58	60	62	62	47	68	66	62	60	58	58	60	60	58	60	62	67	55	55	64	60	62	66	64	70	68	66	57	62	66	..	61.4
Louisiana	Maximum	75	77	75	85	87	90	87	82	80	82	85	84	87	80	86	85	93	89	84	80	83	87	90	87	90	90	80	83	90	96	..	85.0
	Minimum	62	55	56	64	67	69	59	65	62	53	57	56	60	55	60	57	62	66	66	64	60	63	64	64	66	64	70	55	70	70	..	62.0
Macon§§	Maximum	77	85	85	86	89	90	90	82	82	83	87	86	85	77	83	86	95	86	83	80	82	88	92	91	89	81	83	84	94	94	..	85.8
	Minimum	58	59	61	64	65	67	66	62	61	60	59	60	59	59	60	62	64	64	64	65	61	63	64	65	66	70	69	58	61	67	..	62.8
Mexico §§	Maximum	73	88	85	88	92	91	80	80	81	82	84	84	85	85	81	85	97	89	83	80	82	89	90	90	92	84	83	82	91	94	..	85.7
	Minimum	61	58	63	64	65	67	62	61	59	59	62	58	60	61	60	60	63	70	64	64	63	63	67	65	69	70	69	57	60	70	..	63.1
St. Louis(1)	Maximum	74	86	85	87	90	90	90	76	78	82	83	85	86	83	81	85	92	94	86	85	85	92	91	89	88	89	85	85	92	94	..	86.3
	Minimum	65	66	66	66	71	75	72	65	64	66	67	67	71	67	65	65	72	72	66	65	69	74	77	66	74	72	72	66	70	75	..	68.9
Unionville	Maximum	80	82	83	84	80	90	90	80	82	82	85	80	85	84	84	86	92	90	90	75	84	90	92	90	92	85	80	85	93	95	..	85.7
	Minimum	57	60	60	63	65	66	67	61	60	57	56	62	56	56	55	62	62	60	63	61	60	63	68	64	70	67	64	64	62	65	..	61.9
Warrenton	Maximum	71	83	84	90	91	93	90	88	82	84	82	85	86	85	83	85	96	93	88	82	82	90	90	92	91	88	84	85	92	95	..	87.0
	Minimum	61	57	62	63	68	68	67	65	61	58	60	60	63	63	61	61	64	69	66	62	64	67	69	65	71	71	70	60	65	71	..	64.4
Southeast Lowlands																																	
Campbell	Maximum	90	92	90	95	98	99	96	90	87	88	91	87	94	89	86	92	96	97	96	99	94	102	101	103	92	91	89	91	92	92	..	93.3
	Minimum	58	65	63	62	58	63	66	65	63	61	56	54	59	62	60	58	63	73	70	70	67	66	70	71	70	70	71	70	67	67	..	64.6
Caruthersville	Maximum	88	89	90	91	93	95	94	86	84	84	84	96	91	84	86	93	95	96	95	98	94	100	98	95	86	88	89	87	92	96	..	91.2
	Minimum	61	69	68	70	67	70	68	65	68	67	60	62	62	64	64	64	71	76	71	75	72	74	73	76	74	73	76	73	71	71	..	69.2
Doniphan	Maximum	88	92	87	90	96	97	96	95	84	87	90	91	93	90	75	95	97	100	94	94	91	98	93	93	92	91	90	91	92	95	..	91.9
	Minimum	65	64	67	65	60	60	65	65	66	63	55	54	57	62	60	59	65	73	68	72	69	67	70	70	75	72	75	72	68	69	..	65.7
Jackson	Maximum	..	..	..	91	95	96	95	85	87	86	86	88	90	85	87	90	99	100	99	95	95	98	97	95	80	92	90	89	93	94	..	°92.1
	Minimum	59	63	61	65	56	55	63	62	56	55	51	51	54	59	59	57	61	71	65	63	65	67	67	65	70	69	70	63	60	62	..	61.5
Poplar Bluff	Maximum	85	89	81	82	89	94	93	89	84	86	87	84	89	88	82	90	94	97	93	93	90	97	98	95	86	88	90	91	92	93	..	89.6
	Minimum	60	62	65	64	61	65	68	66	64	62	56	56	57	63	60	63	65	72	68	72	69	68	69	71	72	71	74	70	65	69	..	65.6
Sikeston	Maximum	87	88	87	87	92	94	95	93	87	87	84	85	88	83	85	90	96	98	95	96	96	97	98	97	93	89	85	86	85	90	..	90.4
	Minimum	63	79	64	66	65	65	68	65	62	63	57	59	60	65	64	61	67	76	79	73	70	70	70	70	74	72	70	71	67	70	..	67.5
Cairo, Ill	Maximum	85	89	86	86	89	91	91	79	81	80	82	83	87	78	80	89	94	95	89	94	89	97	93	89	85	86	86	86	89	91	..	87.3
	Minimum	66	70	68	70	67	69	70	68	63	64	63	63	63	66	66	64	71	76	72	70	73	73	76	71	73	73	73	72	71	71	..	69.2
Ozark Plateau																																	
Arcadia	Maximum	78	85	83	84	87	87	86	79	78	80	81	82	82	80	78	83	92	93	86	86	86	92	91	87	84	85	80	84	87	91	..	84.6
	Minimum	58	60	61	58	56	57	63	61	56	51	49	49	52	58	58	58	59	69	64	64	65	64	64	62	68	68	70	62	57	65	..	60.2
Aurora	Maximum	80	84	81	84	85	86	88	88	77	80	80	82	87	78	83	86	89	88	91	86	83	89	88	85	83	82	80	86	91	87	..	84.6
	Minimum	58	67	66	65	67	66	63	60	61	61	59	60	58	59	58	63	68	74	64	62	63	64	66	68	68	69	69	65	69	70	..	64.3
Birchtree	Maximum	79	85	82	86	88	90	90	89	89	86	85	85	86	85	85	89	91	95	91	90	89	95	95	92	90	89	85	87	89	91	..	88.3
	Minimum	56	62	65	62	63	63	65	65	63	60	63	57	58	60	62	58	60	72	67	70	71	63	68	70	69	68	70	65	64	67	..	64.2
Eldon§§	Maximum	81	86	85	88	84	85	85	89	84	74	88	88	82	80	86	85	96	96	91	79	86	91	91	89	89	84	84	91	88	91	..	86.8
	Minimum	61	61	64	64	66	65	68	63	66	61	60	58	59	61	60	60	66	71	67	62	64	65	68	66	68	68	70	61	64	68	..	64.2
Farmington	Maximum	80	87	78	89	94	96	89	82	79	86	87	85	85	86	86	94	100	101	89	89	87	98	91	94	88	91	80	89	92	97	..	89.0
	Minimum	60	63	64	61	60	61	61	65	56	56	54	52	55	60	60	61	62	74	66	64	66	66	71	66	70	69	70	64	60	68	..	62.8
Koshkonong	Maximum	80	97	87	90	93	93	91	89	79	85	85	84	89	85	75	90	91	93	89	90	89	95	94	96	81	85	85	85	88	88	..	88.0
	Minimum	61	66	67	64	67	68	68	64	64	65	63	63	61	61	63	71	75	66	78	67	67	72	72	71	73	72	69	69	71	71	..	67.5
Lebanon	Maximum	79	86	83	87	90	90	82	82	83	78	84	86	76	79	83	89	93	92	87	74	87	89	92	93	89	80	80	85	78	83	..	84.6
	Minimum	56	63	65	52	65	67	62	61	65	58	62	55	57	56	55	57	67	62	66	61	61	63	63	63	67	66	66	58	63	65	..	61.6
Mountain Grove	Maximum	79	83	78	83	85	90	89	92	79	80	84	85	83	80	80	87	85	90	84	84	88	91	91	88	88	85	81	87	88	92	..	85.3
	Minimum	58	63	64	63	65	67	61	62	63	60	62	56	59	57	57	60	68	70	63	66	63	65	65	66	67	68	68	64	65	68	..	63.4
Neosho	Maximum	78	87	80	87	88	88	84	88	79	79	92	86	84	84	85	90	89	89	86	86	88	83	90	89	89	82	79	89	86	91	..	85.8
	Minimum	57	66	65	63	63	64	59	64	61	60	71	60	69	59	56	57	69	72	64	65	62	69	64	62	67	69	69	67	70	70	..	64.4
Rolla	Maximum	72	83	81	85	87	88	86	85	79	81	82	83	80	80	79	85	94	91	90	83	84	88	87	88	85	87	83	80	86	88	..	84.3
	Minimum	61	64	69	66	66	64	65	65	65	62	60	73	61	59	60	61	69	75	66	64	66	67	68	68	70	71	69	64	63	69	..	65.7
Springfield	Maximum	78	82	79	83	84	84	85	85	75	74	78	80	80	75	80	84	88	86	86	77	83	85	89	85	84	82	78	83	86	84	..	82.1
	Minimum	60	67	67	67	70	69	68	64	63	64	65	65	59	60	59	66	71	74	65	63	64	68	70	68	68	68	69	67	70	72	..	66.3
Southwest Plain																																	
Appleton City	Maximum	80	83	79	85	86	87	93	85	83	78	83	83	82	79	84	87	91	92	86	78	83	89	91	87	88	82	84	86	91	89	..	85.1
	Minimum	60	66	65	65	66	67	68	62	62	63	60	61	63	60	60	61	69	68	66	61	65	67	69	69	67	70	70	60	65	70	..	64.8
Clinton	Maximum	74	85	84	85	89	90	93	83	86	79	83	85	83	85	88	90	93	86	83	83	77	89	93	91	80	80	79	83	95	85	..	85.3
	Minimum	60	63	65	65	66	65	65	63	62	63	68	61	61	60	60	62	77	68	65	61	65	67	68	69	67	70	70	70	62	70	..	65.3
Harrisonville§§	Maximum	79	82	80	87	88	90	93	85	84	78	83	87	86	81	85	85	91	91	82	82	82	88	92	89	87	81	85	87	93	93	..	85.9
	Minimum	59	60	61	64	66	66	65	68	59	59	58	61	60	59	60	64	68	64	65	59	63	66	67	69	67	69	69	60	64	68	..	63.6
Lamar§§	Maximum	81	86	88	85	87	86	87	86	80	81	86	86	84	81	83	90	91	87	89	73	81	85	88	91	87	84	82	85	88	88	..	84.9
	Minimum	60	61	69	65	66	68	65	65	64	62	61	61	63	61	60	60	64	75	65	64	63	64	67	69	69	71	71	63	64	71	..	65.0
Lamonte	Maximum	79	85	83	85	85	85	87	86	83	84	86	84	84	83	81	85	85	84	84	79	81	86	85	85	84	85	82	84	83	84	..	83.9
	Minimum	61	63	64	65	67	67	64	64	63	59	60	61	61	61	59	61	70	68	63	63	65	65	68	68	68	71	67	59	64	70	..	64.3
Marshall	Maximum	76	86	84	86	90	90	89	88	83	79	85	86	85	81	82	86	96	91	88	86	81	87	90	90	91	88	82	82	92	93	..	86.4
	Minimum	60	62	61	63	61	68	68	62	66	63	60	61	60	62	61	62	66	66	64	65	64	65	66	68	69	71	71	59	65	71	..	64.1
Nevada	Maximum	79	82	79	85	85	87	90	83	81	80	82	82	84	80	83	87	91	89	88	84	81	87	88	85	85	79	81	84	87	87	..	84.2
	Minimum	60	68	67	66	57	69	67	62	62	61	60	60	64	61	59	61	74	70	65	62	64	66	68	71	68	70	70	60	68	72	..	65.1
Warrensburg	Maximum	82	84	84	86	90	86	92	86	85	76	83	86	84	80	86	88	92	91	85	79	83	90	91	92	90	83	83	87	91	92	..	86.2
	Minimum	57	56	56	51	62	67	65	65	61	61	59	61	61	61	60	62	71	66	65	61	64	64	67	69	67	68	70	61	65	68	..	63.0
Warsaw	Maximum	83	88	86	89	92	92	93	91	87	75	83	87	81	81	86	90	94	99	89	89	85	92	93	91	92	86	83	88	93	94	..	88.4
	Minimum	60	64	67	65	65	65	63	65	61	64	59	59	60	62	58	59	72	73	65	62	64	64	66	66	65	70	70	57	62	69	..	64.0
Northwest Plateau																																	
Chillicothe §§	Maximum	84	85	84	86	92	92	91	82	82	80	85	87	88	80	86	87	92	88	85	82	84	92	93	94	92	87	85	87	98	96	..	87.5
	Minimum	57	61	59	61	64	66	64	62	62	58	55	63	58	59	60	60	67	61	64	61	60	59	63	67	69	69	66	56	60	65	..	61.9
Grant City	Maximum	75	70	76	78	83	85	87	82	81	75	82	81	80	79	82	83	87	79	77	70	79	84	92	88	88	85	80	82	88	91	..	81.6
	Minimum	54	61	61	60	66	68	66	63	63	60	61	62	59	59	68	63	68	63	60	58	61	63	69	68	69	67	62	60	64	67	..	63.1
Kansas City	Maximum	80	82	81	86	90	87	91	80	79	77	83	86	86	76	83	85	91	86	82	82	82	87	92	90	88	84	83	85	93	94	..	85.0
	Minimum	65	64	63	66	71	72	72	67	63	64	64	68	66	63	64	69	74	69	62	65	67	67	73	77	72	71	69	66	72	75	..	68.0
Kidder	Maximum	79	79	79	84	87	86	88	83	79	78	83	84	82	77	82	84	89	86	79	74	80	87	89	90	89	84	82	85	93	93	..	83.8
	Minimum	60	62	60	62	66	68	65	62	64	60	59	65	59	61	61	63	70	63	62	62	62	63	67	68	71	71	66	61	63	67	..	63.8
Lexington	Maximum	83	85	83	88	92	91	92	88	85	81	86	86	87	81	87	91	93	92	86	85	85	89	95	95	92	87	88	89	97	96	..	88.5
	Minimum	62	64	63	66	68	69	68	65	64	64	61	64	61	63	63	65	72	67	65	65	65	65	69	70	71	73	71	60	67	72	..	66.1
Maryville	Maximum	82	78	78	85	89	89	91	84	81	81	83	86	85	77	84	81	90	85	78	74	82	89	92	92	92	84	83	86	94	95	..	85.0
	Minimum	63	63	58	60	64	66	62	62	64	58	58	59	57	59	58	61	68	62	61	55	59	58	62	68	66	67	59	57	61	65	..	61.3
Oregon	Maximum	85	84	80	86	91	88	93	88	77	76	84	82	82	79	88	88	92	86	74	72	85	90	93	93	93	82	83	89	96	93	..	85.7
	Minimum	62	62	61	64	68	69	66	65	64	61	60	63	60	60	60	65	71	64	64	58	63	69	69	70	70	65	62	62	65	71	..	64.4
St. Joseph	Maximum	81	84	78	85	90	87	91	75	81	79	84	82	84	77	84	86	91	84	76	76	82	86	91	91	91	82	82	86	94	93	..	84.4
	Minimum	63	64	61	65	69	69	66	68	66	63	61	65	60	62	63	66	68	66	63	62	65	62	67	69	72	70	65	60	68	71	..	65.3
Trenton	Maximum	82	82	82	86	90	89	90	90	81	81	87	79	86	80	85	85	92	87	83	77	81	91	93	93	87	83	86	95	95	..	86.4
	Minimum	59	61	61	62	62	69	67	64	69	61	58	64	60	61	62	62	70	63	65	61	61	61	63	68	71	70	66	58	61	66	..	63.5

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 7-22-32—990.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

O. R. ROGERS, Meteorologist, Temporarily in Charge

VOL. XXXVI COLUMBIA, MO., JULY, 1932 No. 7

DIRECTORSHIP OF THE MISSOURI CLIMATOLOGICAL SERVICE OF THE UNITED STATES WEATHER BUREAU CHANGES HANDS

Mr. George Reeder, who has been meteorologist in charge of the Columbia office of the Weather Bureau and director of the Missouri Section of the Climatological Service since June 4, 1904, was retired on pension at the termination of June 30, 1932, having completed nearly 47 years of active service in the United States Weather Bureau. Mr. Reeder is temporarily succeeded by Mr. Orlin R. Rogers who has been first assistant and right-hand man to Mr. Reeder for the past 17 years. Mr. Rogers is capable and efficient and is qualified to carry on the work.

The retiring section director has found his work in the State of Missouri very pleasant and interesting and regretfully severs his association with a fine body of station and field co-workers. And not the least of his pleasures while at Columbia was his long-time association with the University of Missouri as a member of its faculty, where the close touch with the student and faculty life proved of considerable value.—G. R.

GENERAL SUMMARY

July, 1932, was warm and dry, but less so than the same month in 1930 and 1931. Only eight Julys in the past 45 years have been so warm. The excess in warmth was common to all parts of the State. The warmest area, the southeast lowlands, was only three degrees warmer than the coolest section, the northern border. The outstanding weather feature of the month was the hot rainless period from the 6th to the 22d, a 16-day spell of searing heat and blazing sun, trying alike to animal and vegetable life.

The precipitation was unevenly distributed, as regards both time and place. Substantial showers, fairly general, fell on the 3d to the 5th, which, with the late June rains, gave adequate moisture to practically the entire State. Then came a 16-day spell with no rain anywhere, but on the 22d local showers began and by the close of the month the droughty conditions had been largely relieved.

The average precipitation for northern, western, and central sections was about four inches, just about the usual for July. But in the southeast lowlands and east-central counties, from about Pike southward and from Dent eastward the rainfall was hardly one-half so much, and in some localities it was less than one inch. Since this section was already in need of rain at the beginning of this month, drought damage was severe and extensive before the late rains came.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 79.8,° or 2.5° above the 40 year average. The highest local mean temperature was 84.2°, at Caruthersville; the lowest monthly mean was 76.8°, at Seymour. The extreme highest temperature reported was 109°, at Warsaw on the 16th and Doniphan on the 22d; the extreme lowest was 48°, at Edgerton and Goodland on the 2d. Daytime temperatures reached 90° on 21 days, on the average for all stations, and 100° or higher on 4 days. From about the 12th to the 24th, maximum temperatures ranged in the high nineties every day, and occasionally exceeded 100°.

PRECIPITATION

The average precipitation for the State, 123 stations reporting, was 3.67 inches, or 0.33 inch less than the 60 year average. The rainfall in the southeast lowlands and eastern Ozark counties was much less than normal, which caused quite severe and extensive drought damage, due in part to scant rainfall in preceding months. The greatest monthly precipitation was 8.07

(Continued on Page 34)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	29.94	78	55	55	365	81	5,093	6.8	32	nw.	4
Hannibal	29.95	74	50	..	...	..	5,834	7.8	28	sw.	3
Kansas City	29.92	73	51	53	359	79	6,218	8.4	31	nw.	4
St. Joseph	29.91	77	56	57	354	78	5,576	7.5	31	nw.	4
St. Louis	29.88	72	52	50	342	76	7,486	10.1	42	sw.	22
Springfield	29.96	79	59	63	346	77	5,982	8.0	26	w.	1
Cairo, Ill.	29.94	81	57	60	...	..	5,323	7.2	27	n.	10
Keokuk, Iowa	29.96	72	53	57	361	79	4,959	6.7	26	sw.	3

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**77.3**	.....	**106**	**46**	**4.00**	.....	**5.19**	**0**	**8**	**17**	**9**	**5**
1888	79.3	+ 2.0	111	50	3.31	−0.69	....	0	7	..	..	..
1889	77.1	− 0.2	107	46	3.75	−0.25	....	0	8	..	..	..
1890	79.6	+ 2.3	106	52	2.98	−1.02	....	0	5	..	..	..
1891	72.7	− 4.6	103	40	3.55	−0.45	....	0	8	..	..	..
1892	75.8	− 1.5	101	45	4.99	+0.99	4.75	0	8	12	10	9
1893	77.3	0.0	101	51	4.91	+0.91	6.44	0	8	14	12	5
1894	76.5	− 0.8	109	42	2.48	−1.52	4.90	0	5	18	10	3
1895	74.4	− 2.9	106	45	6.79	+2.79	6.52	0	10	10	12	9
1896	77.3	0.0	108	48	5.87	+1.87	8.00	0	9	15	11	5
1897	78.7	+ 1.4	106	48	3.22	−0.78	4.05	0	6	19	9	3
1898	76.1	− 1.2	104	42	5.58	+1.58	8.15	0	9	16	10	5
1899	76.0	− 1.3	102	43	4.51	+0.51	4.48	0	9	15	11	5
1900	76.9	− 0.4	102	46	4.11	+0.11	7.03	0	8	17	10	4
1901	85.4	+ 8.1	116	46	2.02	−1.98	3.78	0	5	19	10	2
1902	77.0	− 0.3	103	50	4.59	+0.59	5.30	0	8	17	11	3
1903	77.4	+ 0.1	102	51	3.22	−0.78	3.26	0	8	17	10	4
1904	74.2	− 3.1	100	47	4.65	+0.65	4.15	0	10	15	11	5
1905	73.4	− 3.9	101	48	7.45	+3.45	7.60	0	12	12	10	9
1906	74.7	− 2.6	100	48	3.53	−0.47	4.46	0	8	17	10	4
1907	78.4	+ 1.1	105	47	4.57	+0.57	6.70	0	8	19	8	4
1908	76.5	− 0.8	101	49	2.23	−1.77	2.65	0	8	18	9	4
1909	76.7	− 0.6	102	41	6.41	+2.41	10.71	0	10	17	8	6
1910	76.8	− 0.5	109	46	6.70	+2.70	5.80	0	9	16	9	6
1911	78.0	+ 0.7	113	43	3.95	−0.05	4.20	0	8	16	9	6
1912	78.8	+ 1.5	104	52	2.74	−1.26	3.17	0	7	18	9	4
1913	80.2	+ 2.9	108	47	3.13	−0.87	3.62	0	7	18	9	4
1914	80.5	+ 3.2	109	45	2.67	−1.33	4.45	0	17	17	9	5
1915	74.6	− 2.7	102	42	6.05	+2.05	6.77	0	2	14	9	8
1916	81 6	+ 4.3	109	52	1.25	−2.75	2.55	0	3	25	5	1
1917	77.5	+ 0.2	107	42	2.96	−1.04	3.40	0	8	20	8	3
1918	77.1	− 0.2	110	41	1.76	−2.24	3.75	0	6	19	8	4
1919	80.0	+ 2.7	115	50	2.33	−1.67	4.55	0	5	23	6	2
1920	76.3	− 1.0	105	47	3.25	-0.75	3.84	0	7	18	8	5
1921	80.3	+ 3.0	109	46	2.32	−1.68	2.25	0	5	20	8	3
1922	76.8	− 0.5	103	46	5.85	+1.85	12.25	0	8	17	9	5
1923	78.2	+ 0.9	105	50	3.07	−0.93	7.42	0	6	18	8	5
1924	73.3	− 4.0	103	40	5.39	+1.39	7.14	0	10	15	11	5
1925	77.9	+ 0.6	106	46	2.71	−1.29	3.25	0	7	16	10	5
1926	78.0	+ 0.7	108	40	3.14	−0.86	6.00	0	7	17	9	5
1927	75.8	− 1.5	101	48	4.13	+0.13	4.65	0	8	18	9	4
1928	77.2	− 0.1	102	48	2.97	−1.03	3.30	0	7	17	10	4
1929	77.8	+ 0.5	104	50	4.12	+0.12	4.95	0	8	16	10	5
1930	81.2	+ 3.9	113	42	0.97	−3.03	2.09	0	3	22	7	2
1931	80.3	+ 3.0	110	49	3.23	−0.77	7.47	0	7	18	9	4
1932	79.8	+ 2.5	109	48	3.67	−0.33	3.50	0	7	19	8	4

Climatological Data for July, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	81.2	+ 5.1	103	22	56	2	34	2.94	−1.41	1.40	0	7	24	1	6	sw.	O. K. Benecke
Clifton Hill	Randolph	731	33	78.2	+ 1.8	101	16	50	2	40	3.24	−0.16	1.71	0	9	20	7	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	79.1	+ 2.2	100	22	55	2	31	3.39	−0.10	1.37	0	8	15	10	6	sw.	U. S. Weather Bureau
Downing	Schuyler	876	11	77.9	+ 1.5	98	15†	52	2	32	4.40	−0.09	1.29	0	7	19	9	3	s.	James Taylor
Elsberry	Lincoln	449	1	77.8	.....	101	15	50	2	37	4.21	.....	2.08	0	7	11	4	16	ne.	Ray E. Mills
Fayette	Howard	661	52	79.1	+ 1.9	101	16†	52	2	36	3.05	−0.55	1.15	0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	79.4	+ 1.7	99	23	56	2	35	3.39	−0.46	2.21	0	6	21	8	2	sw.	Chamber of Commerce
Gorin	Scotland	700	45	....	.....	..	..	..	.	..	8.07	+4.16	3.14	0	7	14	10	7	sw.	J. W. Pulliam
Hannibal	Marion	534	49	79.0	+ 2.2	100	15	57	2	34	3.48	+0.39	2.16	0	10	14	9	8	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	80.8	+ 2.7	102	23	54	2	40	2.68	−0.77	0.70	0	8	12	12	7	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	77.8	+ 1.8	99	19	50	2	33	4.62	+0.55	1.81	0	5	23	4	4	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	38	78.4	+ 2.0	100	15	52	8	41	5.27	+2.03	3.50	0	5	22	7	2	s.	Stark Bros. Nurseries
Macon	Macon	875	33	78.9	+ 1.7	100	15†	52	2	37	4.32	+0.95	2.15	0	6	21	6	4	w.	W. C. Brown
Mexico	Audrain	800	43	79.0	+ 1.7	102	14	50	12	42	2.67	+0.93	0.87	0	7	25	0	6	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	.	..	3.42	−0.31	2.44	0	4	21	5	5	ne.	J. S. Conway
St. Charles	St. Charles	456	44	80.8	+ 2.7	105	15	54	2	35	4.57	+1.45	1.85	0	8	14	12	5	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	81.6	+ 2.8	101	15	62	2	26	5.30	+2.32	1.81	0	9	18	10	3	w.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	81.6	+ 1.5	100	15†	60	2	24	4.32	+1.85	1.61	0	8	17	12	2	w.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	4.81	+0.93	2.75	0	9	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	34	78.0	+ 0.2	100	16	52	2	40	4.34	+0.07	1.80	0	7	17	12	2	w.	Frank Hall
Unionville	Putnam	1,062	39	78.6	+ 2.1	102	15†	52	2	39	4.63	+0.57	1.35	0	7	25	1	5	n.	Geo. W. Davis
Warrenton	Warren	816	50	81.0	+ 3.2	102	18†	56	2	34	2.44	−0.82	0.67	0	8	11	16	4	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	78.3	+ 1.4	97	20	55	2	30	4.53	+1.12	0.97	0	10	17	5	9	sw	U. S. Weather Bureau
Section means and	extremes	.....	..	79.3	+ 2.1	105	15	50	2†	42	4.09	+0.58	3.50	0	7	18	8	5	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	82.6	.....	106	19†	52	2	39	3.50	.....	2.08	0	5	20	8	3	s.	Jeff. King
Caruthersville	Pemiscot	265	36	84.2	+ 2.9	104	15†	59	2	30	1.66	−1.73	0.64	0	5	20	7	4	s.	Sam Smith
Doniphan	Ripley	344	28	83.4	+ 4.8	109	22	54	2	36	3.80	−0.31	1.33	0	7	24	2	5	se.	W. W. Martin
Jackson	Cape Girardeau	428	41	80.0	+ 2.4	104	28	52	2	40	0.54	−2.94	0.20	0	5	9	17	5	s.	John G. Putz
Marble Hill	Bollinger	470	37	82.8	+ 5.0	107	15	52	2	42	0.52	−3.88	0.42	0	3	16	15	0	w.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	1.63	−1.39	0.49	0	9	22	7	2	sw.	John A. Spence
Poplar Bluff	Butler	329	27	81.6	+ 2.4	103	16	53	2	36	4.57	+1.09	1.30	0	10	22	7	2	sw.	J. H. Wolpers
Sikeston	Scott	318	25	82.0	+ 3.4	100	15†	56	2	31	2.59	−1.78	1.20	0	7	25	0	6	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	81.5	+ 1.9	98	15	62	2	23	2.58	−0.49	1.03	0	8	10	11	10	sw.	U. S. Weather Bureau
Section means and	extremes	....	..	82.3	+ 3.3	109	22	52	2	42	2.38	−1.43	2.08	0	7	19	8	4	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	77.9	+ 2.1	100	14	50	2	39	5.12	+0.98	2.03	0	8	19	5	7	nw.	Arcadia College
Aurora	Lawrence	1,370	31	81.4	+ 3.7	97	17	56	2	32	4.04	−1.15	1.35	0	8	22	4	5	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	80.4	+ 3.8	100	21	52	2	32	4.12	+0.26	0.92	0	8	23	4	4	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	78.9	.....	98	24	60	11	30	4.51	.....	1.56	0	10	15	14	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	1.89	.....	0.92	0	3	17	12	2	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	78.6	+ 1.3	101	17	51	2	36	6.59	+2.40	1.73	0	8	22	7	2	sw.	H. E. Dean
Eldon	Miller	934	37	78.7	+ 1.5	101	18	56	2	37	3.71	+0.17	1.50	0	8	10	13	8	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	81.0	+ 4.7	104	14†	53	2†	39	1.58	−1.86	0.51	0	6	16	13	2	nw.	Robert Forsyth
Goodland	Iron	1,000	39	78.4	+ 2.8	101	17†	48	2	42	1.39	−2.49	0.29	0	7	20	6	5	s.	F. M. Adams
Greenville	Wayne	381	23	80.4	+ 3.0	103	15†	50	2†	40	3.38	−0.39	1.28	0	5	26	3	2	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	6.90	+2.90	2.10	0	9	14	3	14	.....	A. W. Madison
Koshkonong	Oregon	958	31	82.4	+ 3.6	101	18†	59	2	28	3.56	−0.11	1.91	0	5	19	6	6	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	77.4	+ 0.5	98	16†	49	2	35	6.97	+3.00	1.50	0	9	23	2	6	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	79.7	+ 2.1	97	16†	56	2	26	5.45	+0.74	1.80	0	10	20	9	2	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	78.9	+ 2.5	97	16†	53	2	30	4.76	+0.93	1.57	0	12	15	11	5	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	80.4	+ 2.9	99	17	63	3	32	3.34	−0.97	1.02	0	7	17	12	2	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	79.6	+ 1.9	96	15†	56	2	26	2.33	−1.55	0.99	0	7	3	14	14	s.	F. H. Lane
Salem	Dent	1,173	28	79.6	+ 2.8	100	22	52	2	37	2.57	−0.79	1.20	0	6	20	8	3	s.	E. E. Martin
Seligman	Barry	1,542	31	78.0[b]	+ 1.3	96	16	56	2	34	3.42	−0.89	1.08	0	9	21	4	6	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	76.8	+ 1.3	94	15	60	3†	29	5.63	+1.39	1.79	0	9	23	4	4	sw.	Ira H. Hailey
Springfield	Greene	1,324	54	79.0	+ 2.2	95	16	60	2	22	3.88	−0.33	2.05	0	10	14	15	2	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	80.4	.....	102	22	52	2	33	4.51	.....	1.30	0	8	17	8	5	sw.	I. M. Wilson
Section means and	extremes	.....	..	79.4	+ 2.4	104	14†	48	2	42	4.08	+0.13	2.05	0	8	18	8	5	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	79.8	+ 1.6	100	15	57	2	30	3.88	−0.63	1.78	0	6	14	16	1	sw.	W. G. Bigelow
Clinton	Henry	765	39	80.4	+ 2.1	101	19	56	2	33	3.47	−0.36	1.95	0	8	19	11	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	79.0	+ 1.3	100	15	55	2	31	2.82	−0.94	2.44	0	9	10	10	11	s.	John H. Patterson
Lamar	Barton	980	44	80.6	+ 2.2	101	17	56	2	30	3.86	−0.32	1.10	0	9	18	11	2	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	76.6	− 2.5	95	16	53	2	29	3.58	−0.37	2.00	0	9	22	7	2	se.	J. E. Wheeler
Marshall	Saline	779	45	79.8	+ 2.3	99	22	56	2	30	4.96	+1.12	2.08	0	6	23	4	4	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	80.2	+ 0.6	99	16	54	2	28	3.52	−0.42	1.76	0	5	20	7	4	sw.	George A. Kaupp
Warrensburg	Johnson	878	45	80.0	+ 1.2	100	16	54	2	33	5.17	+1.32	2.40	0	7	23	5	3	sw.	E. A. Markey
Warsaw	Benton	687	31	82.1	+ 3.8	109	16	54	2	40	4.56	+0.47	0.98	0	8	22	4	5	s.	Everett Martin
Section means and	extremes	.....	..	79.8	+ 1.4	109	16	53	2	40	3.98	−0.01	2.44	0	7	19	8	4	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	78.0	+ 1.7	99	22	49	2	33	4.37	+0.14	2.31	0	7	21	7	3	s.	A. S. Cumming
Chillicothe	Livingston	779	23	79.1	+ 0.2	105	16	50	2	46	4.09	−0.07	2.30	0	7	18	9	4	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	78.8	+ 2.2	99	15	53	2	28	5.12	+0.79	1.61	0	7	20	7	4	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	79.0[a]	+ 2.9	99	15	48	2	35	2.84	−1.04	1.22	0	8	21	3	7	s.	Fred L. Stiff
Grant City	Worth	1,134	28	77.4	+ 1.2	100	15	54	2	33	2.89	−1.94	1.30	0	7	21	9	1	sw.	W. P. Spillman
Kansas City	Jackson	963	43	81.4	+ 3.3	98	15	63	2	25	2.57	−1.56	2.32	0	8	17	10	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	79.3	+ 2.7	99	22	53	2	30	4.22	+0.30	1.89	0	8	19	8	4	sw.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	3.67	−0.18	1.34	0	7	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	82.8	+ 5.4	103	16	57	2	32	3.05	−1.63	1.69	0	7	20	9	2	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	78.2	+ 2.5	100	15†	50	2	37	3.37	−1.76	1.13	0	7	17	11	3	n.	J. R. Brink
Oregon	Holt	1,048	76	80.4	+ 4.8	102	16	55	2	31	4.20	−0.06	1.52	0	9	25	5	1	se.	Mina Wright
St. Joseph	Buchanan	967	24	79.6	+ 0.8	98	16	55	2	29	4.06	+0.97	1.29	0	10	20	4	7	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	77.9	+ 1.1	98	15	52	2	31	3.72	−0.02	1.58	0	8	20	7	4	se.	Albert Volker
Trenton	Grundy	822	36	79.6	+ 2.8	100	15†	52	2	33	4.59	+0.53	1.66	0	7	19	11	1	s.	W. H. Estes
Section means and	extremes	.....	..	79.4	+ 2.4	105	16	48	2	46	3.77	−0.40	2.32	0	8	20	8	3	s.	
State means and	extremes	.....	..	79.8	+ 2.5	109	16†	48	2	46	3.67	−0.33	3.50	0	7	19	8	4	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for July, 1932

Stations	Drainage-basins	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Bethel	Mississippi				.24	.77																		.70	.04		2.10						3.11
Boonville	Missouri			.17	.75	.74	.41																	.20									3.01
Bowling Green	Mississippi					1.17																		.47			2.96	.22					4.82
Brunswick	Grand				.04	1.40	.50																	.40	.12		.40	.08					2.94
Canton	Mississippi			1.00		.29	.06				.37																	.57			.06		2.35
Clifton Hill	Chariton			.16	.01	1.71				.01													.42	.05		.21	.34					.33	3.24
Columbia***	Missouri			.76	.94	.43																	.07	.01		.03	.60				T.	.55	3.39
Downing	Mississippi			1.29		1.05				.64	.10																.62			.07		.63	4.40
Edina	do				.68	2.10	.23				.22																2.85	.18	T.		T.	T.	6.26
Elsberry	do			.57		.64																	.50			.05	2.08	.24	T.		T.	.13	4.21
Fayette	Missouri			.27	1.15	.35						.04												.25			.21					.78	3.05
Fulton	do			.18	.38	.47	.03																		.12	T.	2.21						3.39
Gorin	Mississippi			.81		1.88				.62	.08															1.17				.37		3.14	8.07
Hannibal***	do	.01		.08	.29	.18					.05												T.			.13	2.03		.84	.22	T.	.15	3.48
Hermann	Missouri				.41	1.15	.03																	.04	.06		.20	.18					2.07
Jefferson City	do			.12	.70	.40	.04																	.40	.50		.43	.09					2.68
Kahoka	Mississippi				.93	1.03					1.32												.51				.36						4.15
Kirksville	do			1.15		1.22				.13														1.81								.31	4.62
LaBelle	do				.04	1.00	.02				.45																1.80			.05		.05	3.41
Laddonia	do					.15	.86																				1.06						2.07
Linneus	Grand																																
Louisiana	Mississippi			.27	.90																						3.50		.50			.10	5.27
Lucerne	Grand				.84	.92				.72	.23													.10		.09				.08		.02	3.00
Macon	Chariton				.06	1.42	.10																		.15		2.15	.44					4.32
Memphis	Mississippi				1.32	1.10	.22				.90																.30						3.84
Mexico	do				.66	.85	.05																	.10			.87	.05				.09	2.67
Milan	Grand				2.43	.96					.34												.05		.26		.41					.18	4.63
Monroe City	Mississippi			.06		.74					T.																2.44					.18	3.42
New London	do			.21			.76																				2.26					.09	3.32
Pacific	Meramec				1.00	.25						.08												.87	.05		.35	.39					2.99
Palmyra	Mississippi						1.05				.27																2.31			.35			3.98
Paris	do				.13	.86																		.15			1.30	.06				.12	2.62
Perry	do					.60																					2.25					.05	2.90
Philadelphia	do				.43	.73					T.																1.82	T.		.21			3.19
St. Charles	Missouri			.36	.23	.49																	1.85				1.30	.04	.29		T.	.01	4.57
St. Louis (1)***	Mississippi			1.75	.05	.16					.11												1.35			.03	1.79		.05		T.	.01	5.30
St. Louis (2)*	do			1.38		.08					.02												1.11			.05	1.61		.05		.02	T.	4.32
Shelbina	do				.24	.80	.02				.15													.31	.20		2.75		.01	T.		.33	4.81
Steffenville	do			.30		.72			.80	.07												.50			T.		1.80			T.	T.	.15	4.34
Troy	do				.63	.77	.02					.04												1.22		1.63	.25		.81				5.37
Union	Meramec				.78	.20						.05												1.44	.06		.20	.21					2.94
Unionville	Chariton			1.00		.65				1.10	.30											.03					T.			.20	T.	1.35	4.63
Valley Park	Meramec				1.12	.20	.02					T.												.35			1.06	.25		T.		T.	3.00
Warrenton	Mississippi			.49	.08	.53																	.09	.15		.25	.67					.18	2.44
West Ely	do				.08	.71	.01				.12																1.82			.02		.01	2.77
Winfield	do				.80	.40																		1.00			1.47			.12			3.79
Keokuk, Ia.***	do		T.	.80	.65	.30				.57	.40												.70	.04		.65	.04	T.				.38	4.53
Southeast Lowlands																																	
Bragg City	St. Francis			.51	T.			.60	T.																		.32	T.					1.43
Campbell	do				.20		2.08		.30															.62				.30					3.50
Cape Girardeau	Mississippi					.25	.03					.39												.10				.75					1.52
Caruthersville	do	.12		.64		.63		.23															.04										1.66
Dexter	St. Francis			.14	.25		.65	.52																.29		.04		.54					2.43
Doniphan	Black				.22	1.33	.16		T.															.80				.45		.64	.20		3.80
Fisk	St. Francis				.13	.10	2.61	T.	.23			.09												.21			.03	.32			T.		3.72
Jackson	Mississippi					.20						.02											.10	.04		.18							0.54
Marble Hill	do					.05		.05															.42										0.52
Morehouse	do			.03	.04	.32	.31		.26			.01											.49	.08			T.	.09					1.63
New Madrid	do				.16		1.96	.76	.73																			.07	.02				3.70
Parma	St. Francis				.37		2.10	.85	.07															1.30	.03		.10	.25		.27			4.57
Poplar Bluff	Black				.27	.51	1.27	.17	.40														.10				.08						2.59
Sikeston	Mississippi			.35	.01	.45	1.20	.40															.01			T.	.85	.18			T.		2.58
Cairo, Ill.***	do			.37	T.	.32	.41	.40		T.	T.	.04																					
Ozark Plateau																																	
Arcadia	St. Francis				.20	.11	.07					.06												2.03	1.88		.12	.65			T.	T.	5.12
Aurora	Neosho	.18		.41		1.35			.26																.30		.95	.09		T.	.50		4.04
Birchtree (near)	Black					.92	.11	.88														.40	.40				.40			.36	.65		4.12
Buffalo	Osage	.30		.32	.02	.50	.01	1.56	.01																1.08	.39						.32		4.51
Caplinger Mills	do			.12		.85		T.																		.92							1.89
Chaonia	St. Francis					.23		.02	.75			.18												.25	.07			.02					1.52
Dean	Neosho			1.32		1.05			.22				T.											1.36	.32		.27	T.		.32	1.73		6.59
Eldon	Missouri				1.50	.51	.35																	.20	.67		.14	.21				.13	3.71
Farmington	St. Francis			.17	.12	.16																	.51	.11			.51						1.58
Fredericktown	do				.53	.12	.21					.52												.83	.28			.06						2.55
Galena	White		.49		.53	.90		.16					.20												.15	.30		.27			.12			3.12
Goodland	Black			.15	.10	.29						.10												.27		.20	.28						1.89
Greenville	St. Francis				.18	.68			1.28														.86	.38									3.38
Hailey	White	.07		.87		.84			.36				.09											.87	2.10					.98	.72		6.90
Koshkonong	Black			.10		1.91																		.79		.36				.40			3.56
Lakeside	Osage				.49	.80	.49																	.07	.12		.30	.09				.34	.25	2.95
Lebanon	do			.49	.52	.55	1.00																T.	.81		.19	1.00			1.50	.91		6.97
Leeper	Black				.12	.36	.16	.01	.42															.74	.22			.27					2.30
Lockwood	Osage	1.20		.60	.10	1.80			.15															.11		.35	T.	.07		.72	.35		5.45
Mountain Grove	White	.02		.06	.05	1.57	.02	.62	.32															.27	T	T.	.91	.07		.81	.04		4.76
Neosho	Neosho			.62		1.02		.22					T.											T.	.15			.14		.24	.95		3.34
Owensville	Gasconade				.90	.60																		.25	.45			.40					2.60
Ozark Beach	White				.32		.64		.26				1.20												2.08	.06		.11			.24	.28	5.19
Rolla	Meramec				.99	.23	.55																	.18	.01			.32				.05	2.33
St. Thomas (near)	Osage				.85	.36	.10																	T.	.78			.28					2.37
Salem	Meramec			.28	.42	.49																		1.20			.06				.12		2.57
Seligman	Neosho			.40		.48			.04															.18	.54			.08	.54	.08	1.08		3.42
Seymour (near)	White	.62		.22		1.76		1.79																.11		T.	.45	.10		.46	.12		5.63
Springfield***	do	.32		.48		2.05	T.	.47	T.															.14	.04	.07	.20		T.	.04	.07		3.88
Steelville	Meramec				.85	.40	.23																	.71	.80			.22					3.21
Stover	Missouri				.24	1.67	.11																	.04	1.80		1.50				.27	.04	5.67
Williamsville	Black				.02	.44	.38	.03	.39															.91	.22		.79	.04	.01				3.23
Willow Sprgs. (near)	White	.03			.09	.41	.62	.08	.68															.76	.31			.57			.03		3.58
Versailles	Osage			.45	.02	1.15																	.10	1.30		.24	.87				.38		4.51

Continued on next page

Daily Precipitation for July, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage				.08	1.78			T.															T.	.25	.78	.39				.60		3.88
Clinton	do			.17	.03	1.95																		.31		.53	.41			.05		.02	3.47
Concordia‖	Missouri			.05		1.98	.04																.49		.20	.05					.06	.05	2.92
Harrisonville‖	Osage				.04	2.44	.15			.04			.02												.06	.01					.01	.05	2.82
Joplin‖	Neosho			.45		.58		.57																.15			.68		.03	.08	1.15		3.69
Lamar‖	do	.83			.08	.05	.40		1.10																.15		.60	.10			T.	.55	3.86
Lamonte	Missouri			.10	.05	2.00					.02												.39	.32			.05				.60	.05	3.58
Marshall	do			T.		2.08																	1.35	.13		T.	.25	.08				1.07	4.96
Nevada	Osage			.08		.73																		.53		1.76					.42		3.52
Osceola‖	do				.05	1.34	.17																	T.	.12		.85	.09				1.67	4.29
Warrensburg	Missouri				1.52	2.40		.28																		.03	.13			T.	.73	.08	5.17
Warsaw	Osage				.15	.87	.65																	.40	.37		.81			T.	.33	.98	4.56
Waverly ‖	Misouri				.58	2.10	.20																	.27	.25							.20	3.60
Northwest Plateau																																	
Bethany	Grand			2.31		1.43				.03												.09				.02	.03					.46	4.37
Chillicothe ‖	do				.09	2.30						T.										T.		.17	.51		.55	.20				.27	4.09
Conception	Missouri			1.55		1.61				.04												.60		.51		.05				T.	T.	.76	5.12
Edgerton	do	T.		.77		1.22					.03													.30		.11	.16				.13	.12	2.84
Gallatin ‖	Grand				.53	2.28																			.35		3.15					.48	6.79
Grant City	do			.28		1.30				.35												.12		.30		.02				T.		.52	2.89
Kansas City***	Missouri	T.		.04	1.38	.94		T.	T.															.02		.01	.02			T.	.15	.01	2.57
Kidder ‖	Grand			.32	1.89	.03															.03			.86		.40					.62	.07	4.22
King City	Missouri			1.34	1.06																	.02		.33		.15	.01					.76	3.67
Lexington ‖	do				.52	1.69	.15					.03												.33							.02	.31	3.05
Maryville‖	do				.73	1.13				.02												.38		.47	.20							.44	3.37
Oregon	do	.32		1.47	.03	1.52		.02														T.	T.	.17		.20					.02	.45	4.20
St. Joseph***	do		T.	1.29	.63	.46	.01		T.													.03	T.	1.15		.08	.20				.05	.16	4.06
Tarkio	do			1.58	.66	.03				.02											.01			.21		.05						1.16	3.72
Trenton	Grand		T.	.29	T.	1.66																.04		1.33		.06	.32				T.	.89	4.59

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for July, 1932

(See precipitation data in table, page 33)

Station	Data	Day of month																															Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.318	.386	.260	.044	.269	.112	.268	.226	.223	.300	.324	.289	.210	.322	.351	.312	.342	.343	.320	.335	.293	.340	.349	.167	.268	.167	.222	.263	.311	.329	.023	8.316
	Mean temperature	80	68	72	82	74	78	81	76	78	84	78	79	81	82	83	86	82	80	81	81	84	86	74	78	78	80	82	82	82	72	76	79.4
	Wind movement	75	84	53	62	56	52	59	50	43	60	64	35	49	54	51	54	45	44	44	45	58	63	72	63	49	69	83	42	51	79	48	1,756

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932 report.

Continued from Page 31

inches, at Gorin; the least monthly amount was 0.52 inch, at Marble Hill. The greatest rainfall in any twenty-four consecutive hours was 3.50 inches at Louisiana, on the 26th. The average number of days with 0.01 inch or more precipitation was 7.

The rainfall of the month was of the local shower type. The most general rains came on the 3d-5th, the 26th, and the 31st. No rain of economic value fell within the confines of the State from the 6th to the 22d.

MISCELLANEOUS PHENOMENA

Hail, light.—Seymour on 7th; Brunswick on 22d; Versailles and St. Joseph on 23d; St. Louis on 26th; and Hannibal on 28th and 29th. No damage resulted.

Halos, lunar.—None. Solar, 2d, 5th, 8th, 22d, 23d, 25th, and 26th.

Thunderstorms, local.—1st, 6th, 7th, 9th, 11th, 21st, 29th, and 31st. General.—3d, 4th, 5th, 7th, 10th, 22d, 23d, 25th, 26th, and 28th.

WIND AND LOCAL STORM DAMAGE

During the late afternoon and evening of the 4th severe thunderstorm squall winds caused local damage over most of northwestern and north-central Missouri. A telephone district manager at St. Joseph estimated one-third of all telephone and power lines in northwest Missouri were broken from fallen limbs of trees. A few barns were unroofed or blown down, while many houses had broken windows or damaged roofs, mostly from fallen limbs. The damage was most general and severe in Nodaway, Gentry and Daviess counties, though reports of slight damage embrace adjacent counties. Damage in buildings in Nodaway County is estimated at $7,500, mostly from south of Maryville to Conception, but the greatest damage was to shade trees.

Daily Temperatures for July, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	91	85	84	86	88	89	89	87	93	92	89	96	96	98	100	101	100	96	100	97	96	103	85	90	88	95	94	97	93	87	89	92.7
	Minimum...	72	56	68	69	64	69	76	64	69	78	61	66	75	74	73	72	72	69	70	75	75	69	69	65	71	74	67	75	70	67	64	69.6
Columbia.	Maximum...	78	78	79	85	79	86	88	83	92	91	86	95	94	96	97	96	95	95	97	96	94	100	90	90	85	92	92	96	84	81	77	89.3
	Minimum...	61	55	66	65	65	68	68	62	71	73	64	64	75	75	73	73	72	70	70	74	76	71	69	65	72	71	73	74	70	67	64	68.9
Fayette	Maximum...	79	83	85	85	86	89	92	87	95	94	90	96	96	97	100	101	100	98	100	99	96	101	91	91	85	94	97	100	88	83	79	92.2
	Minimum...	68	52	57	67	64	66	69	60	65	68	61	61	64	71	68	71	69	63	64	68	72	74	66	62	69	73	66	70	69	66	64	66.0
Hannibal	Maximum...	82	80	83	82	80	89	86	86	89	91	85	96	96	97	100	94	93	94	98	97	95	95	86	91	89	94	89	94	78	81	71	89.1
	Minimum...	60	57	68	67	66	66	73	63	68	69	64	62	77	76	75	77	73	68	74	72	76	73	70	66	74	69	69	67	68	67	66	69.0
Jefferson City	Maximum...	93	84	83	83	90	87	90	92	87	94	94	92	97	96	98	101	101	100	101	101	99	98	102	95	91	88	91	96	97	91	81	93.3
	Minimum...	70	54	61	70	65	66	72	65	68	64	65	63	73	74	74	73	61	65	67	75	75	77	68	65	69	72	71	72	70	67	64	68.2
Kirksville.	Maximum...	83	81	84	77	88	90	88	86	88	86	89	95	95	96	97	97	96	95	99	96	97	95	83	93	88	95	92	95	80	80	70	89.5
	Minimum...	62	50	65	63	63	67	69	59	60	65	56	62	73	74	74	72	72	75	67	73	74	75	66	62	72	67	65	64	62	63	62	66.2
Louisiana	Maximum...	91	80	82	85	83	96	86	85	86	90	86	96	95	97	100	98	90	95	93	98	94	92	95	94	95	97	95	95	85	85	75	90.8
	Minimum...	72	65	54	66	63	63	72	52	68	73	63	55	73	72	73	72	73	58	60	66	75	70	65	60	66	68	68	70	70	65	60	66.1
Macon§§	Maximum...	76	83	86	81	87	91	89	88	87	94	87	97	96	98	100	98	97	96	100	100	97	97	89	93	85	95	94	98	78	80	78	90.8
	Minimum...	67	52	61	65	64	65	71	61	65	70	57	60	71	74	73	70	73	70	66	74	74	74	68	62	69	67	66	73	65	65	64	67.0
Mexico§§	Maximum...	80	81	84	83	79	93	92	86	92	93	90	92	101	102	101	101	99	100	100	100	91	101	92	93	92	94	93	98	83	83	75	91.7
	Minimum...	69	53	57	56	64	64	71	60	66	71	58	50	72	74	72	71	72	64	65	73	75	76	67	64	70	69	67	72	68	64	63	66.4
St. Louis(1)	Maximum...	84	82	83	87	81	90	92	87	92	95	88	94	97	99	101	95	95	94	97	99	96	94	91	89	90	90	91	97	81	81	77	90.6
	Minimum...	66	62	65	72	68	73	75	72	72	76	70	73	79	80	81	81	78	73	75	78	80	68	72	70	71	69	74	75	70	65	67	72.6
Unionville	Maximum...	92	85	85	80	86	88	85	87	86	85	86	95	96	98	102	98	94	97	100	98	99	97	90	102	88	97	95	95	85	85	80	91.5
	Minimum...	62	52	63	62	63	62	70	60	62	72	54	55	72	75	74	68	64	67	67	73	75	74	66	63	70	70	64	72	60	62	63	65.7
Warrenton	Maximum...	87	82	83	85	82	89	91	85	93	96	90	94	99	99	101	97	97	102	102	102	96	96	91	92	90	94	92	101	94	83	78	92.4
	Minimum...	72	56	62	71	66	67	73	63	67	74	63	66	75	74	75	75	74	70	68	75	77	74	69	67	70	69	72	73	69	64	64	69.5
Southeast Lowlands																																	
Campbell	Maximum...	92	86	84	84	89	85	96	95	98	98	95	100	102	105	104	103	105	104	106	101	104	106	92	97	97	98	93	101	98	84	96	96.7
	Minimum...	70	52	57	70	72	70	70	66	69	70	74	65	71	74	72	74	67	72	67	72	70	71	66	66	68	68	70	70	70	66	66	68.5
Caruthersville	Maximum...	92	83	82	89	88	84	94	88	96	96	95	95	102	99	104	104	99	99	102	99	103	103	93	96	98	100	92	104	102	89	95	95.6
	Minimum...	71	59	62	72	74	74	72	68	73	75	77	72	76	77	75	75	72	77	75	76	76	75	70	70	73	72	73	74	74	72	73	72.7
Doniphan	Maximum...	90	87	84	95	95	90	97	92	97	99	96	99	101	103	104	106	106	102	104	104	104	109	93	95	92	100	95	99	95	81	90	96.9
	Minimum...	70	54	58	71	70	72	70	69	72	72	74	67	71	72	72	76	72	66	67	72	72	73	71	67	75	72	72	72	70	67	65	69.8
Jackson	Maximum...	91	83	81	94	89	87	94	91	94	95	93	94	99	99	99	98	94	94	96	96	100	100	99	98	96	97	98	104	100	89	90	94.6
	Minimum...	67	52	54	69	65	69	68	64	64	62	70	64	70	68	68	73	63	66	60	64	70	70	64	65	63	68	69	64	69	62	60	65.3
Poplar Bluff	Maximum...	91	87	88	93	83	85	95	93	94	96	94	94	98	101	102	103	99	98	98	99	101	98	91	94	91	95	94	98	97	88	91	94.5
	Minimum...	70	53	57	72	68	71	71	57	71	72	75	67	71	72	71	78	68	69	66	74	71	72	68	69	70	71	72	71	71	64	62	68.8
Sikeston	Maximum...	88	87	79	96	89	76	93	92	92	96	95	95	98	98	100	99	99	98	99	99	99	100	90	93	93	93	94	99	98	91	90	93.8
	Minimum...	72	56	61	72	70	72	72	68	70	72	72	69	69	75	73	75	68	72	69	75	73	75	68	71	71	70	72	70	74	67	66	70.3
Cairo, Ill.	Maximum...	88	81	78	90	85	84	91	88	90	93	88	91	97	98	98	96	96	94	94	95	96	95	90	90	91	91	91	96	87	81	85	90 6
	Minimum...	68	62	64	74	73	72	72	71	71	73	72	74	77	77	77	78	73	73	71	77	77	74	72	74	72	73	73	75	73	66	66	72.4
Ozark Plateau																																	
Arcadia	Maximum...	84	81	75	90	85	85	90	88	94	95	91	94	97	100	99	98	98	97	99	98	95	98	89	87	86	90	90	93	84	76	82	90.6
	Minimum...	70	50	51	69	64	66	70	63	61	72	67	59	70	66	67	74	63	60	60	69	69	67	66	64	63	70	69	69	69	63	60	65.2
Aurora	Maximum...	85	81	82	92	87	89	93	91	92	95	93	93	92	94	94	96	97	93	91	89	93	93	93	80	90	94	85	92	92	81	90	90.4
	Minimum...	68	56	63	77	65	66	71	69	70	71	80	85	80	83	84	86	83	78	69	78	68	78	75	66	74	72	72	68	70	60	58	72.4
Birchtree	Maximum...	85	84	82	95	87	86	93	89	93	95	90	95	97	98	99	99	98	98	98	98	99	100	90	89	90	89	94	91	93	92	76	85	91.9
	Minimum...	70	52	59	72	67	67	67	67	70	73	74	72	73	72	67	76	78	70	72	70	72	69	67	70	69	70	70	70	70	60	63	69.0
Eldon§§	Maximum...	82	83	81	83	83	90	87	87	94	83	83	95	94	99	94	97	97	101	96	99	96	94	96	82	86	89	84	90	88	68	89	89.4
	Minimum...	72	56	61	68	65	66	70	65	67	73	65	65	68	72	71	76	70	64	65	68	70	76	70	64	69	71	71	70	71	67	63	68.0
Farmington	Maximum...	87	83	78	96	81	73	91	91	102	100	94	101	103	104	103	99	100	102	104	103	100	101	95	94	88	96	95	101	88	85	84	94.3
	Minimum...	72	53	53	71	68	71	71	66	63	70	66	63	71	69	69	76	70	68	66	71	71	71	67	64	66	72	75	68	70	63	62	67.6
Koshkonong	Maximum...	85	87	79	95	85	81	92	88	94	95	90	95	97	98	98	100	99	101	100	98	97	101	93	90	93	95	91	97	91	77	93	92.7
	Minimum...	70	59	63	71	72	72	72	69	71	73	75	72	74	74	77	79	83	80	72	75	74	76	69	69	72	72	71	73	72	67	65	72.0
Lebanon	Maximum...	83	81	73	91	81	87	87	80	90	95	94	94	93	92	93	98	98	97	98	97	96	97	98	90	81	81	80	95	93	75	85	89.5
	Minimum...	70	49	62	68	63	62	64	62	68	68	67	66	69	68	68	70	64	63	63	68	67	72	65	64	67	68	68	66	64	59	60	65.2
Mountain Grove	Maximum...	81	80	81	92	82	88	92	90	90	91	93	93	92	94	95	97	96	94	94	91	94	96	97	88	92	94	86	93	89	75	85	90.2
	Minimum...	69	53	60	69	64	66	68	65	70	70	71	70	72	71	72	72	67	65	70	70	70	72	67	70	68	68	68	67	67	63	62	67.6
Neosho	Maximum...	79	88	86	94	81	86	92	94	93	93	94	96	94	96	96	96	99	98	95	96	95	96	97	83	93	96	85	93	92	90	94	92.3
	Minimum...	71	66	63	70	68	66	69	68	72	70	71	71	69	66	67	67	67	67	63	70	71	70	70	67	67	74	69	67	69	69	67	68.4
Rolla	Maximum...	84	77	78	88	80	85	86	84	90	91	88	92	92	93	96	96	95	96	96	95	95	94	92	90	89	91	91	95	92	81	85	89.6
	Minimum...	72	56	62	71	65	69	71	66	70	73	69	66	73	72	73	73	71	68	68	75	74	76	69	64	69	75	71	71	73	65	64	69.5
Springfield	Maximum...	80	78	78	88	78	85	89	88	90	90	90	90	90	91	92	95	92	90	90	87	90	91	90	81	88	93	83	90	87	74	87	87.3
	Minimum...	65	60	65	72	67	68	68	70	74	72	74	70	73	73	76	75	74	72	73	73	74	75	70	69	71	71	70	71	73	67	65	70.6
Southwest Plain																																	
Appleton City	Maximum...	82	82	80	92	84	88	91	85	93	94	91	94	94	95	100	99	97	96	96	88	96	99	84	87	87	88	93	92	88	78	91	90.5
	Minimum...	71	57	67	66	65	66	71	69	71	73	68	71	71	72	70	72	74	66	71	73	69	74	73	67	68	74	70	69	71	62	63	69.2
Clinton	Maximum...	84	85	77	92	83	86	86	78	93	94	94	94	94	98	99	99	100	98	101	94	98	98	96	94	89	90	96	96	90	78	90	91.7
	Minimum...	71	56	65	73	65	66	66	66	70	74	66	69	68	72	70	70	74	68	68	80	70	70	71	66	70	70	72	72	70	63	71	69.1
Harrisonville§§	Maximum...	82	84	83	92	81	86	90	82	94	94	87	94	95	96	100	97	96	93	95	95	96	99	88	89	89	94	97	95	85	70	89	90.5
	Minimum...	67	55	59	66	64	64	67	66	67	74	64	66	71	71	69	70	74	68	71	72	71	70	72	64	67	70	68	69	68	65	62	67.5
Lamar§§	Maximum...	81	84	81	92	77	85	91	87	95	92	96	95	95	93	97	100	101	100	99	90	95	96	95	99	92	90	86	93	86	79	92	91.4
	Minimum...	68	56	57	71	68	67	68	70	71	73	75	74	73	72	71	72	73	69	69	70	73	74	73	71	71	70	71	69	70	71	67	69.9
Lamonte	Maximum...	80	82	81	84	83	83	81	85	82	81	83	81	85	85	88	95	90	90	90	85	85	90	86	86	83	85	87	90	88	78	83	85.0
	Minimum...	61	53	68	72	65	68	71	65	70	73	62	67	72	72	70	72	73	67	67	74	70	73	67	65	71	71	70	69	69	63	63	68.2
Marshall	Maximum...	92	81	81	81	87	87	89	89	94	92	92	95	94	95	98	97	95	95	98	97	95	99	84	89	87	93	92	94	93	79	83	90.9
	Minimum...	70	56	68	67	67	69	67	63	68	62	62	69	69	75	74	79	72	69	69	76	73	75	69	64	70	69	70	72	69	67	62	68.7
Nevada	Maximum...	82	82	80	91	85	86	86	90	91	94	93	93	92	93	97	99	96	94	95	89	96	98	94	84	89	87	89	91	87	77	91	90.0
	Minimum...	69	54	68	73	65	67	70	73	74	74	71	74	73	74	72	74	73	66	70	73	72	76	70	65	69	77	70	70	72	65	65	70.3
Warrensburg	Maximum...	82	84	80	91	89	88	89	86	94	95	90	94	95	95	99	100	96	98	99	94	95	99	87	92	92	92	98	99	87	78	89	91.8
	Minimum...	69	54	66	69	64	67	70	65	71	71	63	69	72	73	72	73	73	65	71	74	69	75	64	64	64	72	70	70	68	61	62	68.1
Warsaw	Maximum...	87	86	82	96	92	90	92	91	96	95	94	99	99	100	102	109	105	103	101	99	100	102	96	91	90	92	96	98	92	82	90	95 1
	Minimum...	60	54	66	73	65	67	73	67	70	75	68	67	72	75	75	72	71	63	69	75	72	76	71	67	70	72	72	69	72	62	63	69.1
Northwest Plateau																																	
Chillicothe §§	Maximum...	80	87	86	87	87	91	89	87	94	102	91	99	98	101	103	105	103	102	102	102	101	101	87	93	85	98	97	99	81	83	74	93.4
	Minimum...	64	50	64	62	64	65	70	58	66	74	55	53	60	62	70	65	69	65	63	68	72	74	68	61	69	70	66	71	65	65	61	64.8
Grant City	Maximum...	73	79	78	78	80	85	80	84	92	88	86	92	93	93	100	98	96	95	94	94	95	98	90	88	81	96	94	93	83	83	78	88.3
	Minimum...	61	54	63	63	64	66	64	60	68	73	58	67	72	73	72	74	71	70	69	73	69	74	57	59	70	72	67	69	62	66	62	66.5
Kansas City..	Maximum...	79	85	84	92	82	89	90	83	95	90	88	94	96	97	98	96	94	96	97	94	94	96	84	90	87	96	97	94	81	73	88	90.3
	Minimum...	67	63	70	67	66	71	75	69	74	73	68	75	77	78	77	78	79	73	76	79	75	80	72	67	75	79	74	74	69	65	64	72.5
Kidder	Maximum...	82	83	86	84	83	86	85	84	93	88	87	94	94	96	97	97	96	96	97	96	96	99	82	88	87	94	94	97	88	79	75	89.8
	Minimum...	65	53	68	65	65	67	71	61	69	76	61	68	73	75	73	73	73	69	71	74	73	76	70	64	71	73	69	71	66	66	64	68.8
Lexington	Maximum...	89	87	85	94	88	90	94	88	96	95	93	97	97	98	101	103	100	101	100	98	98	102	91	95	91	99	100	101	95	81	90	94.7
	Minimum...	69	57	68	69	65	69	75	65	71	78	64	69	76	75	75	76	74	69	72	77	74	78	73	65	72	78	70	74	69	67	64	70.9
Maryville	Maximum...	89	84	82	82	86	90	88	86	96	90	94	95	98	97	100	97	97	100	98	96	96	97	85	89	85	97	96	96	81	80	69	90.8
	Minimum...	58	50	66	62	63	63	65	57	68	75	57	65	70	72	71	70	70	68	67	71	68	73	65	63	69	69	66	67	63	65	62	65.7
Oregon	Maximum...	77	85	84	89	84	90	89	85	95	90	92	94	98	97	101	102	100	99	99	98	99	100	87	91	83	98	98	100	81	77	77	91.6
	Minimum...	61	55	67	66	64	67	67	62	74	75	61	72	74	76	75	76	73	73	71	74	75	75	67	65	72	77	67	72	66	66	63	69.3
St. Joseph..	Maximum...	77	84	82	86	85	89	87	84	95	89	89	95	96	96	98	98	96	96	97	95	96	97	81	88	82	95	95	95	81	73	78	89.5
	Minimum...	62	55	67	64	67	68	67	62	73	70	64	73	77	78	77	74	74	73	73	78	75	77	65	65	73	74	67	74	68	66	64	69.8
Trenton	Maximum...	93	85	86	80	89	90	87	86	93	92	89	96	98	98	100	98	96	97	100	99	98	97	85	91	85	96	95	98	88	82	73	91.6
	Minimum...	60	52	66	63	65	67	68	59	67	78	59	64	73	73	72	72	71	68	68	73	74	76	67	63	71	70	68	71	66	68	63	67.6

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 8-23-32—990.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

O. R. ROGERS, Meteorologist, Temporarily in Charge

VOL. XXXVI COLUMBIA, MO., AUGUST, 1932 No. 8

GENERAL SUMMARY

August was the fifth consecutive month above normal in warmth, though with few unpleasantly warm days. It also was wetter than normal, the first month with positive precipitation departures since February. It was the wettest August since 1915, and the wettest of any month since April, 1929. Only three Augusts in the past 45 years have been so wet.

Temperatures were below normal at eleven northern stations, and only three places in the State showed plus departures of three or more degrees. Daytime readings reached or passed the 100 degree mark on one to five days at sixteen stations, all south of the Missouri River. There were nineteen days, for the State as a whole, with readings of 90 degrees or higher, ranging from thirteen days in the north to twenty-two days in the south.

The monthly totals of precipitation present striking contrast in the northeast and the southwest sections. In the northeast, from Putnam, Sullivan, Shelby, and Monroe counties eastward, an area of eleven counties, monthly totals exceeded ten inches, with Kirksville, Adair County, reporting 13.96 inches. In the southwest, south from Barton County and east along the southern border to Oregon County, monthly totals were generally less than one inch, the fourth driest August on record. Roughly divided, the eastern half of the State, scantily watered in July, received ample rainfall, while the western half, well supplied with moisture in July, received rather less than the usual during August.

The month opened with excessive rains in the extreme northeast, from four to more than five inches falling within a twenty-four hour period over about five counties. The following eight days were mostly fair with normal warmth. From about the 11th to the 17th, showers were frequent, and general except in the southwest. These were very beneficial to growing crops, but the attendant humidity and heat were unpleasant for animal life. The succeeding days were fair and mostly cooler than normal until the 26th, a day of generous and general showers. The concluding days were about the warmest of the month, though late on the last day the heat was broken by further showers.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 77.2°, and 1.2° warmer than the 40-year average. The highest local monthly mean temperature was 82.0°, at Caruthersville; the lowest local monthly mean was 73.2°, at Grant City. The extreme highest temperature reported was 106°, at Marble Hill on the 2d; the extreme lowest was 46°, at Edgerton on the 19th, and Lebanon on the 21st. The greatest daily range was 46°, at Neosho on the 20th. Temperatures were above normal on 21 days, and daytime values were 90° or higher on 19 days. Yet there were few uncomfortably warm days during the month.

PRECIPITATION

The average precipitation for the State, 124 stations reporting, was 5.98 inches, and 2.23 inches more than the 60 year average. The greatest monthly amount was 13.96 inches, at Kirksville, a record amount for this station in August, and the second largest amount ever recorded in August in the northeast section. The least monthly total was 0.61 inch at Seligman. The greatest amount in any twenty-four consecutive hours was 5.25 inches at Philadelphia, Marion County, on August 31st-September 1st. Other excessive amounts on this date were as follows: Bethel, Shelby County, 5.15 inches; Lucerne, Putnam County, 4.68 inches; and Steffenville, Lewis County, 4.45 inches. Lamonte, Pettis County, reported 4.50 inches on the

(Continued on Page 39)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	29.96	84	55	64	329	78	4,997	6.7	26	nw.	12
Hannibal	29.96	84	60	..	...	..	5,506	7.4	24	ne.	11
Kansas City	29.94	72	50	57	322	76	5,993	8.1	24	ne.	6
St. Joseph	29.92	81	52	59	308	72	5,440	7.3	37	w.	25
St. Louis	29.97	80	54	61	291	69	6,622	8.9	33	nw.	9
Springfield	29.96	78	47	53	366	87	6,353	8.5	27	nw.	6
Cairo, Ill.	29.97	86	60	68	...	..	4,949	6.7	26	n.	2
Keokuk, Iowa	29.99	80	61	66	295	69	4,897	6.6	30	nw.	6

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**76.0**	.....	**105**	**44**	**3.75**	.....	**4.91**	**0**	**8**	**17**	**9**	**5**
1888	74.0	− 2.0	110	48	7.25	+3.50	....	0	11	..	..	..
1889	73.5	− 2.5	101	52	1.96	−1.79	....	0	14	..	..	..
1890	73.3	− 2.7	104	49	4.84	+1.09	....	0	9	..	..	..
1891	73.2	− 2.8	108	38	5.34	+1.59	....	0	8	..	..	..
1892	74.3	− 1.7	100	40	2.42	−1.33	4.55	0	6	17	8	6
1893	72.8	− 3.2	100	40	2.20	−1.55	5.60	0	4	18	10	3
1894	77.0	+ 1.0	111	39	1.58	−2.17	3.07	0	5	14	16	1
1895	75.3	− 0.7	104	48	4.23	+0.48	3.50	0	8	15	11	5
1896	76.6	+ 0.6	108	41	3.25	−0.50	4.80	0	6	17	10	4
1897	74.1	− 1.9	108	41	2.39	−1.36	5.00	0	6	19	9	3
1898	75.8	− 0.2	103	44	3.03	−0.72	4.75	0	5	17	10	4
1899	78.8	+ 2.8	107	49	3.35	−0.40	4.28	0	7	18	10	3
1900	80 3	+ 4.3	105	52	3.51	−0.24	2.77	0	6	19	9	3
1901	78.4	+ 2.4	109	47	1.88	−1.87	4.33	0	5	19	9	3
1902	75.0	− 1.0	103	47	6.16	+2.41	7.84	0	10	14	11	6
1903	74.4	− 1.6	102	43	5.40	+1.65	6.40	0	10	16	11	4
1904	73.7	− 2.3	100	43	5.46	+1.71	4.43	0	8	16	10	5
1905	76.4	+ 0.4	102	48	4.69	+0.94	3.94	0	8	19	7	5
1906	76.6	+ 0.6	101	40	4.72	+0.97	3.55	0	11	14	10	7
1907	77.3	+ 1.3	109	47	3.71	−0.04	6.30	0	9	17	8	6
1908	76.4	+ 0.4	102	46	3.87	+0.12	3.57	0	8	17	9	5
1909	79.5	+ 3.5	110	40	0.55	−3.20	4.00	0	2	24	6	1
1910	74.7	− 1.3	103	40	2.77	−0.98	5.80	0	6	15	9	7
1911	75.4	− 0.6	109	41	4.20	+0.45	5.17	0	7	15	8	8
1912	76.2	+ 0.2	104	41	4.19	+0.44	2.62	0	9	17	8	6
1913	82.8	+ 6.8	110	41	1.06	−2.69	3.51	0	3	22	7	2
1914	78.0	+ 2.0	106	49	4.25	+0.50	8.50	0	9	15	9	7
1915	69.8	− 6.2	98	37	7.86	+4.11	8.20	0	12	12	9	10
1916	79.2	+ 3.2	107	41	4.05	+0.30	6.48	0	7	19	7	5
1917	73.3	− 2.7	104	38	4.45	+0.70	5.20	0	9	16	8	7
1918	81.8	+ 5.8	111	45	3.34	−0.41	3.42	0	8	17	9	5
1919	75.7	− 0.3	106	44	4.29	+0.54	7.00	0	8	17	9	5
1920	73.1	− 2.9	102	43	4.78	+1.03	5.77	0	9	15	8	8
1921	76.8	+ 0.8	109	48	5.27	+1.52	5.20	0	9	14	0	7
1922	77.5	+ 1.5	107	46	2.40	−1.35	3.87	0	6	18	18	5
1923	77 3	+ 1.3	108	42	3.99	+0.24	5.25	0	8	16	9	6
1924	77.2	+ 1.2	106	48	4.14	+0.39	3.50	0	7	19	8	4
1925	76.5	+ 0.5	107	45	3.45	−0.30	4.26	0	6	19	8	4
1926	77.5	+ 1.5	106	50	5.63	+1.88	5.83	0	10	15	9	7
1927	71.1	− 4.9	97	39	5.06	+1.31	7.76	0	9	14	10	7
1928	76.4	+ 0.4	99	45	5.35	+1.60	5.52	0	9	15	10	6
1929	76.0	0.0	105	43	2.50	−1.25	3.27	0	6	18	9	4
1930	78.5	+ 2.5	114	47	2.02	−1.73	2.54	0	6	16	10	5
1931	74.9	− 1.1	106	44	4.77	+1.02	5.36	0	9	15	9	7
1932	77.2	+ 1.2	106	46	5.98	+2.23	5.25	0	9	18	9	4

Climatological Data for August, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	78.2	+ 4.0	97	5	55	19	30	3.74	−0.10	1.18	0	9	20	2	9	e.	O. K. Benecke
Clifton Hill	Randolph	731	33	74.8	− 1.2	95	10	49	19	33	4.27	+0.26	2.20	0	10	22	5	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	77.0	+ 1.4	94	5	56	19	30	6.44	+2.84	2.86	0	12	14	13	4	se.	U. S. Weather Bureau
Downing	Schuyler	876	11	73.9[a]	− 1.0	93	30	53	19	30	7.54	+3.82	2.72	0	15	16[a]	8[a]	6[a]	e.	James Taylor
Elsberry	Lincoln	449	1	74.5	.....	96	23	49	20†	44	5.32	.....	1.48	0	9	11	6	14	sw.	Ray E. Mills
Fayette	Howard	661	52	77.0	+ 1.1	98	10	51	20†	39	3.31	+0.05	1.81	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	75.3	− 1.1	95	30	52	20†	31	3.96	+0.49	1.51	0	8	18	13	0	e.	Clyde C. Herring
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	9.20	+6.08	4.14	0	10	16	2	13	se.	J. W. Pulliam
Hannibal	Marion	534	49	75.4	+ 0.4	94	30	55	19	26	10.15	+6.81	3.77	0	11	13	11	7	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	78.1	+ 1.4	100	7	54	20	31	5.81	+2.56	1.70	0	9	15	10	6	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	74.9	+ 0.9	93	2†	53	19	30	13.96	§§§§	3.86	0	12	20	3	8	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	38	76.2	+ 1.3	96	28†	50	19†	33	9.79	+5.97	3.52	0	10	16	9	6	s.	Stark Bros. Nurseries
Macon	Macon	875	33	75.4	− 0.7	98	3	50	4	41	5.44	+1.90	1.65	0	11	18	4	9	ne.	W. C. Brown
Mexico	Audrain	800	43	76.0	0.0	98	10	52	20	34	5.92	+2.68	2.60	0	10	18	0	13	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	11.96	+7.39	3.32	0	11	13	11	7	n.	J. S. Conway
St. Charles	St. Charles	456	44	76.7	− 0.1	96	10†	55	13	31	7.64	+4.16	2.20	0	11	11	14	6	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	77.8	+ 0.3	94	10	59	19	28	8.68	+5.69	3.39	0	12	17	10	4	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	77.9	+ 0.7	95	28†	60	19	25	9.21	+4.96	3.93	0	13	18	12	1	se.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	6.59	+3.57	1.60	0	13	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	34	74.3	− 2.2	94	10	53	19	27	12.13	+8.42	4.45	0	13	18	9	4	s.	Frank Hall
Unionville	Putnam	1,062	39	73.5	− 1.3	95	9†	50	19	35	10.60	+6.53	3.90	0	12	22	0	9	sw.	Geo. W. Davis
Warrenton	Warren	816	50	77.3	+ 0.8	96	30†	55	19	30	5.77	+1.37	2.87	0	8	9	18	4	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	74.4	− 0.6	93	30	56	20	27	8.93	+5.73	4.17	0	10	11	12	8	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	75.8	0.0	100	7	49	19†	44	7.85	+4.37	4.45	0	11	16	8	7	sw	
Southeast Lowlands																				
Campbell	Dunklin	314	6	77.5	.....	103	1†	54	20	40	2.98	.....	1.70	0	9	19	10	2	s.	Jeff. King
Caruthersville	Pemiscot	265	36	82.0	+ 1.7	103	1†	61	21	31	3.10	−0.28	1.75	0	4	24	6	1	s.	Sam Smith
Doniphan	Ripley	344	28	80.1	+ 2.5	102	2	52	19	41	4.68	+0.40	1.54	0	6	27	2	2	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	77.6	+ 1.5	105	2	49	24	43	9.90	+6.29	2.52	0	10	9	10	12	s.	John G. Putz
Marble Hill	Bollinger	470	37	79.3	+ 2.3	106	2	50	21	40	5.50	+1.90	1.65	0	7	15	11	5	w.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	2.50	−1.48	1.08	0	7	23	6	2	sw.	John A. Spence
Poplar Bluff	Butler	339	27	78.7	+ 0.7	101	1	54	20†	36	6.23	+1.86	2.40	0	10	21	7	3	s.	J. H. Wolpers
Sikeston	Scott.	318	25	79.3	+ 1.7	100	2	57	20†	32	2.19	−1.67	0.95	0	7	0	26	5	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	79.0	+ 1.2	96	2	59	21	23	3.79	+0.77	1.68	0	11	10	14	7	s.	U. S. Weather Bureau
Section means and	extremes	....	..	79.2	+ 1.7	106	2	49	24	43	4.54	+0.97	2.52	0	8	17	10	4	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	74.6	+ 0.3	95	2	50	21	36	7.23	+3.50	1.37	0	11	14	6	11	sw.	Arcadia College
Aurora	Lawrence	1,370	31	78.9	+ 2.2	95	27	60	20†	27	3.40	−1.08	1.35	0	5	24	5	2	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	77.4	+ 1.3	99	6	50	19	34	4.20	−0.38	1.58	0	11	22	9	0	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	78.7	.....	98	22	51	20	34	1.68	.....	1.04	0	4	22	7	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	1.48	.....	0.61	0	6	15	15	1	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	78.2	+ 0.5	100	26†	49	20†	44	2.11	−2.05	1.10	0	3	22	7	2	sw.	H. E. Dean
Eldon	Miller	934	37	78.0[b]	+ 1.6	99	6	53	21	34	5.49	+1.67	1.81	0	5	5[b]	15[b]	9[b]	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	77.4	+ 2.0	101	2	52	21	36	5.20	+1.63	2.54	0	11	14	16	1	sw.	Robert Forsyth
Goodland	Iron	1,000	39	75.7	+ 1.2	99	5†	48	21	45	7.44	+3.46	1.60	0	12	17	6	8	s.	F. M. Adams
Greenville	Wayne	381	23	77.6	+ 0.9	103	2	49	20†	42	4.66	+1.31	1.43	0	8	21	8	2	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	..	.....	..	..	..	..	..	1.18	−4.19	0.83	0	3	27	2	2	sw.	A. W. Madison
Koshkonong	Oregon	958	31	80.9[a]	+ 3.0	101	2	57	21	35	0.95	−3.39	0.34	0	5	15[b]	8[b]	6[b]	ne.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	76.8	+ 0.7	99	10	46	21	40	6.17	+3.29	2.35	0	6	25	2	4	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	78.9	+ 1.7	96	6†	54	20†	32	2.77	−1.59	1.95	0	6	21	10	0	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	31	77.6	+ 2.1	97	5†	51	21	37	2.48	−1.84	0.65	0	8	17	14	0	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	78.3	+ 1.2	97	30	49	21	46	1.18	−2.96	0.60	0	2	19	11	1	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	78.0	+ 1.8	97	6	55	20†	33	4.59	+0.51	1.95	0	9	6	16	9	s.	F. H. Lane
Salem	Dent	1,178	28	77.2	+ 1.3	99	6	48	21	38	5.12	+0 61	1.56	0	10	13	15	3	s.	E. E. Martin
Seligman	Barry	1,542	31	78.0	+ 1.8	96	13†	51	21	34	0.61	−3.43	0.42	0	3	27	4	0	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	76.1	+ 1.1	93	6†	48	21	35	2.58	−1.38	0.76	0	5	24	7	0	s.	Ira H. Hailey
Springfield	Greene	1,324	54	78.3	+ 2.6	94	12	56	20	26	3.14	−0.95	1.53	0	5	23	8	0	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	78.0	.....	98	11†	51	19	32	6.38	.....	1.63	0	9	17	11	3	sw.	I. M. Wilson
Section means and	extremes	.....	..	77.7	+ 1.5	103	2	46	21	46	3.64	−0.38	2.54	0	7	19	9	3	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	78.5	+ 0.7	97	12	54	20	34	2.01	−1.67	0.87	0	8	3	26	2	sw.	W. G. Bigelow
Clinton	Henry	765	39	79.4	+ 1.8	100	5†	55	19†	37	4.54	−1.17	1.68	0	9	16	14	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	77.6	+ 1.7	100	6	54	19	36	6.42	+2.37	1.79	0	8	12	10	9	sw.	John H. Patterson
Lamar	Barton	980	44	80.2	+ 2.5	101	13	56	20†	35	0.90	−3.33	0.80	0	2	24	7	0	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	74.0	− 3.1	90	30	54	19†	28	10.22	+4.26	4.50	0	10	22	5	4	se.	J. E. Wheeler
Marshall	Saline	779	45	77.5	+ 1.5	94	1†	53	19	31	4.62	+0.98	2.35	0	4	19	12	0	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	78.8	+ 1.7	95	6†	54	20	29	2.48	−1.16	0.87	0	5	21	9	1	s.	George A. Kaupp
Warrensburg	Johnson	878	45	78.4[a]	+ 1.3	100	5	55	19†	33	8.50	+5.01	2.91	0	8	20[a]	9[a]	1[a]	sw.	E. A. Markey
Warsaw	Benton	687	31	79.9	+ 2.3	99	6†	54	20†	39	3.26	−1.03	1.25	0	9	19	5	7	s.	Everett Martin
Section means and	extremes	.....	..	78.8	+ 1.7	101	13	53	19	39	4.77	+0.47	4.50	0	7	17	11	3	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	75.0	0.0	95	10	51	19	29	5.64	+1.69	1.53	0	11	19	6	6	se.	A. S. Cumming
Chillicothe	Livingston	779	23	75.5	− 0.2	99	10	50	19	38	5.95	+1.49	1.73	0	12	17	8	6	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	75.4	+ 0.7	94	10	53	19	32	9.37	+5.67	1.70	0	11	17	8	6	e.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	76.3[a]	+ 1.2	96	1	46	19	36	4.72	+1.50	1.82	0	11	24	2	5	s.	Fred L. Stiff
Grant City	Worth	1,134	28	73.2	− 1.7	93	16	53	19	28	6.89	+3.15	1.54	0	12	17	11	3	sw.	W. P. Spillman
Kansas City	Jackson	963	43	79.2	+ 2.6	96	1	58	19	26	4.90	+0.81	1.96	0	9	15	12	4	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	76.3	+ 0.9	96	9	52	19	35	5.71	+1.84	2.47	0	10	18	8	5	se.	Roscoe L Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	4.55	+0.84	1.72	0	7	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	80.9	+ 4.7	99	1†	57	20	33	3.25	−0.20	0.90	0	8	20	9	2	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	75.2	+ 1.4	96	10	49	19	35	5.81	+1.85	1.15	0	12	14	11	6	s.	J. R. Brink
Oregon	Holt	1,048	76	78.4	+ 3.2	98	10	53	19	31	4.25	+0.24	1.50	0	8	22	6	3	se.	Mina Wright
St. Joseph	Buchanan	967	24	77.6	+ 0.9	96	30	52	19	28	3.82	+0.33	1.58	0	8	17	10	4	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	74.6	− 0.6	94	10†	50	19	31	6.35	+2.30	2.10	0	8	16	9	6	se.	Albert Volker
Trenton	Grundy	822	36	76.1	+ 0.9	98	10	54	19†	30	8.21	+4.52	1.91	0	11	17	9	5	s.	W. H. Estes
Section means and	extremes	.....	..	76.4	+ 1.1	99	1†	46	19	38	5.67	+1.86	2.47	0	10	18	8	5	se.	
State means and	extremes	.....	..	77.2	+ 1.2	106	2	46	19†	46	5.98	+2.23	5.25	0	9	18	9	4	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. §§§§ Plus 10.45.

Daily Precipitation for August, 1932

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi	5.00		.05					.81				1.39	1.17		1.24	.27		.81								.83						11.57
Boonville	Missouri	1.02	.03					.80					.18	1.04		.02	.95	.04									1.18						5.26
Bowling Green	Mississippi	2.55	.70						1.03		.01	.04	2.70	.75		.60	.34										.76			.16			9.64
Brunswick	Grand	.50		.32				.56					.15	1.18	.07	.05			.18								.73						3.74
Canton	Mississippi	3.44					1.34					.07	.27	.69	1.36	.16			1.09								.82						9.24
Clifton Hill	Chariton	.06	.06				.19	.57				.37	T.	2.20	T.	.02		.41	.03								.36						4.27
Columbia***	Missouri	.01	T.				.80			.42		.23	2.37	.49	.02	.01	.87									.89	.12					.21	6.44
Downing	Mississippi	2.72	.11				.98	.15				.16	.03	.24	.85	.44	.23	.89								.40	.12	.03				.19	7.54
Edina	do	3.84		.10				1.57					1.76	1.50	T.	1.38	.56	1.36									.83						12.90
Elsberry	do	1.48						1.16		T.		.43	.09	.59	.20	.17		.17								1.03						5.32
Fayette	Missouri	.04	.05					.78				.14	1.81		.02	.01	.02										.44						3.31
Fulton	do	.51		.16				.80			.34		.01	1.51		.07											.56						3.96
Gorin	Mississippi		.07				1.25					1.12	.19	.37	4.14	.55	.10	.93								.48							9.20
Hannibal***	do	3.64	T.				.86	T		.10		2.65	.78	T.	1.12	.12	.02	.37								.46						.03	10.15
Hermann	Missouri	.40						1.02			.02		.06	4.10	.10	.33	.04	.03	.02								.17		.01				6.30
Jefferson City	do	.04						1.70					1.18	.65	.04	1.04		.32									.80	.04					5.81
Kahoka	Mississippi	3.80						1.28				.56	.55	.50		1.58		1.00	.70								.30						10.27
Kirksville	do	3.86	.05				1.28	.84				1.15		.65	.98	3.05		1.90								.40	.20					.10	13.96
LaBelle	do	3.35						1.30				.52	.40	2.05	.30	.90	.30	.50	1.15								.32						11.09
Laddonia	do	1.10							1.20		.66		.96	1.51		.33											1.05						6.81
Linneus	Grand	.42	T.	.02			.61					.21	.52		2.90	.25		.68	.66							.70	.13					.21	7.31
Louisiana	Mississippi	3.52					1.00	.20				.80		.87	1.40	.10		.80									.88					.22	9.79
Lucerne	Grand	4.68	.05				2.22							.43	.22	1.44	.41	1.54	.30								.47						11.76
Macon	Chariton	.54	.08					.75					.42	1.65	.12	.97	.02	.28	.33								.28						5.44
Memphis	Mississippi	3.90	T.					1.15				.50	.40	1.15	.50	1.30	T.	1.54									1.13					.10	11.67
Mexico	do	.56	.05					.80			.18		.60	2.60	.04	.05	.36										.68						5.92
Milan	Grand	3.95	.05					.75						.12		3.05	1.07	.98	.15								.52	.10					10.74
Monroe City	Mississippi	3.32						.79		.46		1.68		1.26	1.43	1.26	.27	.26								1.09						.14	11.96
New London	do	3.32	.79					.89			.74	.45	1.68	.57	.23	1.04	.15	.23	.31								.34						10.74
Pacific	Meramec	.20	.24	.64				1.35					.45	1.92	.11	.14	.57	.02	.54								.12						6.30
Palmyra	Mississippi	2.13		.25				.74			.44	.25	.64	1.16		.80		.14	1.20								.42						8.17
Paris	do	.40	.02						1.19		.17		1.06	2.94	.12	.71	.11										.25					.11	7.08
Perry	do	1.19	.18					.85		.76			.45	1.70	.50	.67		.84									.99						8.13
Philadelphia	do	5.25						1.00			T.		.96	.71	.09	2.00	.10	.20	1.18								T.						11.49
St. Charles	Missouri	2.20	.05				.98	1.00		.24		.95	.33	1.66		.06		.15									.02						7.64
St. Louis (1)***	Mississippi	2.08	.01				.62	.22		.14		.69	1.79	1.60	.03	T.	T.	1.33								.01	.16						8.68
St. Louis (2)*	do	1.95	.10				.74	.19		.20		.47	2.68	1.25	.03			1.34								.14	.10					.02	9.21
Shelbina	do	1.24	.01	.03				.69			.07	.09	.47	1.32	.22	1.60	.09	T.	.55								.18						6.59
Steffenville	do	4.45	T.				1.00	.27				1.10	.17	1.05	1.35	.45	.07	1.35	.27							.45	.15					T.	12.13
Troy	do	.59	2.03					.64			.25		2.48	1.06		.11	.50	.36	.44								.11						8.57
Union	Meramec	.33		.06				.99			.02		68	2.57	.09	.08	.08	.02	.30								.16						5.38
Unionville	Chariton		.15				2.20	.10					.30	.45	2.20	1.70		.90	.30							1.20	.15					.95	10.60
Valley Park	Meramec	.08	1.10	.56				.70					1.41	2.28	.04	.12	.18	.32	.82								.41		T.				8.02
Warrenton	Mississippi	.72						.73		.08	T	.88		2.87		.28	.11										.10					T.	5.77
West Ely	do	.43					.76	.11		.16	.26	2.02	1.11	.07	1.54	.13	.16	.20								.37						.16	7.48
Winfield	do	1.55	.87					.67					1.92	.95		.66		.37	1.11														8.10
Keokuk, Ia.***	do	3.79	T.				1.02			T.		1.71	.75	.01	.29	.07	.27	.59								.43		T.				T.	8.93
Southeast Lowlands																																	
Bragg City	St. Francis			1.96									.22			1.90	.29	.63									.60						5.60
Campbell	do			1.70					.05					.08		.02	.10	.20	.50								.03	.30					2.98
Cape Girardeau	Mississippi			.34				.04			.06		1.73	.42	.86		.22		.57								.56		.09				4.89
Caruthersville	do		1.75												.22			.68								.45						3.10
Dexter	St. Francis			2.00							.50		.20					.12	.62	.04							.60	T.	1.05				5.13
Doniphan	Black			1.54					T.	.45			1.54		.15		.15	.85									T.						4.68
Fisk	St. Francis			1.04							1.33		T.	.27	T.	.60	.54	T.	.07								1.09	.65	1.45	T.			7.04
Jackson	Mississippi		1.30							.58		.72	2.52	1.15	.40	.35		1.63									1.18	.07					9.90
Marble Hill	do		1.65										1.40	.42		.12										.52	1.11	.28					5.50
Morehouse	do			.50							T.		1.08	.08		.02	T.	.29									.46		.07				2.50
New Madrid	do			1.42							.41		.02	.91			.10		1.90								1.40	1.65	.04				7.85
Parma	St. Francis			2.45							.67							.20	1.05								.47	1.35					6.19
Poplar Bluff	Black			2.40				T.			T.			1.11	.15	.12	.85	.54	.55								.10	.16	.25				6.23
Sikeston	Mississippi		.27									.05	.95	.12		.15										.60		.05				2.19
Cairo, Ill.***	do	T.	1.67	.01				.01		.05		.05	.04	.10	T.	T.	.03	.17									T.	1.60	.06					3.79
Ozark Plateau																																	
Arcadia	St. Francis		.43				.97			.04		.05		.26	.73	.33	1.00	.92									1.13	1.37					7.23
Aurora	Neosho							.20						T.			1.35	.70								T.	.45					.70	3.40
Birchtree (near)	Black		.30	.08				.16		.40			1.58	.15	.45	.50	.23										.30	.05					4.20
Buffalo	Osage							1.04							.26												.28					.10	1.68
Caplinger Mills	do						.32	.36							T.	.05	.07									.07						.61	1.48
Chaonia	St. Francis			.93				.12					.04	.47	.11	.05	.68		.36								.70	.28	1.34				5.08
Dean	Neosho							.52		.49	T.															T.		T.				1.10	2.11
Eldon	Missouri							1.81						.10		1.78			.25								1.55						5.49
Farmington	St. Francis		.99				T.	.20			.14		1.71	.83	.02	.33		.14									.55	.28	.01				5.20
Fredericktown	do			.18				.54					.57	.67	.37	.12	.08	.06	1.48								.47		.36				4.90
Galena	White							.22			.12																	.75					1.09
Goodland	Black		.09					.96		.12		.17	.93	.38	.86	.02	1.22	.29									1.60	.80					7.44
Greenville	St. Francis		.08									.67	.49	.26		T.	.63	.59									.51	1.43					4.66
Hailey	White						.28			.07								.83															1.18
Koshkonong	Black									.34	.10				.05	T.	.33										.13						0.95
Lakeside	Osage		.02					1.94					.07	.67		.09		.10	.50							2.62		.03				6.04
Lebanon	do							1.63					T.	.49	.10		T.									1.46		.14			2.35	6 17
Leeper	Black			.08				.09			.03		.21	1.36			2.06	.12	1.02								.12		.34				5.43
Lockwood	Osage		T.					1.95						.13	.20		.11	T.								.10	.28					T.	2.77
Mountain Grove	White		T.					.53		T.				.02	.22	.05	.65	.31									.52	.18					2.48
Neosho	Neosho							.58			.60							T.														T.	1.18
Owensville	Gasconade							1.35					.55	2.80	T.	T.			T.											T.			4.70
Ozark Beach	White			.36							.33							.07											.32			1.08
Rolla	Meramec							.65					31	1.95	.15	.36		.05									.80	.05	.27				4.59
St. Thomas (near)	Osage							1.65					.09	.21	.03	1.84		.51	.35								1.32						6.00
Salem	Meramec		.22					.82				.22	.05	.23	1.11		.36	.45									1.56	.10					5.12
Seligman	Neosho									.42	.15							.04															0.61
Seymour (near)	White							.63								.65	.28	.76									.26	T.				T.	2.58
Springfield	do		T.				T.	.78				T.		.01	T.	1.53	T.	T.								.15		T.				.67	3.14
Steelville	Meramec							.27					.60	2.73	.22	.63			.03								.26		1.16	.04			5.94
Stover	Missouri						2.12						.50	.24		1.41		.76	.62								1.64	.10					7.39
Williamsville	Black			.84				.38						.36	.28	.25	1.65	.10	1.39								.50	.53	1.43				7.71
Willow Sprgs. (near)	White							.03						.12		.05	.16	.03	.07								.61	.17	.23				1.47
Versailles	Osage	.05	.12					1.50				.39		.14	1.54		T.	.20								T.	1.63	T.				.81	6.38

Continued on next page

Daily Precipitation for August, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																																	
Appleton City	Osage	T.					T.	.87						.05	.09		.04	.49								T.	.16	.20				.11	2.01
Clinton	do	.05	.22				1.15							.41	.02			.22									1.68	.32				.47	4.54
Concordia‖	Missouri	.04						.98						.62				.04									.49						2.17
Harrisonville‖	Osage	.06		.38				1.71						1.79		.35			.29								1.70	.14					6.42
Joplin‖	Neosho							.22			.08															T.						.73	1.03
Lamar‖	do							.80																			.10						0.90
Lamonte	Missouri	.03					4.50	.50						1.05	.02		.02	.67								3.05	.20				.18	10.22
Marshall	do		.23					1.19					T.	2.35			T.									.85				T.	4.62
Nevada	Osage		.09					.87							.11				.62							T.					.79	2.48
Osceola‖	do		.04					.70								.22			.36								.55					1.87
Warrensburg	Missouri	T.	.12				.80	2.11					T.	2.05	.37			1.50									1.43					.12	8.50
Warsaw	Osage	.02		.52				1.25						.08	.03	.16			.05								.95		.20				3.26
Waverly ‖	Missouri	.11		.26				.72						2.60					.05								.79						4.53
Northwest Plateau																																	
Bethany	Grand	.12	.20				.54					.08	.26		1.10	.07		1.53								.60		.20				.94	5.64
Chillicothe‖	do	.33	.31	.11				1.01					.66	.44	.02	.23		.94	.15								1.73	.02					5.95
Conception	Missouri	.20	.63			..	.59					1.70	1.31		.14	.38		1.56								.81		.52			1.53	9.37
Edgerton	do	.07	.86	.01			.09	.32				.02	.09	.43				T.								.60	.41					1.82	4.72
Gallatin ‖	Grand	.20		.67				.68							.59	.28	.03	.06	.30								.74	.40				.52	4.47
Grant City	do	.40	.96				.76					.11	1.54	.04	.52	.55		.75								.04		.17				1.05	6.89
Kansas City***	Missouri	.07	.45				.92						.23	.05	.03			T.							T.	.67	1.29	T.				1.19	4.90
Kidder ‖	Grand	T.	.07				.51					T.	.20		.09		.50	.30							T.	2.47	.10	T.			.42	1.05	5.71
King City	Missouri	T.					.61					.46	.47	T.	.17	T.	T.	.56								.56						1.72	4.55
Lexington ‖	do	.10	.09	.38				.68						.87	.03				.20	..							.90						3.25
Maryville‖	do	.35	.70				T.	.66					1.15	.56	.12	.14		.41	.05								.14	.57				.96	5.81
Oregon	do		.77		T.		.42						.94		.07	.07	T.										.03	.45				1.50	4.25
St. Joseph***	do	.05	.08		T.		.80			T.		T.	.29	T.	.09		T.									.87		.06			T.	1.58	3.82
Tarkio	do		.51				.49						1.98				.17	.26					.22					.62				2.10	6.35
Trenton	Grand		.11				.72					.96	.18	.13	1.91	.38		1.03								.97		.16				1.66	8.21

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for August, 1932
(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.272	.196	.245	.322	.252	.282	....	.210	.262	.303	.292	.273	.295	.164	.117	.232	.172	.248	.275	.244	.240	.259	.259	.261	.243	....	.148	.134	.249	.333	.298	7.568
	Mean temperature	84	83	76	76	78	81	77	74	77	81	82	84	82	82	82	82	80	74	68	68	69	72	75	78	78	78	79	82	82	86	84	78.6
	Wind movement	91	62	70	46	53	44	91	49	36	82	53	53	65	57	49	47	42	54	56	53	54	53	50	49	51	77	44	37	67	81	62	1,778

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932 report.

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6th, and Gorin had 4.14 inches on the 14th. There was some flood damage in Putnam and Adair counties on the 17th due to high water in the Chariton River and its tributaries.

MISCELLANEOUS PHENOMENA

Fog, dense.—At St. Joseph on 3d, at Keokuk on 7th, and at Hannibal on 20th and 21st.

Hail.—Light at St. Joseph on the 6th, and 25th, and at Columbia on the 12th. See storm notes for data on hailstorm in Platte County.

Halos, solar.—4th, 5th, 12th, 14th, 17th, 23d, 24th, and 29th.

Thunderstorms.—General on 2d, 6th, 9th, 11th, 12th, 13th, 14th, 16th, 17th, 25th, and 31st. Local on 1st, 7th, 15th, 26th, and 27th.

SPECIAL STORM NOTES

About 5.15 p. m. of August 6th, a hailstorm, travelling from the northwest, crossed the Missouri River in the vicinity of Bean Lake, Platte County, after causing severe damage in Brown and Atchison counties in Kansas. There was severe damage to tobacco and considerable damage to corn over an area from one to three miles in width and twelve miles in length. A great many stones were three-fourths inch in diameter, and occasional cluster of stones frozen to-gether were noted the size of hen eggs and even larger. Truck crops and gardens were ruined, window panes broken, automobile tops perforated, and some roofs were punctured. The total loss in Platte County is estimated at $150,000 by the County Agent.

Daily Temperatures for August, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	95	91	87	89	97	91	85	88	92	96	96	88	84	85	90	92	88	85	80	81	85	89	92	94	94	86	85	94	94	93	87	89.5
	Minimum ...	69	75	64	63	68	70	62	59	63	71	73	69	69	70	71	72	74	62	55	57	58	59	63	66	71	67	69	70	74	77	63	66.9
Columbia.	Maximum...	93	88	86	88	94	93	83	86	90	94	92	88	85	83	89	91	87	77	76	77	82	87	89	91	88	84	84	92	94	93	90	87.5
	Minimum ...	68	72	63	61	65	66	65	60	63	71	72	70	72	72	72	72	71	63	56	56	59	57	61	67	66	66	66	69	72	76	75	64	66.5
Fayette	Maximum...	95	90	89	91	88	92	87	90	92	98	97	90	81	83	93	96	90	82	82	82	87	90	93	93	88	87	95	95	96	91	90	90.2
	Minimum ...	67	67	60	59	61	64	64	55	58	64	70	68	70	70	70	74	70	62	52	51	51	51	57	62	68	65	66	69	72	73	71	63.8
Hannibal	Maximum...	86	88	84	86	90	83	81	85	90	92	83	76	70	76	80	87	84	75	76	78	81	84	85	89	89	86	80	93	93	94	90	84.3
	Minimum ...	65	73	66	64	67	66	64	62	66	72	69	67	67	69	72	74	70	64	55	57	58	58	59	65	69	68	67	68	78	77	66	66.5
Jefferson City	Maximum...	85	96	94	90	94	99	100	85	88	92	96	95	91	89	89	90	94	91	81	79	80	85	89	90	91	90	89	88	94	93	94	90.4
	Minimum ...	75	77	64	61	63	69	64	61	61	68	69	68	69	70	69	70	72	64	55	54	55	57	58	60	67	65	66	68	74	75	74	65.9
Kirksville.	Maximum...	89	93	87	87	90	89	84	87	90	93	91	71	68	79	80	92	88	87	79	81	82	86	88	91	89	87	84	91	93	92	90	86.4
	Minimum ...	64	70	60	62	65	64	60	58	64	70	67	66	62	65	66	68	68	59	53	55	57	58	61	62	65	62	61	64	74	75	60	63.4
Louisiana	Maximum...	85	80	85	83	93	95	90	85	87	92	91	80	77	86	85	90	87	82	76	78	86	85	86	90	87	89	90	96	95	96	92	87.1
	Minimum ...	65	68	65	58	60	64	65	58	58	70	70	65	68	70	69	70	69	70	50	50	60	58	60	64	65	70	66	75	74	75	74	65.3
Macon§§	Maximum...	94	88	98	91	94	82	84	88	92	96	93	77	72	78	84	94	88	77	77	78	82	84	87	91	90	87	90	93	92	94	87	87.2
	Minimum ...	62	68	61	50	65	68	61	57	61	64	70	68	64	64	69	69	70	59	53	54	55	55	59	63	70	64	64	65	74	75	72	63.6
Mexico §§	Maximum...	92	91	85	92	96	80	84	89	93	98	94	85	80	79	87	93	81	79	77	80	85	87	89	92	92	87	84	95	95	97	93	88.1
	Minimum ...	63	66	62	59	63	68	64	57	59	65	71	67	67	68	70	70	69	60	53	52	53	55	58	60	66	64	65	67	74	74	73	63.9
St. Louis(1)	Maximum...	81	92	84	86	93	93	83	87	91	94	88	86	73	86	84	89	89	78	76	78	82	85	87	89	89	86	85	94	93	94	93	86.7
	Minimum ...	63	75	70	69	72	65	65	69	68	70	70	70	65	70	73	74	70	63	59	63	63	66	69	70	70	69	73	70	78	76	73	69.0
Unionville	Maximum...	90	85	90	86	90	84	80	85	95	92	90	70	72	67	78	92	85	80	76	80	80	84	95	90	85	84	80	90	92	90	85	84.6
	Minimum ...	63	70	56	64	66	62	60	61	65	65	67	65	60	63	64	64	64	64	50	52	55	52	60	64	66	63	60	63	70	72	64	62.4
Warrenton	Maximum...	84	92	84	90	95	95	84	87	93	95	92	86	82	83	85	87	84	80	75	80	85	88	89	91	91	87	87	95	95	96	96	88.2
	Minimum ...	64	75	65	62	65	70	63	63	63	69	68	68	68	70	70	71	73	64	55	58	56	60	62	65	69	65	67	69	75	73	74	66.4
Southeast Lowlands																																	
Campbell	Maximum...	103	103	94	92	96	97	89	94	96	98	101	102	92	96	95	95	97	88	82	85	92	95	97	98	95	90	98	98	97	99	101	92.4
	Minimum ...	63	70	70	64	60	65	65	61	60	61	69	71	69	72	69	69	68	68	56	54	55	56	59	60	62	68	67	68	71	69	66	62.6
Caruthersville	Maximum...	103	103	98	94	95	99	98	93	96	98	99	100	94	94	91	93	95	87	80	88	88	90	93	94	92	86	95	95	94	97	96	94.1
	Minimum ...	72	78	72	71	66	69	71	69	66	68	74	75	74	74	72	72	70	70	62	62	61	62	65	69	68	71	69	73	74	73	74	69.9
Doniphan	Maximum...	101	102	94	93	98	90	94	92	96	96	99	93	98	95	95	94	96	82	81	88	92	95	95	94	95	94	94	98	100	101	99	94.6
	Minimum ...	66	76	74	66	65	67	68	61	63	62	70	74	72	75	70	70	73	56	52	56	55	61	55	53	62	65	68	70	70	70	70	65.6
Jackson	Maximum...	96	105	90	93	98	100	91	95	89	100	98	94	86	93	87	93	92	84	80	83	88	90	92	92	93	98	94	95	95	95	97	92.8
	Minimum ...	63	75	67	60	58	64	64	56	58	63	70	66	66	66	69	66	67	66	53	51	50	50	53	49	62	64	69	66	70	69	69	62.5
Poplar Bluff	Maximum...	101	100	93	91	93	95	93	91	92	96	98	97	84	89	91	89	89	87	81	82	87	90	91	90	90	86	92	93	94	95	94	91.4
	Minimum ...	65	75	71	64	61	66	67	61	62	65	70	71	71	72	70	69	70	69	56	54	54	56	58	63	66	68	71	69	72	69	70	66.0
Sikeston	Maximum...	99	100	99	88	92	97	96	90	91	96	96	95	92	91	90	89	92	80	79	81	84	86	86	91	90	89	89	96	94	95	95	91.2
	Minimum ...	67	72	71	65	62	69	69	62	63	68	72	72	71	71	65	70	71	70	67	57	57	57	62	66	67	69	69	72	73	72	72	67.4
Cairo, Ill.	Maximum...	93	96	86	84	89	93	85	87	90	92	94	88	82	87	86	91	90	83	75	78	82	85	88	89	87	84	90	92	91	92	95	87.9
	Minimum ...	72	73	72	70	70	73	69	68	69	69	74	72	71	71	75	72	72	67	60	60	59	63	66	71	71	69	71	73	76	76	75	70.0
Ozark Plateau																																	
Arcadia	Maximum...	90	95	84	85	91	94	81	84	89	92	91	91	83	84	84	86	85	78	73	75	80	82	86	86	87	84	87	89	89	88	89	85.9
	Minimum ...	64	71	65	57	55	62	61	58	58	67	71	68	68	71	70	68	69	66	53	51	50	51	52	59	64	65	69	67	71	69	70	63.2
Aurora	Maximum...	93	90	86	86	92	92	90	85	91	93	94	94	93	94	92	92	90	81	78	79	82	86	88	89	92	89	95	92	93	93	93	89.6
	Minimum ...	67	68	68	62	70	72	64	62	66	68	69	70	74	74	72	77	75	67	62	60	60	62	65	67	68	69	68	70	72	72	73	68.2
Birchtree	Maximum...	95	98	90	86	92	99	94	88	94	96	96	96	90	92	89	91	82	77	77	79	81	85	88	88	89	92	91	93	93	94	95	90.0
	Minimum ...	67	72	68	62	62	65	64	60	64	65	68	70	72	70	70	71	70	56	50	55	55	57	58	59	66	66	68	67	72	71	70	64.8
Eldon§§	Maximum...	90	91	90	94	97	99	85	85	91	94	93	94	91	89	93	91	88	..	..	88	84	88	91	93	91	88	87	91	90	94	82	[b]90.1
	Minimum ...	65	76	63	61	63	67	64	61	62	66	69	69	70	72	70	71	70	64	..	..	53	54	58	60	66	64	65	69	72	73	71	[b]65.8
Farmington	Maximum...	94	101	94	88	95	99	87	89	93	98	97	94	89	89	88	86	84	82	74	78	83	86	92	90	92	91	86	95	93	92	93	90.1
	Minimum ...	67	72	66	60	58	66	63	67	57	67	71	67	71	69	70	67	71	67	53	53	52	52	57	61	65	66	69	69	70	71	70	64.6
Koshkonong	Maximum...	99	101	89	87	94	99	..	96	97	98	98	98	91	95	96	90	93	84	82	81	86	90	92	95	94	92	95	97	95	97	98	[a]93.3
	Minimum. ..	70	72	80	65	65	71	..	66	64	63	71	71	71	73	70	70	72	71	63	58	57	59	64	66	69	69	70	72	74	72	79	[a]68.6
Lebanon	Maximum...	93	95	89	90	95	96	85	89	95	99	94	98	92	91	90	95	88	83	82	78	85	85	96	95	91	90	85	92	85	94	96	90.7
	Minimum ...	71	71	63	50	60	63	62	56	62	70	67	68	71	70	67	66	69	65	51	49	46	51	59	63	60	63	66	68	69	69	68	63.0
Mountain Grove	Maximum...	93	93	88	91	97	95	86	89	92	97	95	97	90	88	92	90	91	82	80	80	83	87	90	88	93	92	94	90	91	92	93	90.3
	Minimum ...	68	72	65	59	60	64	63	57	65	66	69	69	70	71	69	69	69	66	55	52	51	60	64	64	66	64	68	68	69	69	69	64.8
Neosho	Maximum...	95	96	94	90	93	95	95	93	93	94	94	95	96	96	92	90	88	81	81	96	88	84	90	91	91	91	94	94	92	97	94	92.0
	Minimum ...	75	72	65	55	62	63	66	58	62	68	67	71	71	70	68	68	71	69	51	50	49	54	60	60	62	68	68	71	71	71	68	64.6
Rolla	Maximum...	96	95	88	90	95	97	94	95	93	95	93	92	84	86	87	89	86	82	74	77	81	85	86	90	89	85	87	92	91	92	92	89.0
	Minimum ...	73	72	68	60	63	68	65	66	64	69	71	70	68	72	71	70	73	68	56	55	55	56	56	67	70	65	70	71	74	74	74	66.9
Springfield	Maximum...	93	89	82	86	93	92	79	84	90	92	93	94	90	90	87	90	87	80	76	78	83	86	88	88	91	90	93	91	91	92	91	88.0
	Minimum ...	74	75	67	64	70	66	65	66	68	68	73	74	74	74	70	71	72	64	58	56	59	63	68	69	70	68	72	72	74	73	69	68.6
Southwest Plain																																	
Appleton City	Maximum...	95	89	87	88	96	96	85	87	93	95	96	97	94	94	93	90	91	82	77	81	86	90	93	91	92	87	90	96	95	95	87	90.6
	Minimum ...	77	74	64	63	70	67	65	57	61	68	68	71	69	70	69	71	70	64	55	54	57	56	63	66	67	66	68	71	73	74	70	66.4
Clinton	Maximum...	92	92	90	92	100	98	90	88	91	95	100	100	94	96	95	97	85	82	82	86	88	92	92	95	96	87	78	95	95	94	90	91.8
	Minimum ...	75	72	63	70	75	75	65	66	60	70	68	70	70	73	70	69	68	72	55	55	55	55	62	63	66	65	68	70	70	74	70	67.1
Harrisonville§§	Maximum...	98	89	89	90	99	100	86	87	94	97	97	96	89	93	91	94	91	80	78	80	82	87	93	93	92	85	86	94	93	94	78	90.2
	Minimum ...	64	74	63	64	67	67	63	58	58	63	68	70	67	72	68	71	69	62	54	55	58	58	60	64	66	65	65	68	70	72	72	65.0
Lamar§§	Maximum...	94	91	90	91	95	97	81	86	92	94	95	96	101	98	92	96	91	84	85	85	88	93	95	95	96	93	96	97	95	96	96	92.7
	Minimum ...	70	74	67	61	63	67	67	60	60	69	71	73	75	74	73	73	74	69	58	56	56	60	60	66	66	70	70	71	75	75	72	67.6
Lamonte	Maximum...	81	80	80	81	81	82	82	82	82	82	88	85	81	82	85	86	81	80	79	80	84	80	81	80	80	83	80	84	84	90	81	82.3
	Minimum ...	63	63	63	62	66	65	64	57	62	70	71	71	75	70	74	71	63	54	54	56	57	62	67	69	65	68	71	72	76	76	64	65.6
Marshall	Maximum...	94	93	91	90	93	91	89	86	90	93	94	91	87	83	92	93	93	84	76	79	82	87	92	93	92	94	86	94	94	94	92	89.7
	Minimum ...	73	71	67	64	69	68	62	60	62	70	71	69	60	59	61	70	73	62	53	56	55	57	62	65	71	64	67	68	70	78	66	65.3
Nevada	Maximum...	93	89	86	87	93	95	82	83	92	92	94	94	94	94	94	91	91	89	79	78	80	85	88	92	93	90	90	94	95	93	95	90	89.7
	Minimum ...	77	75	64	61	70	71	66	57	64	70	73	74	73	71	71	74	72	62	65	54	56	59	68	65	70	66	66	72	74	77	69	67.9
Warrensburg	Maximum...	97	88	87	90	100	97	84	88	91	94	97	97	88	89	90	96	90	81	79	..	85	90	92	91	91	86	87	93	92	93	84	[a]90.2
	Minimum ...	71	74	67	63	69	64	63	58	63	70	71	72	70	73	69	72	68	62	55	..	55	64	64	68	68	64	64	71	72	75	63	[a]66.7
Warsaw	Maximum...	96	92	89	90	97	99	85	87	94	96	98	99	93	90	95	95	92	83	84	85	89	95	97	97	94	94	96	96	98	95	93.0	
	Minimum ...	78	76	64	61	66	65	65	59	61	71	69	71	71	74	70	72	71	64	55	54	54	56	61	66	70	65	70	72	74	77	70	66.8
Northwest Plateau																																	
Chillicothe §§	Maximum...	97	86	87	92	97	83	86	91	95	99	93	81	74	88	91	93	88	78	82	82	86	90	92	94	92	89	83	94	95	95	72	88.5
	Minimum ...	62	68	59	60	64	68	57	53	61	68	71	68	64	65	57	70	69	58	50	51	54	53	55	63	66	61	65	64	70	74	68	62.5
Grant City	Maximum...	90	86	82	86	86	79	81	81	82	91	86	76	70	81	81	93	87	79	76	77	82	86	88	86	79	85	78	90	88	89	81	83.3
	Minimum ...	66	68	64	62	61	62	63	61	64	65	70	68	63	67	69	71	67	57	53	54	56	58	67	67	67	67	58	59	62	68	69	63.2
Kansas City ..	Maximum...	96	85	86	91	94	89	82	87	91	95	95	90	86	89	89	95	90	78	76	80	82	87	91	91	93	85	86	94	94	95	84	88.6
	Minimum ...	79	70	69	71	73	65	63	67	68	75	77	72	72	73	73	79	74	64	58	62	62	66	69	74	67	67	69	74	76	78	61	69.9
Kidder	Maximum...	94	90	86	88	92	82	82	78	92	96	91	84	77	84	89	94	86	77	78	80	85	89	93	93	91	84	83	92	92	93	88	87.2
	Minimum ...	69	72	62	63	67	64	59	59	64	70	72	70	66	68	71	73	72	58	52	56	57	58	64	66	66	66	65	69	75	76	58	65.4
Lexington	Maximum...	99	94	91	95	99	93	88	91	95	98	99	97	90	93	94	98	98	87	84	86	91	89	98	97	95	89	93	96	96	96	88	93.5
	Minimum ...	70	75	65	65	71	71	62	60	65	73	73	70	71	73	71	75	75	62	60	57	58	59	65	69	70	65	69	74	73	76	74	68.3
Maryville	Maximum...	96	92	89	91	92	84	94	88	92	96	90	81	78	86	89	95	90	80	80	83	85	90	92	89	88	88	80	81	93	94	83	88.0
	Minimum ...	65	68	56	62	63	60	59	53	64	68	70	67	63	65	69	71	65	55	49	53	55	55	60	65	64	59	62	65	71	73	60	62.4
Oregon	Maximum...	97	88	92	86	94	87	84	89	94	98	93	87	83	83	93	97	91	80	83	87	89	93	95	90	89	90	88	95	94	97	86	90.1
	Minimum ...	76	70	62	66	65	65	61	59	66	72	75	70	67	69	72	75	72	59	53	57	58	63	66	72	67	63	65	71	76	78	55	66.6
St. Joseph..	Maximum...	96	86	89	89	92	85	82	88	92	95	93	83	82	87	92	94	90	78	79	83	87	90	93	90	91	87	85	94	93	96	73	88.2
	Minimum ...	72	68	62	67	68	63	62	61	69	75	76	70	68	69	73	74	73	59	52	57	59	63	67	73	66	65	66	73	75	73	57	66.9
Trenton	Maximum...	97	87	89	89	93	80	84	89	92	98	93	83	73	82	87	93	89	80	80	80	83	86	89	92	91	87	79	93	94	94	84	87.4
	Minimum ...	67	71	61	63	68	73	60	57	64	69	71	68	65	67	70	71	69	59	54	54	55	57	63	64	66	62	63	68	70	75	64	64.8

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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CLIMATOLOGICAL DATA

O. R. ROGERS, Meteorologist, Temporarily in Charge

VOL. XXXVI COLUMBIA, MO., SEPTEMBER, 1932 NO. 9

IMPORTANT ANNOUNCEMENT.—Effective about October 20, 1932, the headquarters of the Missouri Section of the Climatological Service of the Weather Bureau will be transferred from Columbia, Mo., to St. Louis, and Roscoe Nunn, Senior Meteorologist, in charge of the St. Louis office, will become the Section Director. Since the retirement, June 30, 1932, of the former Section Director, Mr. George Reeder, the climatological work was temporarily carried on at Columbia by Mr. O. R. Rogers. The transfer to St. Louis is made for purposes of economy and convenience. Substation observers and reporters in Missouri will in the future send their reports and communications to "Weather Bureau Office, St. Louis, Mo.", and all requests for climatological data publications, weather and crop bulletins, etc., for Missouri should be addressed to that office.

GENERAL SUMMARY

September, 1932, was cool throughout the State, and more than seven degrees cooler than the remarkably warm September of last year. It was the driest since 1908. Only five stations received more than normal precipitation, all in the extreme southeastern counties. There were about fifteen counties in the southwest that received less than one inch of rain during the month, and this section was scantily watered during August. More than half of the State received less than fifty per cent of the usual September precipitation.

In marked contrast with September 1931, with 18 days of 90 degrees or higher in one period, there were only two days, the 15th and 18th, with temperatures of 90 degrees. There were no very cool spells and no frosts, save along the northern border on the last day of the month. While there was considerable deterioration in crop prospects in the southwest and southern Ozarks due to the dry weather, the month was excellent for drying out the corn crop and for harvesting a large acreage of forage crops under ideal conditions. Toward the close of the month, a quite general rain gave needed moisture for preparation of ground and seeding of winter wheat over most of the State, for replenishing stock water, and for fall pasturage.

TEMPERATURE

The monthly mean temperature for the State, averaging the reports of 68 stations, was 67.8 degrees, 1.2 degrees less than the 40-year average. The highest monthly mean was 71.8 degrees at Caruthersville, and the lowest monthly mean was 64.1 degrees at Tarkio. The highest daily temperature reported was 99 degrees at Warrensburg on the 15th, and at Neosho on the 18th. The lowest temperature recorded was 33 degrees at Elsberry on the morning of the 30th. The greatest daily range was 51 degrees at Fayette on the 5th. Temperatures reached the 90-degree value on one of three days at most stations, on the 15th, 18th, or 19th. A light frost damaged tender garden plants on the 30th in the northern counties, but all staple crops already were matured or harvested.

PRECIPITATION

The average precipitation for the State, 116 stations reporting, was 2.36 inches, or 1.48 inches less than the 60-year average. It was the driest September in the past 24 years, and in several southwestern counties one of the driest on record. The extreme southeast lowlands received from five to seven inches, and one station, Sikeston, received 11.06 inches. Outside this small area, precipitation was uniformly deficient, though serving current needs in most of the State.

The greatest monthly amount was 11.06 inches at Sikeston, and the least was 0.24 inch at Seymour. The greatest amount in any twenty-four consecutive hours was 4.06 inches on the 2d, and the next greatest was 4.01 inches on the 25th, both occurring at Sikeston. The average number of days with 0.01 inch or more was six, ranging from as few as two days at some Ozark stations to ten days in east-central counties.

(Continued on Page 44)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	30.08	83	47	52	279	75	4,843	6.7	24	w.	12
Hannibal	30.09	82	48	..	...	..	5,059	7.0	27	w.	12
Kansas City	30.08	69	42	49	266	71	6,202	8.6	34	nw.	21
St. Joseph	30.07	76	44	53	295	79	5,172	7.2	32	nw.	18
St. Louis	30.07	77	52	53	245	66	6,665	9.3	38	s.	19
Springfield	30.06	76	45	50	279	75	6,139	8.5	24	sw.	15
Cairo, Ill.	30.05	86	59	71	...	..	5,306	7.4	28	ne.	1
Keokuk, Iowa	30.11	77	45	53	305	82	4,639	6.4	24	s.	18

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals	**69.0**	.....	**101**	**31**	**3.84**	.....	**4.86**	**0**	**8**	**16**	**7**	**7**
1888	65.2	− 3.8	97	28	1.11	−2.73	....	0	4	..	..	..
1889	64.7	− 4.3	94	31	4.66	+0.82	....	0	11	..	..	..
1890	63.7	− 5.3	98	34	3.98	+0.14	....	0	9	..	..	..
1891	70.6	+ 1.6	104	30	0.63	−3.21	....	0	6	..	..	..
1892	67.8	− 1.2	97	32	2.39	−1.45	3.00	0	4	19	6	5
1893	69.9	+ 0.9	107	26	3.92	+0.08	5.20	0	6	17	7	6
1894	68.5	− 0.5	101	34	4.93	+1.09	3.07	0	5	13	11	6
1895	71.8	+ 2.8	104	25	2.45	−1.39	6.21	0	4	19	8	3
1896	65.0	− 4.0	101	28	4.17	+0.33	4.40	0	10	11	10	9
1897	74.3	+ 5.3	105	27	0.74	−3.10	2.13	0	2	23	5	2
1898	70.9	+ 1.9	103	30	6.74	+2.90	6.10	0	9	15	9	6
1899	67.4	− 1.6	108	16	2.04	−1.80	3.01	0	4	20	6	4
1900	71.1	+ 2.1	100	29	4.81	+0.97	3.79	0	10	13	10	7
1901	68.9	− 0.1	103	27	2.31	−1.53	2.80	0	6	18	8	4
1902	63.2	− 5.8	95	30	4.78	+0.94	6.55	0	10	15	6	9
1903	66.4	− 2.6	98	32	4.41	+0.57	6.77	0	8	17	6	7
1904	69.6	+ 0.6	96	34	3.85	+0.01	2.46	0	3	16	8	6
1905	69.6	+ 0.6	98	41	7.67	+3.83	7.90	0	10	15	6	9
1906	71.9	+ 2.9	98	36	4.15	+0.31	4.28	0	11	15	8	7
1907	68.9	− 0.1	101	31	1.93	−1.91	2.25	0	6	18	7	5
1908	71.6	+ 2.6	99	28	1.80	−2.04	2.68	0	4	18	8	4
1909	68.7	− 0.3	105	28	4.62	+0.78	4.48	0	8	18	6	6
1910	69.5	+ 0.5	97	34	5.58	+1.74	4.63	0	10	14	6	10
1911	73.7	+ 4.7	105	39	7.13	+3.29	7.75	0	11	13	7	10
1912	68.6	− 0.4	105	27	3.06	−0.78	3.61	0	9	17	5	8
1913	69.4	+ 0.4	109	27	4.63	+0.79	4.08	0	9	13	7	10
1914	69.6	+ 0.6	99	35	6.27	+2.43	9.22	0	9	15	8	7
1915	70.6	+ 1.6	98	34	5.25	+1.41	5.91	0	7	16	7	7
1916	67.8	− 1.2	101	27	2.94	−0.90	2.80	0	6	19	7	4
1917	67.9	− 1.1	101	33	2.78	−1.06	4.13	0	5	19	6	5
1918	62.3	− 6.7	96	29	4.73	+0.89	6.61	0	7	17	6	7
1919	71.4	+ 2.4	104	38	3.29	−0.55	4.93	0	5	20	6	4
1920	70.0	+ 1.0	100	31	4.81	+0.97	4.10	0	9	17	7	6
1921	73.4	+ 4.4	104	34	7.03	+3.19	5.45	0	13	13	9	8
1922	71.7	+ 2.7	107	34	3.31	−0.53	5.36	0	5	21	5	4
1923	68.7	− 0.3	98	33	4.47	+0.63	5.26	0	11	12	9	9
1924	64.0	− 5.0	96	29	3.77	−0.07	3.72	0	8	14	8	8
1925	74.6	+ 5.6	110	45	6.46	+2.62	8.92	0	10	14	6	10
1926	69.3	+ 0.3	97	27	8.79	+4.95	5.83	0	13	12	7	11
1927	71.6	+ 2.6	102	29	3.71	−0.13	6.37	0	8	17	7	6
1928	65.0	− 4.0	95	28	2.61	−1.23	5.60	0	5	20	7	3
1929	67.4	− 1.6	98	33	3.20	−0.64	4.22	0	8	13	10	7
1930	71.3	+ 2.3	105	37	4.18	+0.34	4.00	0	8	16	7	7
1931	75.0	+ 6.0	104	36	4.16	+0.32	4.19	0	7	19	7	4
1932	67.8	− 1.2	99	33	2.36	−1.48	4.05	0	6	17	8	5

Climatological Data for September, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	68.5	+ 1.5	95	18	43	24†	37	1.29	−3.20	0.86	0	5	20	3	7	ne.	O. K. Benecke
Clifton Hill	Randolph	781	33	65.8	− 2.8	92	18	37	30	42	1.95	−2.50	1.01	0	6	20	5	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	67.1	− 1.1	91	18	41	30	34	2.15	−2.20	1.40	0	6	14	11	5	n.	U. S. Weather Bureau
Downing	Schuyler	876	11	65.6	− 2.0	88	19	43	23	31	1.34	−4.26	0.66	0	6	21	8	1	e.	James Taylor
Elsberry	Lincoln	449	1	65.0	.....	97	18	33	30	45	2.60	.....	0.97	0	5	9	8	13	n.	Ray E. Mills
Fayette	Howard	661	52	66.8	− 1.3	94	15†	35	30	51	2.10	−2.65	0.72	0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	66.2	− 2.7	91	15†	37	30	37	2.02	−2.27	1.28	0	7	22	5	3	ne.	Clyde C. Herring
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	1.10	−3.56	0.61	0	4	17	10	3	nw.	J. W. Pulliam
Hannibal	Marion	534	49	66.5	− 1.2	86	15	42	30	30	2.21	−1.76	1.27	0	5	16	8	6	n.	U. S. Weather Bureau
Jefferson City	Cole	557	42	69.0	− 0.3	96	19	40	30	40	1.79	−1.74	0.60	0	8	13	11	6	nw.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	64.8	− 1.5	86	14†	40	29	36	1.91	−2.55	1.16	0	4	23	4	3	n.	Prof. J. S. Stokes
Louisiana	Pike	469	38	65.4	− 2.6	90	4	35	24	40	1.20	−2.88	0.70	0	2	19	7	4	n.	Stark Bros. Nurseries
Macon	Macon	875	33	66.0	− 1.9	88	4†	42	24†	32	1.18	−3.12	0.50	0	5	19	5	6	w.	W. C. Brown
Mexico	Audrain	800	43	65.2	− 3.3	91	15	37	30	37	2.14	−2.46	0.92	0	6	25	1	4	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	3.23	−0.78	2.01	0	4	19	8	3	n.	J. S. Conway
St. Charles	St. Charles	456	44	69.2	+ 0.9	92	11†	43	30	35	2.35	−0.96	1.14	0	7	15	6	9	n.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	69.6	− 0.9	90	15	50	25	24	2.15	−1.31	0.77	0	10	16	9	5	n.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	69.4	− 0.8	89	15	47	28	24	1.31	−2.93	0.46	0	10	22	8	0	n.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	2.90	−1.18	2.28	0	6	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	64.8	− 4.2	87	6	39	30	37	2.43	−1.94	0.95	0	5	17	12	1	n.	Frank Hall
Unionville	Putnam	1,062	39	65.0	− 2.1	89	18	40	24†	34	1.12	−3.81	0.35	0	6	21	5	4	nw.	Geo. W. Davis
Warrenton	Warren	816	50	67.6	− 1.4	90	15	44	24	32	2.11	−1.91	0.81	0	5	13	12	5	ne.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	66.2	− 1.3	86	19	42	30	30	1.43	−2.41	0.85	0	4	14	13	3	n.	U. S. Weather Bureau
Section means and	extremes	.....	..	66.7	− 1.5	97	18	33	30	51	1.91	−2.40	2.28	0	6	18	8	4	n.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	71.0	.....	96	1†	43	30	41	6.42	.....	2.35	0	6	18	5	7	n.	Jeff. King
Caruthersville	Pemiscot	265	36	71.8	− 2.7	91	15†	46	28	32	7.66	+4.52	2.25	0	7	21	2	7	s.	Sam Smith
Doniphan	Ripley	344	28	71.4	+ 0.2	97	17	41	30	48	2.25	−1.47	0.62	0	7	21	5	4	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	68.4	− 1.7	92	1†	38	30	42	3.69	−0.09	1.25	0	6	9	6	15	s.	John G. Putz
Marble Hill	Bollinger	470	37	69.8	− 0.9	94	18	40	30	39	4.07	+0.33	1.82	0	7	15	11	4	w.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	7.65	+2.89	2.27	0	8	15	8	7	ne.	John A. Spence
Poplar Bluff	Butler	339	27	70.0	− 1.7	93	1	44	30	36	2.92	−0.87	1.65	0	5	18	6	6	s.	J. H. Wolpers
Sikeston	Scott.	318	25	70.6	− 0.5	91	18	46	30	34	11.06	+7.73	4.05	0	7	14	3	13	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	70.2	− 1.3	90	1	52	29	25	5.67	+2.78	1.99	0	9	8	10	12	n.	U. S. Weather Bureau
Section means and	extremes	....	..	70.4	− 1.2	97	17	38	30	48	5.71	+1.98	4.05	0	7	16	6	8	s.	
Ozark Plateau																				
Arcadia	Iron	926	51	66.2	− 1.4	87	18	38	30	32	1.51	−2.23	0.54	0	4	14	8	8	w.	Arcadia College
Aurora	Lawrence	1,370	31	70.2	− 0.3	91	12†	44	25	28	1.35	−2.49	0.65	0	3	22	3	5	se.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	69.3	− 0.5	91	18	41	28	33	1.85	−1.78	0.63	0	6	23	4	3	ne.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	68.6	.....	90	20	42	30	31	1.08	.....	0.66	0	2	21	7	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	3.33	.....	2.13	0	4	18	9	3	n.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	69.6	− 1.4	98	15	36	28	43	3.00	−0.93	1.85	0	2	23	3	4	e.	H. E. Dean
Eldon	Miller	934	37	66.2	− 3.2	93	15†	41	24†	37	2.38	−1.71	0.87	0	5	11	16	3	s.	E. H. Shepherd
Farmington	St. Francois	918	21	67.7	− 1.9	93	18	38	30	37	1.82	−1.55	0.62	0	8	15	8	7	ne.	Robert Forsyth
Goodland	Iron	1,000	39	66.9	− 0.9	90	15†	36	30	41	1.32	−2.50	0.35	0	7	16	10	4	s.	F. M. Adams
Greenville	Wayne	381	23	68.2	− 2.6	94	1	38	30	39	1.42	−1.72	0.90	0	2	19	6	5	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	1.85	−2.27	0.79	0	4	12	7	11	.....	A. W. Madison
Koshkonong	Oregon	958	31	71.1[a]	− 0.3	92	1	47	28	34	1.79	−1.89	0.68	0	5	13	9	8	ne.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	66.4	− 3.0	93	15†	36	28	39	0.33	−3.92	0.18	0	3	21	5	4	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	68.6	− 2.3	92	15†	42	28	37	2.23	−2.33	0.96	0	5	23	5	2	nw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	70.1	− 1.2	94	5	40	28	43	0.75	−3.49	0.28	0	7	17	11	2	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	70.2	− 0.3	99	18	37	28	47	1 80	−2.59	1.27	0	4	9	21	0	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	67.8	+ 0.1	92	18	42	30	31	1.82	-2.09	0.72	0	7	5	18	7	sw.	F. H. Lane
Salem	Dent	1,173	28	66.7	− 2.5	91	15	37	24	39	1.30	−2.78	0.57	0	6	17	6	7	n.	E. E. Martin
Seligman	Barry	1,542	31	69.9[a]	+ 0.3	93	15	40	28	36	2.25	−2.12	1.64	0	3	20	8	2	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	67.8	− 1.0	94	15	36	28	43	0.24	−4.23	0.20	0	2	19	7	4	ne.	Ira H. Hailey
Springfield	Greene	1,324	54	69.6	+ 0.7	90	18	46	28	28	0.55	−2.97	0.30	0	5	20	8	2	ne.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	67.6	.....	94	15†	38	24	40	1.48	.....	0.42	0	8	17	7	6	nw.	I. M. Wilson
Section means and	extremes	.....	..	68.4	− 1.2	99	18	36	28†	47	1.61	−2.40	2.13	0	5	17	8	5	ne.	
Southwest Plain																				
Appleton City	St. Clair	853	37	69.0	− 1.4	96	15	43	24	41	0.61	−3.51	0.21	0	7	9	19	2	se.	W. G. Bigelow
Clinton	Henry	765	39	68.6	− 2.2	96	15	43	30	36	0.65	−3.41	0.40	0	5	11	16	3	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	67.8	− 0.7	96	18	44	24†	39	1.70	−2.88	0.71	0	7	10	6	14	e.	John H. Patterson
Lamar	Barton	980	44	70.0	− 0.8	95	15	43	28†	37	3.70	−0.82	1.27	0	4	22	6	2	ne.	Jesse A. Mann
Lamonte	Pettis	867	31	66.6	− 3.6	85	11†	41	24†	35	1.70	−2.92	0.50	0	8	21	5	4	sw.	J. E. Wheeler
Marshall	Saline	779	45	68.4[b]	− 0.4	93	19†	43	24	41	3.02	−2.12	0.94	0	5	21	8	1	ne.	Sec. Chamber of Commerce
Nevada ††	Vernon	862	39	77.8	+ 8.3	99	8	43	27	31	1.62	−2.68	0.48	0	7	21	7	2	sw.	George A. Kaupp
Warrensburg	Johnson	878	45	67.6	− 2.6	99	15	42	19†	41	1.44	−2.35	0.50	0	5	21	5	4	ne.	E. A. Markey
Warsaw	Benton	687	31	69.1	− 1.4	96	18	40	24	38	2.76	−1.96	1.83	0	6	15	12	3	e.	Everett Martin
Section means and	extremes	.....	..	68.4	− 1.6	99	15	40	24	41	1.95	−2.50	1.83	0	6	16	10	4	ne.	
Northwest Plateau																				
Bethany	Harrison	916	37	64.4	− 2.7	92	18	38	30	37	2.07	−2.09	0.74	0	7	20	8	2	e.	A. S. Cumming
Chillicothe	Livingston	779	23	65.8	− 2.8	95	18	34	30	43	2.34	−3.34	0.92	0	8	18	8	4	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	43	65.6	− 1.6	92	18	41	29	34	1.92	−2.20	0.61	0	5	16	13	1	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	64.4	− 3.5	93	20	38	30	35	2.42	−1.38	1.07	0	6	23	2	5	s.	Fred L. Stiff
Grant City	Worth	1,134	28	....	.....	..	..	..	..	..	.....	.....	....	....	..	..	..	..	...	W. P. Spillman
Kansas City	Jackson	963	43	69.0	+ 0.1	94	18	50	29	27	1.36	−3.20	0.65	0	7	18	7	5	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	65.8	− 1.5	92	18	41	29	43	2.14	−2.43	0.73	0	7	20	8	2	se.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	1.64	−2.98	0.66	0	5	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	70.5	+ 1.7	97	15†	44	24	39	1.76	−2.98	0.50	0	8	19	9	2	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	65.2	− 0.4	95	18	38	29	38	1.74	−2.76	0.56	0	7	17	7	6	ne.	J. R. Brink
Oregon	Holt	1,048	76	67.8	+ 0.7	95	18	41	23†	35	2.20	−1.71	1.05	0	7	22	7	1	sw.	Mina Wright
St. Joseph	Buchanan	967	24	66.8	− 2.3	94	18	45	29	34	2.67	−2.44	1.30	0	7	19	8	3	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	64.1	− 2.2	92	18	39	29	33	2.09	−1.75	0.89	0	4	19	9	2	se.	Albert Volker
Trenton	Grundy	822	36	66.0	− 1.2	91	18	39	30	44	1.76	−2.77	0.66	0	6	22	7	1	s.	W. H. Estes
Section means and	extremes	.....	..	66.3	− 1.3	97	15†	34	30	44	2.01	−2.46	1.30	0	6	20	7	3	ne.	
State means and	extremes	.....	..	67.8	− 1.2	99	15†	33	30	51	2.36	−1.48	4.05	0	6	17	8	5	ne.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for September, 1932

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																
Bethel	Mississippi											.36	1.00							.12								.44	.12				2.04
Boonville	Missouri	.95								.10	.01			.66			.10						.02				.09	.38	.01				2.32
Bowling Green	Mississippi	.23												1.35													.09		.06				1.73
Brunswick	Grand									.12	.20												.05				.06	.86					1.29
Canton	Mississippi													.51					1.82									.52					2.85
Clifton Hill	Chariton									.14			.27	.35			.09										.09	1.01					1.95
Columbia***	Missouri	T.								.02			1.40			.06	.04				T.		T.		.24	T.	.39					2.15
Downing	Mississippi								.06	.13			.26						.66		.02						.21					1.34
Edina	do									.28			T.	.05					2.00		T.					T.	T.					2.33
Elsberry	do	.83												.97			.42		.10		T.					T.	.28					2.60
Fayette	Missouri	.35								.07				.72			.56								31		.09					2.10
Fulton	do	.19	.07											1.28			.13				T.						.15	.19	.01				2.02
Gorin	Mississippi												.27						.61								.03	.19					1.10
Hannibal***	do									T.			1.26	.01					.29	T.	T.					T.	.08	.57					2.21
Hermann	Missouri	.30		.01	.02									1.12			.05	.43		.10	.02						.30	.52	.14				3.01
Jefferson City	do	.60	.07	.03									.07	.35			.02										.30	.35					1.79
Kahoka	Mississippi												.30						.80														1.10
Kirksville	do								.05				.65						1.16		.05												1.91
LaBelle	do													.02	.10				1.68									.10					1.90
Laddonia	do	.06										.60																.20					0.86
Linneus	Grand	T.							.58	.03			.17				.72		T.		T.					.01	.02						1.53
Louisiana	Mississippi												.70							.50													1.20
Lucerne	Grand	.83							.95	.04			.24	.06				.26										.27					2.81
Macon	Chariton									.25			.19	.18									.16				.06	.50					1.18
Memphis	Mississippi												.15	T.						.97								T.	T.				1.12
Mexico	do	.07		.03										.82			.92										.20	.10					2.14
Milan	Grand	1.76								.98				.22					1.72						.15								4.83
Monroe City	Mississippi								T.				2.01						.14							.30	.78						3.23
New London	do	.04												2.54								.04						.79	.11				3.52
Pacific	Meramec	1.12		.52										.72			.02	.10		.20	.05						.10	.29					3.12
Palmyra	Mississippi												.24	1.51					.20								T.	.36					2.31
Paris	do									.17				2.39													.19	.32					3.07
Perry	do	.07												1.33								T.					1.15	.06					2.61
Philadelphia	do													1.51													T.	1.59					3.10
St. Charles	Missouri			.41										1.14			.07		.23		.05						.09	.36					2.35
St. Louis (1)***	Mississippi		T.	.16									.29	.48			.02		.30	.02	.10		T.			.04	.18	.56					2.15
St. Louis (2)*	do			.09									.18	.28			.02		.25	.04	.08					.04	.12	.21					1.31
Shelbina	do	.01								.03				2.28													.09	.42	.07				2.90
Steffenville	do					.10							.70	.63					.95								.05						2.43
Troy	do	.13	.01	.06										.83			.08			.01							.11	.21					1.44
Union	Meramec	.28		.03										.78				.16	.17								.09	.31					1.82
Unionville	Chariton								T.	.30			.35						.25		.02		.10				T.	.10					1.12
Valley Park	Meramec	.25		.14	T.									.49			.03			.90	.05						.04	.21					2.11
Warrenton	Mississippi		T.										.29	.71			.10		T.								.20	.81					2.11
West Ely	do											1.07								T.						.03	.67	.04				1.81
Winfield	do													.72			.25			.20							.15	.35					1.67
Keokuk, Ia.***	do								T.				.44						.85		T.					T.	.04	.10					1.43
Southeast Lowlands																																
Bragg City	St. Francis			1.99	.20																2.00	.09					1.75	.23					6.26
Campbell	do			2.35		.04															1.70	.03					1.85	.45					6.42
Cape Girardeau	Mississippi		.40	1.86	.06									.05							1.30	.05					1.50	.22					5.44
Carathersville	do		1.50	1.10																	2.25	.12					1.60	1.05	.04				7.66
Dexter	St. Francis			2.10	1.00																1.45	T.					1.04		.28				5.87
Doniphan	Black		.18	.38	.62									.10					.32	.13							.52						2.25
Fisk	St. Francis			2.44	T.																	T.	.09			T.	1.12	T.					3.65
Jackson	Mississippi		.97	1.25										.17							.30						.72	.28					3.69
Marble Hill	do	.53		1.82	.12															.42	.32						.78	.08					4.07
Morehouse	do		.80	1.49	.28															.59	1.85					.05	2.27	.32					7.65
New Madrid	do			2.78	.12																2.60	.60					1.20	.20	.16				7.66
Parma	St. Francis			2.35	.12																2.10	.10					2.90	.15	.47				8.19
Poplar Bluff	Black		.10	1.65												T.					.47						.65	.05					2.92
Sikeston	Mississippi		4.05	.07																1.98	.43				4.01	.30		.22				11.06
Cairo, Ill.***	do	T.	1.50	.49	.06									T.					.04	.43	1.56		T.			.18	.92	.49					5.67
Ozark Plateau																																
Arcadia	St. Francis		.54	T.									.39				T.			.28	T.					.30	T.						1.51
Aurora	Neosho	T.														.30	.40						.65			.10	.30						1.35
Birchtree (near)	Black			.45	.27										.63					.10								.66					1.85
Buffalo	Osage	.42																															1.08
Caplinger Mills	do	2.13											.15		T.						T.	.25					.80						3.33
Chaonia	St. Francis			1.16	.04												.35			.35	.28	.02					.85	.04				T.	3.09
Dean	Neosho	T.														1.15				T.			1.85										3.00
Eldon	Missouri	.70											.09				.87										.36	.36					2.38
Farmington	St. Francis		.03	.62										.43		.02	.02				.10						.38	.22					1.82
Fredericktown	do			.96	T.									.40	.06											.16	.28	.14	.12				2.12
Galena	White																	.76					.14					.05					0.95
Goodland	Black			.20										.35		.11	.05				.23						.26	.12					1.32
Greenville	St. Francis		.90	.52																													1.42
Hailey	White	.28												.20		.79				.58													1.85
Koshkonong	Black		.05	T.												.30				.32						.44	.68					1.79
Lakeside	Osage	.26	1.83											.43			T.								T.		.18	.30					3.00
Lebanon	do												.18													T.	.06	.09					0.33
Leeper	Black			1.13	.04																.33						.31	.04					1.85
Lockwood	Osage	.63												.17			.12						.96			T.		.35					2.23
Mountain Grove	White														.08	.15				.05	.04					.28	.01	.14					0.75
Neosho	Neosho	.02															.46				.05		1.27			T.							1.80
Owensville	Gasconade			T											.98			T.		.21		.14							.14				1.47
Ozark Beach	White	.08															.10						.42										0.60
Rolla	Meramec	.72												.15				.16			.08						.58	.03	.10				1.82
St. Thomas (near)	Osage	.86	.71											1.31			.09	.05									.27	.60					3.89
Salem	Meramec	.06												.22			.57			T.	.03					T.	.31	.11					1.30
Seligman	Neosho	.30															.31					1.64											2.25
Seymour (near)	White	T.														T.				T.						T.	.04	.20					0.24
Springfield***	do	.09												.01		.30						.02	.13			T.	T.	T.			T.		0.55
Steelville	Meramec	.16	T.	.06										.55										T.			.32						1.09
Stover	Missouri	.70	.60											.08			.12						.05				.07	.30					1.92
Williamsville	Black			1.28	.11										.01		.11				.17						.23	.29					2.20
Willow Sprgs. (near)	White	.08			.09										.21	.01					.14						.69						1.22
Versailles	Osage	.25											.02	.30			.42						.02			.02	.10	.35					1.48

Continued on next page

Daily Precipitation for September, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																	
Appleton City	Osage	.02												T.		.04	.10						.21			.01	.02	.21					0.61
Clinton	do															.05							.10			.06	.04	.40					0.65
Concordia	Missouri								.14	.49				1.28			1.11											.80					3.82
Harrisonville	Osage	.03									.10		.01	.23									.60				.02	.71					1.70
Joplin	Neosho	.92														.90	.33				.02	.14	.91			T.					T.		3.22
Lamar	do	1.27															81						.70				T.	.92					3.70
Lamonte	Missouri								.04	.20			.01	.20		T.	.50						.12				.18	.45					1.70
Marshall	do									.46			.94	.32		T.	.57											.73					3.02
Nevada	Osage	.18																.25				.48	.20	.24	.25	.02							1.62
Osceola	do	2.98															.46						.11					.03	.83					4.41
Warrensburg	Missouri									.38				.12								T	.30			T.	.14	.50					1.44
Warsaw	Osage	1.83	.24														.02						.07					.05	.55					2.76
Waverly	Missouri									.15	.50			.06									.18				.20	.60					1.69
Northwest Plateau																																	
Bethany	Grand									.19			.60						.25		.41	.33	.12					.17					2.07
Chillicothe	do	.92								.54	.27		.08	.02					.09		T.		.16					.26					2.34
Conception	Missouri								T.	T.		T	.17						T	T.	.61	.60	.07					.47					1.92
Edgerton	do								T.	T.			.38						.02		.02	.58		.35				1.07					2.42
Gallatin	Grand	.75											.43						.67									.12					1.97
Grant City	do																																
Kansas City***	Missouri	T.							.01	.03			.34							T.		.63	.02			T.	.24	.09					1.36
Kidder	Grand	T.							.73	.20		.47	.03					.02		T.		.37					.32					2.14
King City	Missouri									.05			.63								.14	.66						.16					1.64
Lexington	do	.14									.50		.05	.06			.09						.40				.02	.50					1.76
Maryville	do	.56							T	T.		T.	.05	.06					.08	.05	.44							.55					1.74
Oregon	do									.05			.29						.03		.54	1.05	.09					.15					2.20
St. Joseph***	do	T.							T.	T.		.28	.20						.35	.26		1.30	T.			T.	.23	.05					2.67
Tarkio	do												.51								.89	.58						.11					2.09
Trenton	Grand	T.								.66			.43						.42	.02		T.	.19					.04					1.76

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to mindight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for September, 1932
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.180	.108	.162	.180	.229	.205	.227	.177	.188	.193	.193	.214	.329	.196	.192	.191	.174	.195	.370	.285	.108	.205	.077	.187	.192	.038	.051	.122	.139	.170	....	5.477
	Mean temperature	67	74	77	73	72	69	66	67	70	69	70	76	74	73	76	68	70	78	79	72	68	66	65	58	60	68	66	59	60	58	..	68.9
	Wind movement	65	56	57	50	54	39	46	48	55	50	45	61	60	56	40	48	51	52	91	90	49	60	43	54	57	46	48	70	45	49	..	1,635

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

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MISCELLANEOUS PHENOMENA

Fog, dense.—Local on 13th and 26th.

Frost.—Light on 30th in northern counties.

Hail.—See report Sedalia storm under Special Storm Notes.

Halos, solar.—1st, 22d, 23d, 25th, and 30th.

Thunderstorms, light.—Fairly general on 9th, 12th, 13th, 15th, 18th and 27th.

SPECIAL STORM NOTES

Southern Shelby County was visited by severe squall winds from about 4.30 p. m. to 9 p. m. of the 12th. Damage to light wires and roofs of houses was caused by flying branches of trees; some sheds were demolished and several barns unroofed. Damage estimated at $2600. One man was killed by lightning.

Sedalia was visited by a heavy fall of small hailstones at 4 a. m. of the 16th. There was hail over a mile-wide path, but no damage outside the central path about three blocks wide. The roofs of about 25 houses were damaged and $1000 damage to greenhouse property. Very few hailstones were larger than marbles, but the fall of small stones was sufficient to stall automobiles for several hours. The total damage is estimated at $1800.

Daily Temperatures for September, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	80	84	87	83	89	85	82	87	75	86	86	87	85	88	91	82	85	95	89	79	84	78	77	76	69	71	71	76	70	72	..	81.6
	Minimum ...	62	62	62	57	52	53	55	55	60	57	57	68	58	59	63	56	50	62	68	61	47	60	49	43	49	56	51	43	46	41	..	55.4
Columbia.	Maximum...	74	83	85	79	87	80	77	79	79	83	85	88	81	84	89	76	81	91	86	72	78	76	71	69	68	71	66	72	68	71	..	78.3
	Minimum ...	63	62	67	58	53	53	50	55	59	57	60	66	64	61	64	54	51	65	68	54	49	61	51	47	50	56	47	42	48	41	..	55.9
Fayette	Maximum...	78	88	89	84	93	85	83	83	83	87	88	91	87	87	94	82	86	94	89	75	85	82	77	76	71	72	70	79	74	72	..	82.8
	Minimum ...	61	60	65	57	42	48	46	49	54	50	53	55	60	58	59	52	46	47	65	62	44	45	51	39	42	49	56	37	40	35	..	50.9
Hannibal	Maximum...	75	81	84	78	84	77	76	78	80	85	83	85	82	84	86	75	79	79	85	72	77	75	70	68	67	68	66	74	66	71	..	77.0
	Minimum ...	55	63	68	58	54	53	49	53	62	55	60	66	64	62	65	54	52	61	66	54	49	60	50	47	50	58	48	44	47	42	..	56.0
Jefferson City	Maximum...	94	73	86	89	82	92	85	82	81	84	87	88	90	87	89	95	85	87	96	87	80	85	78	77	75	75	75	69	78	74	..	83.5
	Minimum ...	62	61	61	61	53	54	51	51	54	54	55	60	63	58	59	55	53	57	69	64	49	51	52	43	43	56	58	42	45	40	..	54 5
Kirksville.	Maximum...	77	78	85	79	84	81	79	83	77	81	81	83	84	86	84	78	81	84	86	80	75	75	70	70	65	74	68	78	70	71	..	78.2
	Minimum ...	59	57	61	54	54	52	48	53	59	54	57	63	58	50	62	53	50	56	69	58	46	58	46	43	45	53	49	42	40	43	..	51.4
Louisiana	Maximum...	77	80	85	90	87	84	80	82	87	85	85	83	85	81	86	85	88	85	85	79	76	75	75	72	70	69	66	72	75	80	..	80.3
	Minimum ...	64	57	66	60	48	50	43	44	55	50	48	50	60	55	65	54	64	50	45	52	43	50	44	35	40	54	54	36	40	43	..	50.6
Macon§§	Maximum...	78	80	88	79	85	81	77	80	79	82	83	84	83	84	88	78	83	86	88	75	78	77	71	70	66	69	67	75	67	75	..	78.5
	Minimum ...	61	57	62	55	54	53	47	50	54	52	56	64	57	53	58	52	52	67	69	63	45	46	49	42	45	54	55	43	42	44	..	53.4
Mexico §§	Maximum...	74	83	87	80	89	80	80	80	83	85	87	90	82	80	91	76	84	85	88	71	80	78	71	70	68	70	67	75	68	73	..	79.2
	Minimum ...	61	58	60	58	50	50	46	48	53	51	50	61	64	58	59	53	47	49	65	65	46	48	49	39	41	45	47	40	41	37	..	51.3
St. Louis(1)	Maximum...	81	82	85	82	88	77	75	77	79	84	86	85	81	84	90	77	82	85	81	74	76	74	72	70	71	73	73	72	69	70	..	78.5
	Minimum ...	68	65	70	69	64	62	57	60	61	63	64	66	65	65	66	59	60	61	66	65	58	59	55	50	50	59	56	52	54	51	..	60.7
Unionville	Maximum...	80	78	82	80	80	82	78	82	75	82	81	80	80	84	80	77	82	89	88	77	75	72	68	70	70	75	70	75	70	73	..	77.8
	Minimum ...	66	53	53	50	54	50	48	52	60	63	66	62	56	50	60	50	50	55	64	55	45	55	42	40	43	50	47	44	40	40	..	52.1
Warrenton	Maximum...	75	82	84	82	87	83	75	80	83	86	87	84	81	86	90	84	83	81	86	75	80	76	71	70	68	70	68	71	68	70	..	78.9
	Minimum ...	61	61	65	63	58	53	49	53	55	54	59	63	62	60	63	53	57	61	69	63	52	55	52	44	47	57	54	46	47	48	..	56.2
Southeast Lowlands																																	
Campbell	Maximum...	96	86	89	88	88	80	79	81	86	90	93	92	93	95	94	85	86	96	81	79	83	83	79	75	69	73	86	75	77	77	..	84.5
	Minimum ...	71	70	69	67	64	60	50	52	50	49	58	56	59	62	55	60	52	61	64	61	61	57	58	49	50	58	63	47	45	43	..	57.4
Caruthersville	Maximum...	92	90	88	89	85	83	75	75	84	85	86	86	87	86	91	84	83	91	90	78	78	78	76	75	73	70	73	78	78	70	..	81.9
	Minimum ...	76	71	71	72	70	64	56	59	56	58	66	64	64	63	60	63	61	60	67	66	64	64	60	62	54	54	63	46	53	47	..	61.8
Doniphan	Maximum...	95	85	92	95	90	83	80	79	84	91	90	90	94	94	87	84	97	90	90	82	89	82	83	77	64	76	90	88	91	70	..	86.1
	Minimum ...	72	71	71	66	62	61	50	52	46	51	56	56	65	55	61	54	60	61	65	64	65	58	57	45	46	60	44	43	43	41	..	56.7
Jackson	Maximum...	92	86	86	87	86	81	77	79	83	87	89	88	89	89	91	82	83	92	85	75	76	78	77	73	74	73	83	83	78	76	..	82.6
	Minimum ...	68	64	66	68	56	54	47	48	45	49	54	54	60	63	54	59	47	54	61	61	60	54	55	43	42	57	62	41	41	38	..	54.2
Poplar Bluff	Maximum...	80	80	82	86	86	82	73	76	87	84	86	86	89	89	90	89	84	91	90	75	75	77	77	75	72	71	82	81	74	73	..	81.4
	Minimum ...	72	71	70	69	63	60	50	53	53	55	61	63	63	67	58	63	56	62	67	63	63	59	59	50	53	62	66	47	47	46	..	59.7
Sikeston	Maximum...	93	71	88	86	87	83	76	76	82	83	86	86	90	86	91	81	88	92	78	81	82	85	79	73	67	74	85	76	79	73	..	82.2
	Minimum ...	70	70	70	70	62	58	51	53	54	51	59	58	61	64	55	61	54	56	65	64	63	58	58	48	49	60	60	47	45	44	..	57.9
Cairo, Ill	Maximum...	90	79	85	85	83	76	71	73	78	82	84	83	85	86	88	74	81	89	75	74	74	77	74	70	68	71	77	69	74	71	..	78.2
	Minimum ...	75	72	71	70	68	62	55	58	57	61	64	67	68	70	66	64	58	64	66	64	65	63	59	53	52	63	59	52	52	52	..	62.3
Ozark Plateau																																	
Arcadia	Maximum...	83	79	83	83	81	77	72	73	78	80	82	84	83	80	85	73	78	87	79	78	77	76	73	70	70	72	78	73	72	70	..	77.6
	Minimum ...	69	65	68	70	51	55	47	49	46	49	52	56	63	61	57	59	50	55	63	62	61	56	56	44	42	58	58	41	42	38	..	54.8
Aurora	Maximum...	82	85	87	82	87	83	79	82	81	83	86	91	88	90	89	82	86	91	81	82	85	78	73	72	68	75	71	72	73	72	..	81.2
	Minimum ...	70	64	64	60	60	61	58	57	58	61	60	67	68	65	66	60	61	63	65	66	61	60	55	48	44	53	56	48	50	51	..	59.3
Birchtree	Maximum...	85	84	88	87	85	75	77	80	83	87	85	90	83	85	90	82	80	91	83	80	83	88	75	73	66	77	82	73	75	74	..	81.5
	Minimum ...	69	66	70	69	59	53	56	49	51	56	58	63	60	60	57	63	51	60	64	60	61	57	55	46	49	59	62	41	45	44	..	57.1
Eldon§§	Maximum...	63	84	85	81	90	80	78	79	81	84	86	89	83	85	93	76	83	93	82	78	83	71	74	72	58	73	64	76	72	73	..	79.0
	Minimum ...	62	60	61	60	53	53	50	50	49	53	55	59	62	57	60	53	57	57	57	63	53	50	51	52	41	45	50	58	43	42	..	53.5
Farmington	Maximum...	86	81	87	85	87	88	78	77	81	86	88	90	86	85	88	75	82	93	78	78	77	75	73	71	70	75	82	73	74	75	..	80.8
	Minimum ...	69	62	62	66	52	53	48	48	54	50	57	55	62	61	58	58	50	56	64	62	59	55	53	42	42	56	58	43	44	38	..	54.6
Koshkonong	Maximum...	92	88	90	87	89	83	76	..	83	85	89	89	90	87	91	83	79	91	80	81	81	78	77	76	65	73	80	70	69	71	..	[a]81.8
	Minimum..	71	69	73	71	63	62	57	..	53	51	60	63	68	65	60	65	59	64	65	63	62	60	58	50	58	53	60	47	53	49	..	[a]60.4
Lebanon	Maximum...	70	82	89	78	86	81	78	83	83	82	86	88	86	85	93	85	86	93	80	82	82	75	74	74	69	75	68	69	75	65	..	80.1
	Minimum ...	60	57	64	59	47	53	49	51	51	49	53	61	62	56	59	55	54	62	62	61	54	55	48	40	40	53	53	36	37	38	..	52.6
Mountain Grove	Maximum...	86	87	93	89	94	85	82	81	85	85	86	89	92	90	92	88	85	91	82	95	88	80	79	76	68	75	76	76	79	73	..	83.9
	Minimum ...	67	61	67	66	51	59	52	53	52	53	60	60	63	60	61	60	56	60	63	62	61	57	52	43	47	55	57	40	46	44	..	56.3
Neosho	Maximum...	76	82	84	84	92	90	84	92	87	89	89	91	91	89	91	94	87	99	89	84	87	87	82	76	70	75	80	73	74	70	..	84.6
	Minimum ...	65	60	71	78	46	53	50	54	51	46	52	65	51	55	59	58	61	68	63	61	68	58	52	42	47	57	58	37	42	42	..	55.7
Rolla	Maximum...	78	80	83	82	85	80	77	77	80	82	84	88	84	84	91	83	81	92	83	75	79	77	71	70	69	71	70	68	69	71	..	78.8
	Minimum ...	65	62	67	68	54	57	54	51	52	54	56	63	64	61	62	60	55	63	67	64	53	57	54	47	47	57	60	44	47	42	..	56.9
Springfield	Maximum...	78	83	85	80	87	81	77	82	80	83	85	88	85	87	89	81	85	90	79	80	84	73	73	71	65	76	68	72	72	71	..	79.7
	Minimum ...	65	61	65	63	59	62	58	58	58	59	63	66	67	64	65	60	62	67	67	63	60	58	54	49	51	56	53	46	51	51	..	59.4
Southwest Plain																																	
Appleton City	Maximum...	77	84	92	85	95	84	80	86	87	84	88	93	86	89	96	79	86	94	86	78	85	77	75	66	63	74	70	77	69	70	..	81.8
	Minimum ...	59	60	62	58	54	60	57	56	61	56	58	66	63	59	60	55	54	67	67	60	53	57	49	43	47	55	55	45	48	46	..	56.3
Clinton	Maximum...	70	85	86	78	82	78	71	74	80	85	87	89	85	86	96	82	82	95	92	82	84	78	68	74	68	78	68	80	61	75	..	80.0
	Minimum ...	60	61	62	56	52	56	56	54	65	65	56	65	65	65	60	56	56	63	65	61	61	55	50	44	48	56	55	56	49	43	..	57.2
Harrisonville§§	Maximum...	76	83	88	81	92	85	80	85	74	84	89	93	83	89	94	80	86	96	89	79	83	73	73	72	64	75	71	73	74	72	..	81.2
	Minimum ...	59	58	59	53	54	55	58	58	59	56	57	59	58	59	59	55	54	57	66	60	53	54	46	44	45	48	53	44	45	46	..	54.4
Lamar§§	Maximum...	77	85	88	82	91	87	82	88	86	89	90	92	88	91	95	83	87	92	89	81	92	74	75	73	66	76	67	76	73	74	..	83.0
	Minimum ...	63	61	61	62	54	54	58	59	58	57	57	63	66	59	59	58	58	60	67	63	62	60	52	48	48	52	60	43	43	46	..	57.0
Lamonte	Maximum...	79	81	82	82	83	80	80	79	73	84	85	81	82	80	85	78	83	85	85	78	80	76	75	73	67	75	68	76	71	75	..	78.7
	Minimum ...	64	59	59	59	54	53	53	56	60	55	57	64	59	58	61	53	53	63	66	54	50	56	48	41	49	55	48	41	45	43	..	54.5
Marshall	Maximum...	79	83	86	83	88	83	80	80	76	82	84	89	88	86	90	86	81	89	93	93	90	86	76	72	67	73	71	74	71	73	..	81.7
	Minimum ...	59	59	61	56	52	54	54	54	58	56	58	63	61	58	64	62	52	51	52	61	60	..	..	43	49	55	52	46	45	44	..	[b]55.0
Nevada	Maximum...	83	83	84	90	97	98	96	90	96	93	92	91	95	95	96	96	98	96	93	93	90	90	90	84	79	69	72	77	80	80	..	89.2
	Minimum ...	70	68	62	63	66	74	70	72	69	68	68	66	73	78	78	72	76	71	76	74	65	65	70	64	67	49	43	47	54	56	..	66.5
Warrensburg	Maximum...	76	82	90	81	94	94	82	83	78	82	89	89	89	90	99	77	85	94	93	79	80	74	74	72	66	75	70	79	72	73	..	82.0
	Minimum ...	57	58	61	56	53	61	53	56	59	54	58	55	60	58	59	54	51	57	42	60	48	56	47	42	47	54	50	43	44	43	..	53.2
Warsaw	Maximum...	75	86	88	83	90	85	78	81	85	85	87	93	88	90	95	82	87	96	89	79	85	78	80	75	69	76	72	78	74	75	..	82.8
	Minimum ...	61	60	63	59	52	56	54	54	58	55	55	67	63	55	61	55	54	65	68	60	53	58	48	40	48	55	61	41	43	41	..	55.4
Northwest Plateau																																	
Chillicothe §§	Maximum...	77	81	88	83	86	84	83	84	73	84	83	86	86	88	89	79	87	95	93	77	76	77	74	75	69	77	70	80	73	75	..	81.1
	Minimum ...	57	56	59	52	49	48	49	52	58	53	55	61	49	52	59	50	44	58	63	59	45	54	44	38	46	47	48	39	40	34	..	50.6
Grant City	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Kansas City ..	Maximum...	74	80	84	79	88	81	80	81	75	80	84	87	81	85	88	76	82	94	88	76	76	72	69	69	64	73	66	74	69	74	..	78.3
	Minimum ...	60	61	64	58	64	64	61	64	62	61	65	64	63	64	65	61	58	67	70	61	58	56	50	51	53	55	53	53	50	54	..	59.7
Kidder	Maximum...	75	78	83	75	84	82	80	81	73	80	81	83	91	84	85	76	83	92	87	80	69	73	69	70	69	73	65	76	69	71	..	77.9
	Minimum ...	58	57	59	51	55	52	54	52	59	55	58	64	58	55	62	53	49	61	68	57	49	55	44	49	48	49	48	45	41	44	..	53.6
Lexington	Maximum...	84	89	90	85	94	89	89	86	75	87	88	90	87	92	97	85	89	97	90	85	84	78	78	77	70	79	71	81	75	77	..	84.6
	Minimum ...	60	61	62	56	55	55	55	59	63	56	61	65	60	59	65	57	52	66	69	63	50	58	48	44	50	54	51	48	46	45	..	56.4
Maryville	Maximum...	78	81	85	81	83	85	83	85	85	79	83	82	87	81	80	84	95	88	80	68	76	70	73	72	76	71	79	74	76	..	..	80.2
	Minimum ...	54	54	50	47	50	48	53	57	61	56	59	60	53	49	56	44	46	59	63	48	50	52	39	40	45	48	44	40	38	41	..	50.1
Oregon	Maximum...	81	84	87	83	87	87	86	87	81	88	78	85	81	88	84	84	88	95	89	81	68	76	76	77	74	71	70	79	76	73	..	81.5
	Minimum ...	57	56	55	49	56	56	58	62	60	58	60	63	56	55	64	50	53	64	69	52	53	54	41	44	49	51	41	47	41	48	..	54.1
St. Joseph..	Maximum...	77	82	83	80	85	83	82	82	81	84	82	84	80	86	86	79	83	94	88	76	60	75	70	71	67	74	67	75	70	73	..	78.6
	Minimum ...	59	59	58	53	56	53	59	62	63	58	60	63	58	54	60	55	51	60	66	56	55	54	46	46	50	51	49	48	45	47	..	55.1
Trenton	Maximum...	79	79	85	80	82	82	85	83	76	80	82	84	83	85	83	78	81	91	87	79	75	74	69	71	67	75	76	78	85	73	..	79.6
	Minimum ...	56	57	60	53	53	50	52	55	60	53	57	63	55	52	59	51	48	60	68	58	48	56	44	44	42	49	50	41	41	39	..	52.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 10-21-32—990.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

VOL. XXXVI ST. LOUIS, MO., OCTOBER, 1932 No. 10

GENERAL SUMMARY

The month as a whole was one of rather normal October weather. Pleasant temperature conditions prevailed throughout the month, although averaging slightly cooler than usual. The The average number of clear days over the State was 18, which is one more than the normal. Days with rain averaged 5, or one less than normal. There were no damaging storms.

Periods of abnormal warmth occurred from the 13th to the 19th and from the 22d to the 24th. Days of notably cool weather were the 4th, 5th, 6th, 10th, 11th, 20th, 25th to 27th, and 29th to 31st.

The first freezing temperatures and frosts of the season occurred on October 6, (except light frost along the northern border on September 30). The freezing temperature on the 6th, however, was not general over the State, but occurred mostly in northern and central counties. Over most of the southeastern section forage crops and other late-growing vegetation remained green throughout the month, except in a few spots.

The principal days with rain were the 3d-4th, 9-10th, 25-26th, and 30th-31st. Heavy amounts fell at a few stations on the 3d, 9th, and 10th, mostly in northeastern counties, and on the 25th and 30th in southern and southeastern counties. While precipitation averaged somewhat more than normal for the State, it was unevenly distributed, with much more than normal in the southeastern and south-central counties and less than one-half the normal in the extreme northwestern counties. From Randolph, Monroe, and Audrain counties southwestward to Cass and Vernon counties the rainfall was somewhat less than normal. The month closed with deficient subsoil moisture in some central and western areas, but over most of the State moisture was sufficient for immediate needs.

Weather conditions were favorable for harvesting crops and for other outdoor work. Wheat at the end of the month was in good condition in most sections, but only fairly well advanced in some central counties.

The Mississippi and Missouri rivers and their tributaries in this section were unusually low throughout the month. At St. Louis the average stage for the month was 0.7 foot on the gage, which is the lowest average October stage on record (years 1861 to 1932). The normal October stage at St. Louis is 8.3 feet.

TEMPERATURE

The monthly mean temperature for the State, averaging the reports of 69 stations, was 55.7°, or 1.7° lower than the 40-year average. The highest monthly mean was 59.2° at Aurora, and the lowest monthly mean was 51.0° at Tarkio. The highest temperature reported was 90° at Lamar on the 18th. The lowest temperature recorded was 22° at Unionville on the morning of the 22d and at Seymour on the 6th. The greatest daily range was 54° at Eldon on the 7th.

PRECIPITATION

The average precipitation for the State, 123 stations reporting, was 3.45 inches, or 0.56 inch more than the 60-year average. The greatest monthly amount was 7.32 inches at Greenville, and the least monthly amount was 0.99 inch at Oregon. The greatest amount in any twenty-four consecutive hours was 3.34 inches on the 31st at Birchtree and the next greatest was 2.60 inches on the 31st at Jackson. The average number of days with 0.01 inch or more of precipitation was five, ranging from four days at some Southwest Plain stations to seven days in the northwestern counties.

MISCELLANEOUS PHENOMENA

Fogs, dense.—16th and 24th.

(Continued on Page 49)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity		
									Miles per hour	Direction	Date
Columbia	30.00	80	50	55	225	65	6,521	8.8	30	sw.	28
Hannibal	29.99	78	51	..	....	..	7,079	9.5	27	s.	28
Kansas City	30.01	72	53	55	218	63	8,119	10.9	37	w.	28
St. Joseph	30.00	77	49	56	215	62	6,852	9.2	31	nw.	28
St. Louis	29.99	76	53	56	227	66	9,435	12.7	32	sw.	28
Springfield	30.01	74	46	48	240	69	7,399	9.9	28	s.	28
Cairo, Ill.	30.02	84	58	66	....	..	6,323	8.5	28	nw.	10
Keokuk, Iowa	30.00	78	51	60	202	59	6,473	8.7	31	nw.	28

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals and Extremes	**57.4**	.....	**100**	**— 3**	**3.89**	.....	**8.55**	**0.2**	**6**	**17**	**6**	**8**
1888	53.6	— 3.8	89	24	2.65	−0.24	....	....	7	..	..	..
1889	53.8	— 3.6	91	27	2.50	−0.39	....	....	6	..	..	..
1890	54.8	— 2.6	91	22	2.24	−0.65	....	....	6	..	..	..
1891	55.7	— 1.7	98	19	1.11	−1.78	....	....	3	..	..	..
1892	57.5	+ 0.1	95	16	2.28	−0.61	2.40	0	5	16	7	8
1893	56.7	— 0.7	95	16	0.99	−1.90	2.81	....	10	20	8	3
1894	57.6	+ 0.2	94	18	1.74	−1.15	3.52	T.	6	17	8	6
1895	54.2	— 3.2	89	15	0.35	−2.54	1.20	T.	2	21	6	4
1896	54.1	— 3.3	90	19	2.48	−0.41	2.68	0	5	19	6	6
1897	62.5	+ 5.1	99	23	0.71	−2.18	1.70	0	3	22	6	3
1898	53.5	— 3.9	94	19	4.23	+1.34	4.51	1.4	8	11	7	13
1899	62.4	+ 5.0	100	24	2.93	+0.04	2.53	0	5	20	6	5
1900	62.4	+ 5.0	92	25	4.18	+1.29	4.04	0	7	17	7	7
1901	60.1	+ 2.7	96	24	1.64	−1.25	2.98	0	6	18	8	5
1902	59.5	+ 2.1	88	28	2.52	−0.37	2.69	0	5	21	5	5
1903	57.2	— 0.2	90	19	2.85	−0.04	3.80	0	6	19	6	6
1904	57.6	+ 0.2	90	19	0.90	−1.99	2.46	0	3	20	7	4
1905	55.1	— 2.3	90	20	4.64	+1.75	7.47	0.3	5	17	6	8
1906	56.3	— 1.1	94	17	0.87	−2.02	1.50	0	10	15	7	9
1907	56 7	— 0.7	94	18	2.90	+0.01	3.46	0	7	19	5	7
1908	56.3	— 1.1	92	21	2.74	−0.15	4.90	0.8	5	18	6	7
1909	57.2	— 0.2	96	20	2.77	−0.12	2.57	T.	6	19	5	7
1910	59.4	+ 2.0	94	15	2.71	−0.18	5.50	0	5	22	4	5
1911	56.9	— 0.5	96	25	3.30	+0 41	5.12	0.2	8	11	7	13
1912	59.1	+ 1.7	97	21	3.83	+0.94	5.12	0.7	6	20	5	6
1913	54.7	— 2.7	93	11	4.46	+1.57	2.80	3.3	9	15	6	10
1914	59.2	+ 1.8	88	19	4.54	+1.65	5.40	0	7	14	6	11
1915	59.8	+ 2.4	95	22	1.19	−1.70	1.97	0	3	23	5	3
1916	58.0	+ 0.6	95	20	2.17	−0.72	3.90	0	6	18	5	8
1917	49.8	— 7.6	93	12	1.16	−1.73	2.00	0.2	6	16	8	7
1918	60.6	+ 3.2	95	28	3.37	+0.48	5.61	0	7	14	6	11
1919	58.4	+ 1.0	98	17	6.74	+3.85	4.91	0	11	10	7	14
1920	61.3	+ 3.9	93	18	2.89	0.00	2.45	T	7	17	6	8
1921	57.9	+ 0.5	92	24	2.19	−0.70	2.32	0	5	21	5	5
1922	59.9	+ 2.5	97	18	2.00	−0.89	3.00	0	5	20	5	6
1923	53.0	— 4.4	89	17	3.89	+0.50	2.76	0.1	9	15	5	11
1924	61.8	+ 4.4	92	21	1.22	−1.67	2.73	0	4	22	5	4
1925	48.6	— 8.8	92	3	4.85	+1.96	3.12	2.4	10	8	8	15
1926	57.3	— 0.1	93	21	4.67	+1.78	3.85	0	9	14	6	11
1927	60.9	+ 3.5	93	26	4.72	+1.83	8.85	0	5	22	5	4
1928	60.9	+ 3.5	94	22	3.83	+0.94	5.23	0	8	15	8	8
1929	57.2	— 0.2	91	23	5.54	+2.65	3.30	T.	10	15	6	10
1930	55.3	— 2.1	92	11	3.06	+0.17	4.25	T.	6	16	6	9
1931	61.7	+ 4.3	95	27	3.45	+0.56	3.02	0	8	15	7	9
1932	55.7	— 1.7	90	22	3.45	+0.56	3.34	0	5	18	5	8

Climatological Data for October, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	56.4	+ 1.1	88	2	30	6†	38	2.59	−0.33	1.37	0	6	17	1	13	nw.	O. K. Benecke
Clifton Hill	Randolph	781	33	53.1	− 3.6	81	2	26	30	42	1.73	−0.83	0.60	0	7	17	3	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	55.2	− 1.4	81	2	31	6	39	2.36	−0.25	1.32	0	5	17	5	9	sw.	U. S. Weather Bureau
Downing	Schuyler	876	11	53.8	− 2.1	83	2†	24	30	37	3.52	+0.67	1.62	T.	8	16	6	9	e.	James Taylor
Elsberry	Lincoln	449	1	56.4	.....	85	19	23	30	46	2.67	.....	1.56	0	5	13	8	10	s.	Ray E. Mills
Fayette	Howard	661	52	54.0	− 2.4	86	15	26	21	53	2.34	−0.84	0.73	0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	54.4	− 3.0	83	15	28	6†	45	2.81	−0.28	1.36	0	5	20	4	7	sw.	Clyde C. Herring
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	4.33	+1.53	1.71	0	5	14	6	11	sw.	J W Pulliam
Hannibal	Marion	534	49	54.7	− 1.3	82	19	30	30	35	1.90	−0.49	0.82	0	8	14	7	10	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	57.3	+ 0.5	85	20	31	30	47	3.07	+0.28	1.10	0	6	14	7	10	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	53.9	− 0.8	85	2	26	30	39	5.22	+2.24	2.42	0	6	15	4	12	n.	Prof. J S. Stokes
Louisiana	Pike	469	38	56.2	0.0	84	1	25	30	44	3.15	+0.26	1.90	0	3	17	9	5	n.	Stark Bros. Nurseries
Macon	Macon	875	33	54.0	− 2.3	83	2	27	30	38	3.77	+0.77	2.52	0	6	16	6	9	w.	W. C. Brown
Mexico	Audrain	800	43	53.5	− 2.8	83	2†	28	30	42	2.28	−0.39	0.78	0	5	22	0	9	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	1.54	−1.14	0.88	0	2	14	9	8	ne.	J. S. Conway
St. Charles	St. Charles	456	44	58.1	− 0.1	87	19	30	30	39	3.56	+0.84	1.70	0	5	21	2	8	s.	L. C. Saeger
St. Louis (1)	St. Louis City	568	60	57.4	− 1.4	84	19	35	30	29	4.28	+1.56	2.12	0	7	20	4	7	s.	U. S. Weather Bureau
St. Louis (2)	....do	578	20	57.5	− 1.4	83	19	35	30	28	2.07	−1.28	1.14	0	6	24	1	6	w.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	2.28	−0.62	1.16	0	4	..	..	..	.....	J C Jewett
Steffenville	Lewis	650	34	53.8	− 3.6	80	1†	26	30	35	3.19	+0.75	1.20	0	5	18	3	10	n.	Frank Hall
Unionville	Putnam	1,062	39	53.3	− 1.9	86	2	22	30	40	2.90	+0.07	1.15	T.	7	18	0	13	nw.	Geo. W. Davis
Warrenton	Warren	816	50	57.4	+ 1.4	85	19	30	30	39	4.37	+1.37	1.70	0	5	16	8	7	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	53.2	− 2.2	82	2	30	30	33	2.96	+0.70	2.40	T.	6	15	5	11	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	55.2	− 1.4	88	2	22	30	53	3.00	+0.23	2.52	0	6	17	5	9	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	57.4	.....	85	19	30	6	41	3.27	.....	1.06	0	6	17	5	9	s.	Jeff. King
Caruthersville	Pemiscot	265	36	57.6[a]	− 4.6	78	1	35	6†	40	2.88	−0.22	1.80	0	5	21[a]	3[a]	6[a]	n.	Sam Smith
Doniphan	Ripley	344	28	56.8	− 1.7	88	17	29	6	46	5.40	+2.28	1.65	0	7	20	5	6	n.	W. W. Martin
Jackson	Cape Girardeau	428	41	56.2	− 1.7	81	1†	26	28	41	5.95	+2.71	2.60	0	5	15	4	12	s.	John G. Putz
Marble Hill	Bollinger	470	37	57.8	− 0.4	86	19	28	28	42	5.44	+2.52	2.20	0	6	18	4	9	n.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	4.37	+0.85	1.51	0	6	18	4	9	n.	John A. Spence
Poplar Bluff	Butler	339	27	57.6	− 2.5	86	19	31	6	41	5.49	+2.35	2.40	0	5	22	2	7	sw.	J. H. Wolpers
Sikeston	Scott.	318	25	58.4	− 0.9	83	19	31	28	49	3.22	+0.40	1.45	0	5	20	1	10	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	58.2	− 2.2	80	19	38	30	29	3.56	+0.80	1.43	0	9	13	8	10	s.	U. S. Weather Bureau
Section means and	extremes	....	..	57.5	− 2.0	88	17	26	28	49	4.40	+1.46	2.60	0	6	18	4	9	n.	
Ozark Plateau																				
Arcadia	Iron	926	51	54.1	− 1.9	83	20	29	6†	41	4.84	+1.72	2.36	0	5	22	1	8	w.	Arcadia College
Aurora	Lawrence	1,370	31	59.2	+ 0.6	85	18	34	6	33	3.52	+0.14	3.00	0	3	23	1	7	sw.	W. T Troughton
Birchtree (near)	Shannon	1,000	37	57.8	− 1.1	85	19	27	5	42	6.49	+3.50	3.34	0	6	23	3	5	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	58.7	.....	86	18	28	6	40	2.93	.....	1.83	0	5	24	5	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	2.59	.....	1.80	0	4	14	14	3	n.	Ozark Utilities Co.
Dean II	McDonald	1,000	28	55.5	− 3.2	84	14	24	11	48	3.29	−0.52	1.64	0	4	21	5	5	n.	H. E. Dean
Eldon	Miller	934	37	54.8	− 2.6	84	7	30	7	54	2.43	−0.83	1.74	0	6	18	9	4	s	E. H. Shepherd
Farmington	St. Francois	918	21	56.6	− 0.2	85	19	29	6	42	5.69	+2.75	2.48	0	6	21	4	6	sw.	Robert Forsyth
Goodland	Iron	1,000	39	56.0	+ 0.1	86	19	26	6†	49	5.49	+2.10	2.07	0	6	22	3	6	s.	F. M. Adams
Greenville	Wayne	381	23	56.0	− 1.6	85	19	27	28	46	7.32	+4.45	3.17	0	5	24	1	6	sw.	Wm E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	4.00	+0.40	1.85	0	4	5	12	14	w.	A. W Madison
Koshkonong	Oregon	958	31	57.7[b]	− 1.9	83	19	34	6	31	5.98	+2.79	2.10	0	6	18[b]	2[b]	9[b]	nw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	54.6	− 3.1	83	2	25	6	42	2.79	−0.54	2.05	0	3	18	6	7	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	57.1	− 1.6	87	18	30	11	39	2.92	−0.60	1.77	0	5	19	6	6	sw.	Hubert A. Nieman
Mountain Grove(near)	Wright	1,463	31	56.9	− 0.7	84	13	28	6	43	5.68	+2.43	2.26	0	6	23	1	7	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	55.4	− 3.8	87	18	26	12	51	2.95	−0.53	2.10	0	4	22	3	6	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	57.4	+ 0.9	84	19	32	11	37	4.68	+1.63	2.00	0	8	8	14	9	se.	F. H. Lane
Salem	Dent	1,173	28	55.8	− 1.8	82	19	28	21	39	5.45	+1.72	2.35	0	6	18	7	6	s.	E. E. Martin
Seligman	Barry	1,542	31	57.3[a]	− 1.7	86	18	27	6†	40	3.20	−0.15	1.42	0	5	19[a]	3[a]	8[a]	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	26	56.0	− 1.4	83	14†	22	6	44	5.80	+2.50	3.12	0	4	23	1	7	s.	Ira H. Hailey
Springfield	Greene	1,324	54	56.9	− 1.3	83	18	34	26	31	4.86	+1.81	2.90	0	6	20	3	8	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	57.7	.....	84	15†	27	6	42	2.79	.....	2.01	0	6	18	3	10	sw.	I. M. Wilson
Section means and	extremes	.....	..	56.6	− 1.5	87	18	22	6	54	4.35	+1.30	3.34	0	5	19	5	7	s.	
Southwest Plain																				
Appleton City	St. Clair	853	37	56.9	− 2.0	87	18	29	6†	39	2.52	−0 05	1.77	0	2	14	14	3	sw	W. G. Bigelow
Clinton	Henry	765	39	56.8	− 4.7	86	13†	27	6	41	3.87	+0.82	1.92	0	4	14	13	4	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	54.0	− 2.1	84	15†	28	26†	50	1.82	−1.01	0.78	0	6	12	5	14	s.	John H. Patterson
Lamar	Barton	980	44	55.7	− 3.2	90	18	30	11†	48	3.00	−0.16	1.30	0	5	22	4	5	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	56.6	− 1.4	85	15	28	11	43	2.63	−0.05	1.85	0	3	19	8	4	se.	J. E. Wheeler
Marshall	Saline	779	45	56.4	− 0.2	83	14	31	30†	38	1.18	−1.68	0.90	0	2	23	2	6	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	57.6	0.0	88	18	30	6	39	2.85	−0.14	2.30	0	3	18	7	6	s.	George A. Kaupp
Warrensburg	Johnson	878	45	56.2	− 1.8	85	18	30	11†	40	2.57	−0.15	1.76	0	3	18	3	10	sw.	E. A. Markey
Warsaw	Benton	687	31	58.2	− 0.8	87	18	27	6†	48	3.22	−0.25	2.45	0	5	18	6	7	s.	Everett Martin
Section means and	extremes	.....	..	56.5	− 1.8	90	18	27	6†	50	2.63	−0.30	2.45	0	4	18	7	6	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	52.4	− 2.4	85	2	27	30	44	2.37	−0.08	0.78	T.	8	16	6	9	nw.	A. S. Cumming
Chillicothe	Livingston	779	23	52.2	− 4.6	88	2	28	6†	50	3.60	−0 13	2.20	0	6	16	7	8	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	43	52.6	− 2.8	84	2	28	26†	40	1.27	−1.43	0.52	T	7	11	11	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	52.0[a]	− 4.3	81	15	26	26†	35	1.52	−1.13	0.84	T.	6	21	1	9	s.	Fred L. Stiff
Grant City	Worth	1,134	28	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	W. P. Spillman
Kansas City	Jackson	963	43	55.8	− 1.9	82	14	33	30	29	2.43	−0.49	1.18	T.	7	16	7	8	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	51.6	− 4.2	83	2	29	26†	44	2.84	−0.07	1.40	0	7	16	5	10	sw.	Roscoe L Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	2.16	−0.68	1.44	T.	5	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	55.2	− 2.3	86	1	31	31	49	2.71	−0.27	1.02	0	7	18	6	7	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	52.6	− 0.9	86	2	23	26	47	1.41	−1.40	0.52	0	9	13	9	9	s.	J. R. Brink
Oregon	Holt	1,048	76	54.8	− 0.3	85	2	29	30	38	0.99	−1.66	0.35	T.	8	18	5	8	sw.	Mina Wright
St. Joseph	Buchanan	987	24	53.4	− 3.4	84	2	29	31	37	1 22	−1.67	0 66	T.	7	17	5	9	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	29	51.0	− 3.8	83	2	26	30†	45	1.11	−1.49	0.97	T.	4	16	5	10	nw.	Albert Volker
Trenton	Grundy	822	86	53.8	− 2.1	85	15	30	6†	43	3.30	+0.38	1.45	0	6	17	6	8	n.	W. H. Estes
Section means and	extremes	.....	..	53.1	− 2.8	88	2	23	26	50	2.07	−0.78	2.20	T.	7	16	6	9	sw.	
State means and	extremes	.....	..	55.7	− 1.7	90	18	22	6†	54	3.45	+0.56	3.34	0	5	18	5	8	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for October, 1932

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Bethel	Mississippi				.41						2.39															.84	.32						3.46
Boonville	Missouri				.33						.89	.04												T.		.63	.72						2.61
Bowling Green	Mississippi				.25						.55	.08														1.15	.40						2.43
Brunswick	Grand				.46						1.37	.04												.07		.30	.35						2.59
Canton	Mississippi				.33						1.96															.82							3.11
Clifton Hill	Chariton				.27					.27	.60	.01												.01		.50	.07						1.73
Columbia***	Missouri			T.	.15					.02	.86												T.		.26	1.07					T.		2.36
Downing	Mississippi				.66					1.62	.59					.02							.09	.07		.43	.04					T.	3.52
Edina	do				.52	T.					3.48												T.	.08		.40	.30						4.78
Elsberry	do				.55	.03																				1.56	.40					.13	2.67
Fayette	Missouri				.29						.73	.01														.73	.57					.01	2.34
Fulton	do				.18						.59	.01														1.36	.67						2.81
Gorin	Mississippi				.44					1.71	1.37												.11			.70							4.33
Hannibal***	do			.03	.35					.11	.54				T.								T.	.04	.01	.81	T.	.01					1.90
Hermann	Missouri				.98	.02					.26	.06					T.									.40	1.70					.09	3.51
Jefferson City	do				.32					T.	.41	.20														1.00	1.10					.04	3.07
Kahoka	Mississippi				.65						2.99															.45	.24						4.33
Kirksville	do			.20						2.42	1.65										.02		.07			.86							5.22
LaBelle	do				.24						2.70	.03														.35	.25						3.57
Laddonia (near)	do				.36						.68															.70	.44						2.18
Linneus	Grand			.58					.10	2.50	T.				T.								.12		.57	.11					T.		3.98
Louisiana	Mississippi			.45							.80															1.90							3.15
Lucerne	Grand				.50						1.39													.20		.41	.10					.05	2.65
Macon	Chariton				.51					.03	2.52													.03		.25	.43						3.77
Memphis	Mississippi				.57					T	2.65													.20		.80	.15						4.37
Mexico	do				.31						.78	.05														.62	.52						2.28
Milan	Grand				.58					.70	1.74	.21												.18		.42							3.83
Monroe City	Mississippi										.66															.88							1.54
New London	do				.54						1.04	.21				.07										.82	.53						3.21
Pacific	Meramec				.68	.04					.15	.44														.33	1.60					.66	3.90
Palmyra	Mississippi				.43						.98	.08												T.		.29	.52						2.30
Paris	do				.22						.69													.04		30	.78						2.03
Perry	do				.25						.53	.03														.81	.36						1.98
Philadelphia	do				.47						1.05	T.														.24	.35						2.11
St. Charles	Missouri				.97						.46															1.70	.15				T.	.28	3.56
St. Louis (1)***	Mississippi			.17	.56	T.				T	.73				T.											2.11	.01				.27	.43	4.28
St. Louis (2)*	do			.08	.30	T.					.21															1.14					.16	.18	2.07
Shelbina	do				.50						1.16															.22	.40						2.28
Steffenville	do				.72					.60	1.20									T.			T.	.05		.62							3.19
Troy	do				.65	.05					.23	.37														.29	1.79					.12	3.50
Union	Meramec				.40	.04					.20	.29														.20	1.65					.43	3.21
Unionville	Chariton			.10	.50					1.15	.25													.25		.55	.10						2.90
Valley Park	Meramec				.30	.08					.02	.64														T.	2.44					.55	4.03
Warrenton	Mississippi				1.70						.50															1.65	.42					.10	4.37
West Ely	do			.45						.58	.04												T.		.06	.42							1.55
Winfield	do			.40							.40	.28														.45	1.66					.23	3.42
Keokuk, Ia.***	do			.15	.10	T.				1.86	.55												T.	T.	T.	.29	.01				T.		2.96
Southeast Lowlands																																	
Bragg City	St. Francis			2.00	.05										.70											.28					.80	.20	3.53
Campbell	do				.80	.06						.50					.35										.50					1.06	3.27
Cape Girardeau	Mississippi				1.40	.10						.58															.59					2.38	5.05
Caruthersville	do			1.80							.36															.44				.04	.24		2.88
Dexter	St. Francis				.85						.67					.16												.59					1.28	4.25
Doniphan	Black				1.20					.30					.03											.45	.62					1.15	1.65	5.40
Fisk	St. Francis				.78							.56					T.										.56				.42	.83	.27	3.42
Jackson	Mississippi				1.49						.50																.84					.52	2.60	5.95
Marble Hill	do				.82						.42															.08	.62					1.30	2.20	5.44
Morehouse	do				1.51						.55						.06										.47					.67	1.11	4.87
New Madrid	do				.95	.90						.57					.10										.55						.85	3.42
Parma	St. Francis				.81	.05						.46					.31										.33						.93	2.89
Poplar Bluff	Black				1.00							.39																1.45				.25	2.40	5.49
Sikeston	Mississippi			.84	.08						.50															.35					1.45		3.22
Cairo, Ill.***	do			.06	.98	T.					.44					.01	T.	.01								.13	.35					.60	.98	3.56
Ozark Plateau																																	
Arcadia	St. Francis			.97	T.	T.					.49															1.00					2.36	.02	4.84
Aurora	Neosho				T.						.05															3.00						.47	3.52
Birchtree (near)	Black				.74						.65															1.02	.20				.54	3.34	6.49
Buffalo	Osage				.83						.16															1.83		.04				.07	2.93
Caplinger Mills	do			.01							.45														.33	1.80							2.59
Chaonia	St. Francis				.81	.04						.38					.01										1.11					.06	3.08	5.49
Dean	Neosho	T.			.52						.37												T			1.64				T.	.76		3.29
Eldon	Missouri										.46	.06				.15										.78	.96	.02					2.43
Farmington	St. Francis				.87						.48															.94	.66					.26	2.48	5.69
Fredericktown	do				.64	.16						.37															2.23						2.80	6.20
Galena	White										.18															.49	.75					1.15	2.57
Goodland	Black				.63						.78															1.20	.54					.27	2.07	5.49
Greenville	St. Francis				.74						.55					T										1.36					1.50	3.17	7.32
Hailey	White				1.02							.13														1.85						1.00	4.00
Koshkonong	Black				1.03						.57															.82	.18				1.28	2.10	5.98
Lakeside	Osage				.13						.63	.04				.04										.83	.92	.03				.05	2.67
Lebanon	do				.38																				2.05		T.			T.	T.	.36	2.79
Leeper	Black				.76							.62														.05	1.26	T.				.07	2.40	5.16
Lockwood	Osage	T.			.29						.25												T.		.28	1.77	.33					T.	2.92
Mountain Grove	White	T			.93						.46															1.78	.10				.15	2.26	5.68
Neosho	Neosho				.18						.21															2.10						.46	2.95
Owensville	Gasconade					.82						T.														.41	1.81					.27	3.31
Ozark Beach	White				.96						.19	.21														.45	.96					2.62	5.39
Rolla	Meramec				.74						.22	.05														.66	2.00	.03			.16	.82	4.68
St. Thomas (near)	Osage				.46						.60															.97	.90	.07					3.00
Salem	Meramec				1.00						.50															2.35	.12				.12	1.36	5.45
Seligman	Neosho				.33						.12															1.42					.11	1.22	3.20
Seymour (near)	White	T.			.62						.26															3.12					T.	1.80	5.80
Springfield***	do	T.		1.17	.11						.20				T.		T.						T			2.90					.45	.03	4.86
Steelville	Meramec				1.20						.15	.19														.48	1.79	T.				1.30	5.11
Stover	Missouri										.65															1.08	1.03						2.76
Versailles	Osage				.06					T.	.65				T.								T.			2.01	.04	.02			.01		2.79
Williamsville	Black				.84	.06						.39					.02										1.22					.04	3.80	6.37
Willow Sprgs. (near)	White	.01			.50							.41														.44	1.30					.10	2.83	5.59

Continued on next page

Daily Precipitation for October, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage			T.						T.	.75												T.		T.	1.77		T.					2.52
Clinton	do			.65						.05	1.25																1.92						3.87
Concordia‖	Missouri				.32						.97													.02		.42	.40						2.13
Harrisonville‖	Osage				.22					.01	.78													.01		.26	.54						1.82
Joplin‖	Neosho			.04	T						.32														1.45	2.16					.04		4.01
Lamar‖	do	.12			.45						.23															.90	1.30						3.00
Lamonte	Missouri										.75															1.85	.03						2.63
Marshall	do			T.	.28						.90												T.		T	T.					T.		1.18
Nevada	Osage			T.	.09						.46														T.	2.30							2.85
Osceola‖	do				.10						.53															1.58	1.05						3.26
Warrensburg	Missouri			T.	.28					T.	.53												T.			1.76							2.57
Warsaw	Osage			T.	.08					.04	.60				T.											2.45	.05						3.22
Waverly ‖	Missouri				.48						1.50															1.91	.40					.40	4.69
Northwest Plateau																																	
Bethany	Grand			.30	.19					.78	.30												.05	.20		.50					T.	.05	2.37
Chillicothe ‖	do				.52					.16	2.20												T.	T.	.12	.46	.14			T.		T.	3.60
Conception	Missouri			.14	.06					.52	.13												.05	.28	T.	.09					T.	T.	1.27
Edgerton	do			.08	.06					.84	.28					T.							.02	T.	T	.24					T.		1 52
Gallatin ‖	Grand				.37					.41	1.27	T.												.11		.56	.10						2.82
Grant City	do																																
Kansas City***	Missouri			.52	T.					.76	.43				T.	T.							.01	.01	.44	.26						T.	2.43
Kidder ‖	Grand				.20					.55	1.40					T.							T.	.03		.54	.10					.02	2.84
King City	Missouri									1.44	.20												.10	.11		.31					T.	T.	2.16
Lexington ‖	do				.78						1.02													.04	.02	.45	.34					.06	2.71
Maryville‖	do			.15	.03					.52	.09									.03			.03	.48		.04						T	.04	1.41
Oregon	do			.10	.04					.35	.12									.07			.06	.24								.01		0.99
St. Joseph***	do			.16	T.					.51	.15				T.	T.				.01			.12		.08	.19		T.			T		1.22
Tarkio	do			.05						.02	T.												.07	.97									1.11
Trenton	Grand			T.	.43					1.45	.52					T.							.04	.16		.70					T.		3.30

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for October, 1932
(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.086	.144	.167	.175	.150	.097	.122	.236	.260	.282	.051	.094	.165	.149	.081	.181	.092	.138	.145	.262	.145	.121	.277	.090	.161	.080	.128	.117	.262	.113	.011	4.582
	Mean temperature	62	68	68	57	48	48	60	66	68	52	47	59	64	65	68	66	64	66	68	52	54	60	64	60	47	50	50	56	46	38	42	57.5
	Wind movement	38	64	61	107	136	93	51	92	88	96	111	56	60	44	40	34	52	45	51	105	79	44	93	69	81	104	95	67	126	82	69	2,333

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

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Frosts.—Light on 5th, 6th, 21st, 27th, and 28th. Heavy on 6th, 11th, 21st, and 30th. Killing, rather general on 6th, except in southeastern counties; local on 11th, and 26th.

Halos.—Solar on 7th, 14th, and 28th. Lunar none.

Hail.—None.

Sleet.—Locally on 25th and 30th.

Thunderstorms.—Fairly general on 3d, 24th, 25th, and 31st. Local on 9th and 30th.

Winds.—Strong winds general on 28th, but no damaging winds reported.

ERRATA

Report for September, 1932, page 42: Brunswick, lowest temperature should be 41 on 30th. Caruthersville, page 42, maximum temperature should be 92 on 1st. Macon, page 42, date of maximum temperature should be 3d. Maryville, page 42, prevailing wind direction should be N. Poplar Bluff, page 42, days partly cloudy and cloudy should be 7 and 5 respectively. Nevada, disregard all data appearing on pages 42, 44, and 45 for this station.

Daily Temperatures for October, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	76	88	75	60	53	63	79	78	73	62	59	73	72	82	80	81	80	80	73	60	70	78	69	62	62	62	59	73	72	50	48	69.4
	Minimum ...	46	52	54	44	41	30	42	52	52	37	32	39	47	50	58	48	48	53	54	37	32	48	52	46	40	32	37	36	38	30	37	43.4
Columbia.	Maximum...	74	81	78	54	48	61	79	78	80	51	57	75	73	79	80	78	75	76	80	56	71	76	67	66	48	60	53	73	49	41	45	66.5
	Minimum ...	48	54	51	45	37	31	44	53	51	37	33	40	53	53	57	49	52	53	47	38	32	55	46	42	40	35	39	41	37	34	35	43.9
Fayette	Maximum...	79	85	78	61	45	64	83	81	60	60	61	76	79	84	86	84	82	81	84	61	75	75	64	73	45	63	58	75	53	41	47	69.1
	Minimum ...	37	44	51	44	32	28	30	50	53	38	30	33	39	46	48	44	47	46	48	34	26	28	53	39	43	32	33	33	38	28	32	38.9
Hannibal	Maximum...	76	82	80	54	48	59	77	77	67	50	57	71	66	80	82	78	75	66	82	56	69	70	67	61	52	59	52	71	50	41	47	65.2
	Minimum ...	48	56	52	46	41	33	47	55	50	37	34	41	44	48	60	49	52	54	51	39	35	53	49	44	40	37	38	36	35	30	36	44.2
Jefferson City	Maximum...	74	76	83	82	63	55	64	80	81	83	56	60	77	81	81	84	83	82	81	85	63	74	80	74	76	63	60	61	74	61	51	72.5
	Minimum ...	41	51	58	47	40	32	33	46	54	42	32	33	43	49	51	56	50	50	51	38	35	35	54	40	41	34	35	35	35	31	32	42.1
Kirksville.	Maximum...	77	85	79	56	45	62	78	77	61	50	61	72	66	81	82	77	75	70	73	67	70	65	63	63	55	61	57	71	67	55	47	66.7
	Minimum ...	48	54	52	44	39	32	40	54	48	34	30	40	36	45	58	49	45	50	34	33	31	49	48	48	37	30	36	35	34	26	35	41.1
Louisiana	Maximum...	84	83	77	65	57	56	75	80	79	56	54	75	80	82	80	83	77	72	83	73	77	82	79	73	62	60	65	62	55	50	45	70 4
	Minimum ...	41	47	54	44	40	26	46	50	45	40	29	46	40	55	50	45	45	47	52	29	39	43	48	39	47	40	42	30	40	25	40	42.1
Macon§§	Maximum...	77	83	79	79	52	62	79	77	56	42	57	71	65	80	80	78	75	72	76	55	69	69	63	67	44	59	61	72	49	39	46	65.6
	Minimum ...	46	54	62	43	40	33	43	55	50	36	30	38	42	42	60	50	47	51	52	34	34	35	54	46	43	31	36	34	37	27	34	42.5
Mexico §§	Maximum...	77	83	83	56	49	62	78	77	78	42	58	74	69	83	82	78	76	75	82	57	69	77	68	63	45	59	54	72	49	40	46	66.5
	Minimum ...	38	50	41	41	40	30	36	46	54	38	32	37	46	47	50	47	46	47	49	35	33	37	56	39	42	34	35	34	38	28	30	40.5
St. Louis(1)	Maximum...	75	80	81	58	48	57	70	74	77	65	55	72	73	78	79	77	74	69	84	58	66	77	69	75	62	57	55	66	60	41	47	67.1
	Minimum ...	54	57	58	47	42	39	41	48	53	41	37	45	56	51	56	56	54	60	55	45	40	52	57	52	42	41	44	41	40	35	39	47.7
Unionville	Maximum...	80	86	75	60	46	65	78	74	57	50	62	70	66	80	82	74	76	70	69	62	73	67	62	60	52	60	57	70	65	40	45	65.6
	Minimum ...	50	54	50	44	36	31	45	54	44	33	31	37	33	42	57	45	44	50	54	32	33	47	45	44	37	30	45	34	35	22	33	41.0
Warrenton	Maximum...	75	81	82	75	51	58	75	77	79	75	54	71	71	78	80	76	75	72	85	78	66	78	72	72	70	56	54	70	67	45	44	69.7
	Minimum ...	50	55	59	46	40	33	40	49	51	39	33	43	53	48	53	55	51	53	53	39	35	52	58	47	44	38	40	35	38	30	38	45.1
Southeast Lowlands																																	
Campbell	Maximum...	80	81	78	65	52	57	70	75	78	70	56	74	77	81	72	75	69	80	85	70	67	78	80	76	80	69	62	71	60	55	49	70.7
	Minimum ...	51	51	53	51	37	30	34	38	41	44	39	33	42	42	47	56	59	54	52	47	35	39	51	49	56	41	36	31	47	39	40	44.0
Caruthersville	Maximum...	78	73	72	70	55	52	60	66	77	68	53	63	68	70	71	69	69	70	75	75	64	69	73	73	76	76	60	66	66	59	..	[b]67.9
	Minimum ...	57	51	56	53	40	35	39	45	49	46	41	35	45	50	55	55	60	54	55	37	42	52	52	60	44	36	42	48	42	46	..	[b]47.4
Doniphan	Maximum...	82	86	83	72	55	64	62	78	70	65	79	63	84	73	70	76	88	82	71	72	74	70	81	75	73	65	68	65	64	51	50	71.3
	Minimum ...	57	47	50	54	38	29	33	40	44	40	33	40	43	45	40	46	49	51	53	46	30	40	55	46	42	42	40	34	30	38	40	42.4
Jackson	Maximum...	81	80	80	74	61	58	69	73	77	72	55	70	78	78	77	76	70	78	77	66	75	78	77	73	72	65	67	63	55	70	71.7	
	Minimum ...	43	42	51	48	36	27	34	41	44	38	34	39	43	40	43	55	55	54	44	48	31	36	47	41	54	37	29	26	40	28	35	40.7
Poplar Bluff	Maximum...	74	81	79	64	68	61	69	76	79	69	60	73	79	79	72	77	73	82	86	73	73	78	82	76	76	62	64	71	64	57	51	71.9
	Minimum ...	54	47	49	48	39	31	33	38	41	46	40	35	42	44	47	57	57	55	51	50	32	41	46	46	47	42	35	32	40	33	40	43.2
Sikeston	Maximum...	75	78	77	76	54	55	67	71	78	78	77	71	79	77	76	72	70	77	83	82	67	69	79	78	76	73	60	67	66	60	43	71.3
	Minimum ...	57	50	55	54	38	33	37	43	46	46	50	37	45	47	52	57	60	57	53	33	35	44	49	50	58	42	32	31	37	37	41	45.4
Cairo, Ill.	Maximum...	78	76	78	65	51	56	66	71	76	68	54	69	76	78	74	71	66	72	80	65	64	73	76	74	74	58	59	66	58	47	50	67.3
	Minimum ...	58	53	60	48	43	40	43	49	53	44	42	40	50	53	55	60	61	66	58	49	44	49	56	53	50	43	42	41	41	38	44	49.0
Ozark Plateau																																	
Arcadia §§	Maximum...	75	79	77	52	47	59	68	72	75	61	60	72	81	75	73	75	73	79	83	63	72	72	76	78	67	61	58	68	56	44	42	67.5
	Minimum ...	49	50	54	50	40	29	31	42	46	52	31	32	46	42	44	45	41	47	49	47	31	32	45	40	40	39	38	29	36	29	35	40.7
Aurora	Maximum...	67	77	74	67	50	67	75	73	77	72	58	74	79	81	77	78	77	85	79	62	72	80	75	80	74	59	58	73	67	53	46	70.5
	Minimum ...	54	59	58	48	40	34	48	50	55	40	37	47	52	60	57	55	56	60	60	42	44	52	48	52	43	36	37	46	40	38	38	47.9
Birchtree	Maximum...	71	80	79	68	50	59	70	73	76	66	59	73	81	79	76	79	79	82	85	78	79	80	76	81	73	60	60	70	65	51	50	71.2
	Minimum ...	56	48	54	50	27	34	38	45	45	33	32	36	42	45	47	51	55	51	55	47	37	51	55	43	50	39	34	34	36	36	39	43.4
Eldon §§	Maximum...	73	82	75	53	52	64	84	79	81	40	60	77	82	82	83	75	79	83	83	59	73	83	69	75	45	60	56	75	51	39	39	68.1
	Minimum ...	40	50	54	48	40	32	30	42	51	40	32	33	44	50	51	48	47	50	53	39	34	35	55	43	45	34	33	33	36	31	36	41.6
Farmington	Maximum...	78	82	80	69	49	60	70	74	76	65	60	76	81	84	74	76	74	74	85	73	76	82	74	84	67	60	56	68	61	45	42	70.2
	Minimum ...	48	52	52	48	39	29	36	46	47	39	30	37	46	53	47	53	54	53	51	45	35	45	47	42	48	39	39	30	39	31	36	43.1
Koshkonong	Maximum...	69	72	75	65	51	57	..	71	75	67	55	71	76	76	73	77	76	79	83	75	68	76	79	..	77	57	60	70	63	51	47	[b]68.7
	Minimum..	58	54	55	51	38	34	..	40	50	42	38	42	47	51	52	57	56	58	54	48	40	49	53	..	48	37	39	41	43	40	40	[b]46.7
Lebanon	Maximum...	70	83	80	70	49	55	78	75	79	70	60	75	75	80	82	80	81	82	75	70	72	75	79	72	50	50	70	66	45	46	40	68.8
	Minimum ...	53	49	55	33	36	25	38	46	48	35	27	37	50	50	49	49	41	52	54	28	50	44	39	37	29	35	36	32	32	34	33	40.5
Mountain Grove	Maximum...	69	81	79	65	48	61	71	72	76	69	62	74	84	81	80	81	82	83	82	71	75	79	76	80	71	57	57	70	65	45	44	70.6
	Minimum ...	54	50	52	47	34	28	38	43	48	38	29	41	46	52	52	52	50	53	55	41	32	51	51	45	42	32	37	40	35	36	36	43.2
Neosho	Maximum...	67	77	75	70	53	61	74	76	76	54	50	59	71	84	81	83	77	87	82	69	72	76	75	84	76	60	59	75	70	58	57	70.7
	Minimum ...	54	46	55	46	32	27	44	50	39	34	36	26	38	33	45	42	42	42	58	35	30	50	45	44	40	29	32	37	36	35	37	40.0
Rolla	Maximum...	72	79	80	75	50	57	73	75	78	71	55	74	75	80	79	77	75	79	84	72	67	81	73	79	75	55	53	71	65	46	42	69.9
	Minimum ...	50	52	57	47	40	33	43	50	55	39	32	41	52	48	51	55	53	50	57	41	35	52	57	44	43	35	39	34	39	33	38	45.0
Springfield	Maximum...	63	78	72	52	48	61	75	75	76	64	58	74	80	80	78	77	79	83	78	57	71	78	71	79	60	57	56	72	58	50	43	67.8
	Minimum ...	54	53	52	42	37	34	45	50	54	37	34	44	52	57	56	54	55	58	50	41	40	57	53	52	38	34	39	45	37	39	34	46.0
Southwest Plain																																	
Appleton City	Maximum...	70	80	71	59	49	65	81	79	77	67	60	78	80	83	82	80	80	87	80	60	71	79	68	65	56	62	57	69	67	51	49	69.7
	Minimum ...	54	50	57	44	39	29	45	53	59	36	29	39	47	54	53	51	49	52	56	36	34	53	54	45	40	30	35	42	34	32	37	44.1
Clinton	Maximum...	71	75	76	58	55	57	70	70	81	68	62	65	86	83	82	78	70	86	82	65	73	84	70	58	62	57	56	75	66	52	50	69.1
	Minimum ...	57	60	58	44	40	27	42	52	58	37	30	48	46	43	52	48	48	54	60	36	32	52	54	45	40	31	33	47	33	32	37	44.4
Harrisonville§§	Maximum...	75	83	75	57	51	66	80	79	72	42	62	77	78	83	84	80	78	84	65	61	72	77	68	55	44	64	58	73	51	43	52	67.4
	Minimum ...	48	50	54	42	39	30	30	46	55	35	29	30	41	47	55	50	49	50	53	35	34	34	50	45	40	28	28	34	30	31	35	40.5
Lamar§§	Maximum...	67	80	70	55	52	66	79	78	82	43	60	77	84	84	81	80	82	90	72	60	74	80	75	81	44	61	60	75	50	59	49	69.4
	Minimum ...	48	52	53	50	36	31	31	50	55	39	30	30	43	49	54	48	47	47	56	37	34	34	49	48	43	31	31	36	36	36	38	42.0
Lamonte	Maximum...	76	80	75	76	74	75	74	72	69	59	62	78	80	84	85	81	80	84	75	61	74	80	68	63	50	62	59	74	48	41	46	69.8
	Minimum ...	47	52	55	55	51	51	50	46	46	34	28	39	47	51	51	48	48	53	47	35	31	54	47	43	39	29	35	38	31	30	36	43.5
Marshall	Maximum...	75	82	73	62	64	63	81	79	75	64	59	63	75	83	81	79	76	78	75	74	72	75	71	62	58	57	60	74	69	52	53	69.8
	Minimum ...	47	51	55	44	42	33	46	56	41	37	33	38	43	51	59	50	47	49	39	36	36	54	51	45	40	39	33	38	37	31	31	43.0
Nevada	Maximum...	69	79	71	60	50	65	79	77	78	69	70	79	79	81	80	79	78	88	77	59	72	77	71	70	47	61	56	73	67	56	49	69.9
	Minimum ...	55	54	59	45	37	30	47	54	57	38	40	43	51	57	55	48	47	52	52	37	33	55	52	46	40	32	37	43	35	33	37	45.2
Warrensburg	Maximum...	74	82	72	60	50	65	81	79	72	63	60	76	78	84	82	79	80	85	71	60	72	76	69	62	57	65	57	73	67	52	48	69.4
	Minimum ...	50	47	55	42	39	31	48	53	50	35	30	42	50	53	56	50	46	51	54	34	35	55	53	41	39	30	34	33	33	31	35	43.1
Warsaw	Maximum...	76	81	76	73	52	67	82	81	82	75	60	78	82	85	76	85	83	87	80	64	75	82	74	78	67	61	60	75	70	56	48	73.3
	Minimum ...	50	52	57	45	40	27	46	55	60	27	29	40	53	49	52	45	44	51	55	37	28	52	55	42	39	33	37	37	85	30	37	43.2
Northwest Plateau																																	
Chillicothe §§	Maximum...	80	88	73	57	47	68	84	80	55	42	63	76	69	84	83	79	79	76	76	58	74	68	60	58	46	67	56	73	51	40	50	66.5
	Minimum ...	38	47	53	39	38	28	34	39	45	34	29	31	37	39	48	44	43	43	52	32	28	32	51	41	39	28	31	36	35	28	30	37.8
Grant City	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Kansas City ..	Maximum...	73	81	68	53	49	66	79	75	56	41	62	77	75	82	81	77	77	82	69	58	72	72	63	55	43	59	56	73	48	40	48	64.8
	Minimum ...	55	59	52	44	40	39	51	54	40	37	35	51	56	58	64	54	54	57	47	39	45	62	52	42	39	34	38	44	36	33	36	46.7
Kidder §§	Maximum...	75	83	68	53	47	64	78	73	50	40	59	72	68	78	79	76	76	75	58	56	71	69	58	57	41	60	52	71	42	38	45	62.3
	Minimum ...	48	49	57	40	40	32	34	47	45	35	32	36	42	42	53	48	48	50	54	33	34	36	51	48	40	29	31	37	35	29	32	40.9
Lexington§§	Maximum...	86	71	57	49	67	83	83	65	43	65	78	78	85	85	84	85	85	66	62	75	75	65	57	46	63	60	74	60	52	50	58	68.1
	Minimum ...	52	56	46	42	40	34	47	39	39	36	34	41	48	51	58	50	48	53	42	37	37	46	50	42	36	32	35	37	32	36	31	42.2
Maryville	Maximum...	79	86	75	53	54	70	83	72	51	46	67	79	70	78	81	81	80	78	68	60	75	68	57	55	45	57	57	70	58	48	46	66.0
	Minimum ...	45	50	50	36	37	29	44	50	39	31	28	35	36	48	56	41	46	52	47	33	28	46	48	38	38	23	32	37	33	26	30	39.1
Oregon	Maximum...	78	85	75	52	56	71	83	68	52	44	67	79	77	80	82	84	81	82	72	53	75	67	58	53	45	61	58	59	72	61	44	66.9
	Minimum ...	49	53	51	39	38	35	50	52	39	33	32	44	43	52	61	46	49	54	43	36	37	57	49	43	38	30	34	32	41	29	33	42.6
St. Joseph..	Maximum...	76	84	67	53	50	67	81	68	50	42	63	77	72	81	79	79	77	80	65	58	74	69	58	55	43	58	55	70	48	40	45	64.0
	Minimum ...	51	56	52	41	38	36	50	50	37	34	33	42	48	54	54	45	50	55	43	36	37	57	47	41	36	32	36	43	35	32	29	42.9
Trenton	Maximum...	81	83	73	54	50	65	80	75	58	45	61	75	67	80	85	77	82	72	67	57	73	65	65	57	50	61	54	71	71	44	48	66.0
	Minimum ...	48	53	52	40	37	30	42	53	42	35	32	37	38	47	59	45	48	52	50	34	30	48	48	46	39	32	37	36	37	30	30	41.5

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 11-21-32—990.

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CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

VOL. XXXVI ST. LOUIS, MO., NOVEMBER, 1932 No. 11

GENERAL SUMMARY

Low temperatures and unusually heavy snowfall were the outstanding features of the month. Following the rather mild spell of the 2d to 7th, inclusive, the first really cold weather of the season began about the 8th, and decidedly subnormal temperatures continued, except for brief interruptions, until the 28th. There was then a reaction to mild weather. The month for the State as a whole averaged the third coldest November of record.

A cold wave, with heavy snowfall, came on the 15th, and during the 16-18th severe cold prevailed. The lowest November temperature of record in Missouri occurred on the morning of the 16th, viz., 9° below zero, registered at Clifton Hill, Randolph County. This was one degree lower than ever before recorded in November in this State. At Lamonte, Pettis County, 1° below zero occurred, and at various stations in northern and western counties the minimum temperature on the 16th was around zero or a few degrees above. The severity of the cold weather this month was comparable to that of November, 1929, but the zero temperatures of the present month came earlier than in 1929.

Rainfall averaged considerably less than normal in all divisions of the State, although a few stations had somewhat more than normal. Heavy snow occurred on the 15th. The greatest deficiency in precipitation occurred in the Southeast Lowlands, but lack of moisture was felt most in central and western counties, where the subsoil moisture is severely depleted. The precipitation, however, was fairly well distributed through the month and supplied winter grains with sufficient moisture for immediate needs.

The snowfall of the 15th was the heaviest of record at some stations for so early in the season. It averaged 6.4 inches in the Southwest Plain, 6.0 inches in the Northeast Plain, 4.2 inches in the Northwest Plateau, 3.4 inches in the Ozark Plateau, and 1.5 inches in the Southeast Lowlands.

Weather conditions were favorable for farm work during the first week and the last ten days of the month. Work of the season generally was well up. Wheat was in fair to very good condition.

The rivers of the State were unusually low throughout the month, and almost unprecedentedly low, for the time of year, towards the end of the month. At St. Louis the November record for low stage was established, with 0.1 foot below zero on November 30, and the average stage for the month, 1.0 foot, is the lowest November average. The normal November stage at St. Louis is 7.8 feet.

TEMPERATURE

The monthly mean for the State, 68 stations reporting, was 39.5°, or 4.9° below normal. The highest monthly mean was 45.0° at Doniphan and the lowest was 34.7° at Edgerton. The highest temperature recorded was 75° at Doniphan on the 4th and at Dean on the 7th; the lowest, 9° below zero at Clifton Hill on the 16th. The greatest daily range was 48° at Greenville on the 30th and at Chillicothe on the 20th.

PRECIPITATION

The average for the State, 123 stations reporting, was 1.82 inches, or 0.58 inch less than the 60-year average. The greatest local monthly amount was 3.93 inches at Lockwood, Dade County, and the least, 0.59 inch at St. Joseph. The greatest precipitation in any twenty-four hours was 2.02 inches at Kahoka, Clark County, on the 7-8th. The average number of days with 0.01 inch or more of precipitation was 5. The snow-

(Continued on Page 54)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.20	83	57	59	176	58	6,238	8.7	24	nw.	11
Hannibal	30.20	78	54	..	....	..	6,654	9.2	24	sw.	13
Kansas City	30.19	72	52	55	210	70	7,319	10.2	32	nw.	7
St. Joseph	30.17	71	49	53	198	66	6,894	9.6	28	nw.	7
St. Louis	30.18	75	60	62	157	52	8,497	11.8	31	sw.	14
Springfield	30.18	75	55	57	186	61	7,402	10.3	24	w.	9
Cairo, Ill.	30.19	82	64	67	....	49	6,623	9.2	27	n.	26
Keokuk, Iowa	30.20	79	54	61	190	64	6,108	8.5	24	nw.	11

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals and Extremes	**44.4**	.....	**93**	**− 9**	**2.40**	.....	**6.52**	**0.8**	**6**	**14**	**7**	**9**
1888	41 6	− 2.8	87	15	3.26	+0.86	....	....	11	..	..	..
1889	39.9	− 4.5	73	8	3.43	+1.03	....	....	7	..	..	..
1890	46.5	+ 2.1	80	20	2.31	−0.09	....	....	5	..	..	..
1891	39.6	− 4.8	82	− 2	3.60	+1.20	....	....	5	..	..	..
1892	40.1	− 4.3	79	9	2.60	+0.20	....	1.0	6	11	7	12
1893	40.9	− 3.5	79	− 1	1.59	−0.81	4.86	0.3	4	14	9	7
1894	41.0	− 3.4	80	3	1.58	−0.82	2.20	T.	4	15	9	6
1895	41.6	− 2.8	82	2	3.37	+0.97	2.98	3.2	8	10	7	13
1896	42.3	− 2.1	82	5	2.18	−0.22	4.00	0.2	6	11	7	12
1897	43.4	− 1.0	82	− 3	2.40	0.00	3.39	T.	6	13	8	9
1898	39.9	− 4.5	79	− 8	2.28	−0.12	2.75	2.3	6	14	8	8
1899	49.5	+ 5.1	82	16	1.90	−0.50	2.66	0.2	7	11	9	10
1900	43.7	− 0.7	84	7	2.58	+0.18	4.55	0.2	6	15	7	8
1901	43.6	− 0.8	84	9	1.38	−1.02	1.90	0.3	4	17	7	6
1902	50.1	+ 5.7	85	18	3.52	+1.12	2.14	0.4	9	8	9	13
1903	40.9	− 3.5	79	2	1.24	−1.16	2.44	1.1	5	13	8	9
1904	46.3	+ 1.9	83	11	0.22	−2.18	0.68	T.	2	21	5	4
1905	45.8	+ 1.4	83	2	1.94	−0.46	2.49	T.	5	18	6	6
1906	42.5	− 1.9	88	− 3	2.60	+0.20	3.60	5.0	8	12	6	12
1907	43.8	− 0.6	88	5	2.52	+0.12	3.00	T.	4	19	4	7
1908	47.6	+ 3.2	87	9	4.14	+1.74	4.00	0.2	8	15	7	8
1909	53.6	+ 9.2	87	11	4 43	+2.03	6.18	0.4	8	12	7	11
1910	42.0	− 2.4	83	11	0.38	−2.02	0.70	0.1	3	15	8	7
1911	39.1	− 5.3	93	− 3	2.55	+0.15	2.15	1.1	7	13	6	11
1912	45.9	+ 1.5	88	12	1.52	−0.88	2.37	0.1	3	20	5	5
1913	51.7	+ 7.3	80	11	2.73	+0.38	2.50	T.	7	10	8	12
1914	48.6	+ 4.2	89	2	0.65	−1.75	1.90	0.1	3	19	6	5
1915	49.5	+ 5.1	87	12	2.76	+0.36	2.62	0.1	5	16	7	7
1916	46.9	+ 2.5	85	3	2.49	+0.09	2.53	0.1	4	19	4	7
1917	46.1	+ 1.7	80	8	1.05	−1.35	3.26	T.	3	14	5	11
1918	44.9	+ 0.5	85	12	3.18	+0.78	4.60	1.2	6	15	4	11
1919	42.2	− 2.2	78	2	3.62	+1.22	3.36	1.0	6	15	5	10
1920	40.9	− 3.5	82	6	1.21	−1.19	1.89	T.	6	12	6	12
1921	45.6	+ 1.2	84	10	2.82	+0.42	4.29	0.4	5	13	7	10
1922	47.8	+ 3.4	84	15	3.82	+1.42	3.40	T.	7	16	6	8
1923	45.1	+ 0.7	79	14	2.15	−0.25	2.30	3.0	6	15	6	9
1924	46.7	+ 2.3	88	4	1.72	−0.68	1.68	0.5	4	15	8	7
1925	42.8	− 1.6	80	− 2	2.99	+0.59	3.20	2.0	6	16	6	8
1926	39.6	− 4.8	78	0	2.98	+0.58	2.25	4.2	7	11	7	12
1927	46.8	+ 2.4	89	12	3.55	+1.15	3.41	0.9	7	6	9	15
1928	44.6	+ 0.2	79	9	5.10	+2.70	6.52	0.5	10	13	4	13
1929	39.0	− 5.4	78	− 8	1.46	−0.94	2.45	2.1	6	11	8	11
1930	45.8	+ 1.4	83	8	2.93	+0.53	2.70	T.	5	18	5	7
1931	52.2	+ 7.8	87	17	5.46	+3.06	3.34	1.4	11	10	5	15
1932	39.5	− 4.9	83	− 9	1.82	−0.58	2.02	4.5	5	16	5	9

Climatological Data for November, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Charlton	652	51	38.8	− 2.8	69	14	1	16	40	2.79	+0.75	1.83	8.0	5	19	1	10	nw.	O. K. Benecke
Clifton Hill	Randolph	781	33	34.8	− 8.6	67	28	− 9	16	47	2.25	+0.11	1.20	12.0	6	18	1	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	39.1	− 4.2	66	14	8	16	36	1.27	−0.93	0.61	4.8	5	13	9	8	s.	U. S. Weather Bureau
Downing	Schuyler	876	11	36.8	− 4.8	65	6	9	16	34	2.02	+0.16	1.63	0.7	5	15	6	9	sw.	James Taylor
Elsberry	Lincoln	449	1	36.8	.....	69	4	1	18	42	1.59	.....	1.18	8.0	3	11	6	13	s.	Ray E. Mills
Fayette	Howard	661	52	36.0	− 6.2	70	2	3	16	46	1.35	−0.78	0.75	7.5	3	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	44	36.9	− 7.3	63	6†	9	16	40	0.98	−1.38	0.54	5.0	4	19	2	9	s.	Clyde C. Herring
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	2.10	+0.11	1.50	2.5	5	13	5	11	nw.	J. W. Pulliam
Hannibal	Marion	534	49	38.0	− 4.1	66	14	12	16	32	1.08	−0.98	0.50	8.0	5	10	11	9	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	39.4	− 4.7	70	6	7	16†	46	1.53	−0.84	0.80	5.5	6	10	8	12	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	36.6	− 4.0	63	6	8	16	39	1.95	+0.04	1.45	2.5	5	20	0	10	n.	Prof. J. S. Stokes
Louisiana	Pike	469	38	36.8	− 7.3	70	6	4	18	46	1.05	−1.37	0.52	6.1	4	20	4	6	w.	Stark Bros. Nurseries
Macon	Macon	875	33	36.8	− 6.0	65	6	5	16	35	2.34	+0.24	1.44	8.0	5	19	3	8	nw.	W. C. Brown
Mexico	Audrain	800	43	35.6	− 7.3	65	14	4	16†	38	1.06	−1.32	0.55	6.5	4	18	0	12	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	1.09	−1.04	0.70	7.0	4	12	10	8	ne.	J. S. Conway
St. Charles	St. Charles	456	44	40.3	− 5.0	70	4†	12	16†	43	0.98	−1.54	0.77	5.0	2	10	10	10	se.	L. C. Saeger
St. Louis	St. Louis City	568	60	41.0	− 4.4	66	4	19	16	36	2.08	−0.75	1.37	5.3	5	12	9	9	s.	U. S. Weather Bureau
" " Munic. Airport	St. Louis County	564	2	38.8	.....	68	4†	14	17†	37	1.32	.....	0.89	4.2	4	..	..	..	w.	U. S. Weather Bureau
St. Louis University	St. Louis City	578	20	40.6	− 5.9	65	4†	18	16	35	1.50	−1.12	0.97	5.6	5	9	11	10	se.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	1.48	−0.71	0.80	8.0	5	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	36.6	− 6.9	65	7	4	16	34	2.82	+0.71	1.32	10.0	5	19	3	8	n.	Frank Hall
Unionville	Putnam	1,062	39	36.0	− 4.3	65	14	9	16	39	1.40	−0.56	1.10	1.0	2	18	1	11	nw.	Geo. W. Davis
Warrenton	Warren	816	50	39.8	− 3.4	70	4	11	16	42	1.79	−0.90	0.90	10.2	5	14	9	7	se.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	37.0	− 4.1	63	4	12	16	30	1.78	−0.16	1.32	3.3	5	10	12	8	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	37.7	− 5.3	70	2†	− 9	16	47	1.65	−0.56	1.83	6.0	4	15	6	9	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	42.8	.....	74	6	20	13†	43	2.87	.....	0.80	0	7	11	5	14	s.	Jeff. King
Caruthersville	Pemiscot	265	36	44.5	− 5.9	68	8†	24	16†	37	2.17	−1.79	0.80	T.	6	14	0	16	n.	Sam Smith
Doniphan	Ripley	344	28	45.0	− 2.3	75	4	16	28	44	1.44	−2.09	0.50	1.0	5	21	1	8	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	4.08	− 5.8	70	4	12	27	38	1.74	−1.69	0.62	8.0	6	9	3	18	n.	John G. Putz
Marble Hill	Bollinger	470	37	43.2	− 2.0	71	4†	16	28	43	2.36	−1.27	0.64	2.0	6	9	11	10	n.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	2.86	−1.21	0.80	0.5	6	16	3	11	n.	John A. Spence
Poplar Bluff	Butler	399	27	43.8	− 3.9	74	4†	20	13†	44	2.12	−1.50	0.77	T.	7	20	2	8	w.	J. H. Wolpers
Sikeston	Scott	318	25	44.8	− 2.9	70	7	23	16†	32	1.52	−2.22	0.80	0	4	14	2	14	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	43.8	− 3.5	71	7	24	16	34	2.65	−1.03	1.02	1.6	7	9	5	16	n.	U. S. Weather Bureau
Section means and	extremes	....	..	43.5	− 3.8	75	4	12	27	44	2.19	−1.60	1.02	1.5	6	14	3	13	n.	
Ozark Plateau																				
Arcadia	Iron	926	51	39.4	− 4.5	68	2	15	28†	43	1.38	−2.24	0.52	2.2	5	14	4	12	w.	Arcadia College
Aurora	Lawrence	1,370	31	43.8	− 2.0	72	20	10	16	40	2.64	−0.30	0.71	1.0	6	18	3	9	sw.	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	43.3	− 3.3	70	2†	16	16	41	1.20	−1.93	0.33	4.0	5	16	3	11	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	....	.....	..	..	..	..	..	3.30	.....	0.99	6.0	6	21	7	2	s.	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	1.87	.....	0.90	6.0	4	17	8	5	n.	Ozark Utilities Co.
Dean II	McDonald	1,000	28	41.0	− 8.3	75	7	4	16	45	1.86	−1.48	0.65	0.5	6	17	4	9	ne.	H. E. Dean
Eldon	Miller	934	37	38.8[b]	− 6.0	69	3	6	17	44	2.00	−0.49	1.12	7.0	5	14	6	10	n.	E. H. Shepherd
Farmington	St. Francois	918	21	41.0	− 3.8	70	7	16	16	40	1.00	−2.75	0.32	4.0	6	13	10	7	sw.	Robert Forsyth
Goodland	Iron	1,000	39	41.2	− 3.5	69	2†	13	28	47	1.54	−1.38	0.53	2.5	6	16	4	10	n.	F. M. Adams
Greenville	Wayne	381	23	40.9	− 4.5	72	5	12	27	48	1.93	−1.75	0.70	2.0	5	20	1	9	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	3.83	+1.34	1.73	2.5	4	10	8	12	.....	A. W. Madison
Koshkonong	Oregon	958	31	43.1[a]	− 5.9	69	4	17	16	39	1.28	−2.02	0.43	1.0	6	14[a]	3[a]	12[a]	w.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	38.9	− 6.7	68	3†	5	15	40	2.85	+0.23	0.95	4.0	4	21	2	7	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	41.4	− 5.6	70	7	1	16	40	3.93	+1.48	0.75	4.0	7	20	4	6	nw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	41.6	− 4.3	72	20	13	16	44	1.69	−1.07	0.50	2.0	5	16	5	9	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	41.9	− 5.4	71	20	4	16	46	2.18	−0.98	0.63	2.0	6	22	3	5	sw	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	41.0	− 4.0	68	4	14	16	42	2.61	+0.09	1.16	4.5	6	6	12	12	nw.	F. H. Lane
Salem	Dent	1,173	28	41.0	− 5.1	69	20	13	16	46	1.34	−1.28	0.46	2.0	4	14	4	12	n.	E. E. Martin
Seligman	Barry	1,542	31	42.6	− 4.7	70	3†	9	16	45	3.34	+0.47	1.10	2.5	5	20	2	8	e.	Floyd E. Fawver
Springfield	Greene	1,324	54	41.6	− 4.1	70	20	8	16	38	3.17	+0.38	1.08	7.0	5	18	3	9	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	40.6	.....	69	30	0	16	43	1.38	.....	0.56	5.0	6	20	1	9	sw.	I. M. Wilson
Section means and	extremes	.....	..	41.3	− 4.8	75	7	0	16	48	2.21	−0.76	1.73	3.4	5	16	5	9	n.	
Southwest Plain																				
Appleton City	St. Clair	853	37	41.0	− 5.0	69	3	1	16	41	1.92	−0.32	0 72	3.5	5	16	10	4	sw.	W. G. Bigelow
Clinton	Henry	765	39	39.2	− 7.8	70	2	1	16	39	1.90	−0.17	0.74	10.0	5	13	10	7	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	37.2	− 5.3	66	14	1	16	41	2.16	+0.09	1.36	9.0	4	17	4	9	nw.	John H. Patterson
Lamar	Barton	980	44	40.4	− 5.9	70	3	2	16†	43	1.33	−1.00	0.63	4.0	4	18	5	7	nw.	Jesse A. Mann
Lamonte	Pettis	867	31	39.0	− 5.4	69	3	− 1	16	39	2.09	−0.07	1.35	9.0	5	17	5	8	sw.	J. E. Wheeler
Marshall	Saline	779	45	38.8	− 6.4	65	5	5	16	38	2.18	−0.08	1.30	6.0	3	24	0	6	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	41.4	− 3.4	67	3†	0	16	41	1.47	−0.56	0.74	4.0	4	20	3	7	s.	George A. Kaupp
Warrensburg	Johnson	878	45	39.2	− 5.8	69	3	4	16	38	1.66	−0.34	0.63	6.0	3	18	5	7	ne.	E. A. Markey
Warsaw	Benton	687	31	41.3	− 5.9	69	3†	− 1	16	43	1.78	−0.81	0.87	6.0	4	20	4	6	n.	Everett Martin
Section means and	extremes	.....	..	39.7	− 5.7	70	2†	− 1	16	43	1.83	−0.36	1.36	6.4	4	18	5	7	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	35.8	− 7.0	60	5	10	16†	36	2.05	+0.22	2.00	4.0	3	17	6	7	nw.	A. S. Cumming
Chillicothe	Livingston	779	23	35.2	− 6.5	66	3	4	16	48	2.10	−0.24	1.35	3.0	4	18	7	5	se.	Wm. J. Olenhouse
Conception	Nodaway	980	43	36.2	− 5.2	64	3	7	16	32	1.05	−0.41	0.71	4.0	3	12	9	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	34.7[a]	− 7.1	64	2†	0	16	37	0.95	−0.58	0.59	3.8	5	18	3	9	n.	Fred L. Stiff
Grant City	Worth	1,134	28	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	.....
Kansas City	Jackson	963	43	40.1	− 3.6	67	3	11	16	34	1.49	−0.34	1.02	6.4	3	17	6	7	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	35.0	− 6.8	64	3	5	16	42	0.87	−1.04	0.57	4.5	4	15	7	8	se.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	1.36	−0.38	0.74	8.5	4	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	38.8	− 5.4	69	2	6	16	40	2.04	−0.03	1.10	9.0	5	20	2	8	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	36.6	− 2.8	66	3	6	16	43	2.12	+0.49	1.04	6.0	4	13	9	8	s.	J. R. Brink
Oregon	Holt	1,048	76	39.5	− 1.0	70	2	8	16	36	0.92	−0.81	0.67	T.	3	18	7	5	sw.	Mina Wright
St. Joseph	Buchanan	967	24	38.0	− 5.6	66	3	10	16	32	0.59	−1.50	0.57	1.5	3	17	5	8	se.	U. S. Weather Bureau
Tarkio	Atchison	916	29	35.5	− 4.6	64	31	8	16	37	1.52	+0.04	1.52	T.	1	15	6	9	nw.	Albert Volker
Trenton	Grundy	822	36	36.8	− 5.4	62	3	9	16	34	1.92	+0.04	1.05	4.0	3	11	12	7	s.	W. H. Estes
Section means and	extremes	.....	..	36.8	− 5.1	70	2	0	16	48	1.46	−0.35	2.00	4.2	3	16	7	7	se.	
State means and	extremes	.....	..	39.5	− 4.9	75	4†	− 9	16	48	1.82	−0.68	2.02	4.5	5	16	5	9	n.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for November, 1932

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi								1.34	.05							.50																1.89
Boonville	Missouri					.06			.42	.04						T.	.35																0.87
Bowling Green	Mississippi					.09			.38								.77																1.24
Brunswick	Grand					.03			1.83	.13						.50	.30																2.79
Canton	Mississippi				.03				.82	.12							.46																1.43
Clifton Hill	Chariton				.02			.41	.54	.05	.03	T.				1.20																	2.25
Columbia***	Missouri				.19			.34	.28	.01		T				.45							T.										1.27
Downing	Mississippi				.07			.25	1.63	.05						.02																	2.02
Edina	do				T.	T.			1.75	.08						T.	.22																2.05
Elsberry	do					.09			.32	T.		T.				1.18																	1.59
Farber	do					.08			.40								.59																1.07
Fayette	Missouri								.55	.05							.75																1.35
Fulton	do				T.	.22			.20	.02	T.					T.	.54																0.98
Gorin	Mississippi				.04			.28	1.50	.18		T.				.10																	2.10
Hannibal***	do				.05			.16	.34	.05	T.	T.				.48							T.										1.08
Hermann	Missouri					.19			.40				T.			.20	.96																1.75
Jefferson City	do				.03	.32			.21	.12						.05	.80																1.53
Kahoka	Mississippi								2.02	.14							.10																2.26
Kirksville	do				.10			.15	1.45	.05						.20																	1.95
LaBelle	do								2.00	.05						.20																	2.25
Linneus	Grand				.05				1.69	.10		T.				.20																	1.94
Louisiana	Mississippi				.10				.43	T		T.				**	.52																1.05
Lucerne	Grand								1.05	.10	T.					T.																	1.15
Macon	Chariton					.02			1.44	.08						.30	.50																2.34
Memphis	Mississippi				T.	T			1.70		T.	T.	T.			T.	.10																1.80
Mexico	do				T.	.16			.32	.03							.55																1.06
Milan	Grand					T.			1.12	.25		T					.22	.14															1.73
Monroe City	Mississippi			.06				.30		.03						.70																	1.09
New London	do				.08				.49	.03	T.		.04				.51																1.15
Pacific	Meramec					.21			.16				T.			.18	1.05							.31									1.91
Palmyra	Mississippi				.03	.02			.49								.45																0.99
Paris	do					.04			.41								.70																1.15
Perry	do				.04				.53	T.		T.					.60																1.17
Philadelphia	do								.62	.05							1.05																1.72
St. Charles	Missouri				T.	.21						T.				.77																	0.98
St. Louis ***	Mississippi				.27		T		.09	T.		T.				1.37							.02	.33									2.08
" Munic. Airport*	Missouri				.20		T.		.21	T.		T.			T.	.89	T.						T.	.02									1.32
St. Louis University*	Mississippi				.14				.07	T.		.01				.97								.31									1.50
Shelbina	do				.02	.07			.55	.04						.80																	1.48
Steffenville	do				.07	T		.08	1.92	1.00	T.	T.				.35																	2.82
Troy	do					.12			.44				.01			.10	.80																1.47
Union	Meramec					.17			.20							.27	1.33							.19									2.16
Unionville	Chariton							T.	1.10	.30						T.																	1.40
Valley Park	Meramec					.29										.20	.43							.25									1.17
Warrenton	Mississippi				.04	.17			.58			T.				.90	.10																1.79
West Ely	do			T.	.02			.39	.03							.70																	1.14
Winfield	do					.15			.25								.60																1.00
Keokuk, Ia. ***	do				.02			.84	.50	.18		T				.24																	1.78
Southeast Lowlands																																	
Bragg City	St. Francis											.97					.90								.44								2.31
Campbell	do	.11							.19		.70	.18				.80	.65							.80									2.87
Cape Girardeau	Mississippi	.32				.05	.02	T.	.12	.04		.60					.70							.08	.28								2.21
Caruthersville	do	.24						.07	.05			.56					.80			T.	T.				.45								2.17
Dexter	St. Francis											.95					1.08								.34	T.							2.37
Doniphan	Black								.12		.32					.40	.10							.50									1.44
Fisk	St. Francis	.22				.09						.42					.73							T.	.65								2.11
Jackson	Mississippi					.12			.18		.62					.25	.20							.37									1.74
Marble Hill	do					.12			.13		.42					.62	.43							.64									2.36
Morehouse	do					T.			.15		.80	.41				.53	.67							.30									2.86
New Madrid	do	.50				.01	.06	.08	.15	.04		1.02					1.02			.01					.30	.07							3.26
Parma	St. Francis	.22										.93					1.32								.32								2.79
Poplar Bluff	Black	.10					.06		.12			.62					.77							.30	.15								2.12
Sikeston	Mississippi	.21						.16								.80								.35									1.52
Cairo, Ill. ***	do					T.	.04		.10	T.	1.02	T.				.91	.01	T.	.10					.47	T.								2.65
Ozark Plateau																																	
Arcadia	St. Francis				.05	T.		.08	T.		.52				T.	.39								.34									1.38
Aurora	Neosho				.60	.10		T.	.55		.07					.71								.61									2.64
Birchtree (near)	Black				.15				.25		.33					.32								.15									1.20
Buffalo	Osage				.59	.02			.44							.99	.69							.57									3.30
Caplinger Mills	do				.32			.90	.05							.60																	1.87
Chaonia	St. Francis	.18				.19			.08			.26					.59								.14	.49								1.93
Dean	Neosho				.58	.11		.65	T.		.12					.06								.34									1.86
Eldon	Missouri				.01	.41			.34	T.						.12	1.12																2.00
Farmington	St. Francis			.02	.07						.10					.22	.27							.32									1.00
Fredericktown	do	.27				.12	.07		.12	.02		.37					.17							.16	.08								1.38
Galena	White					.38			.62			.29				.14	.16							.59									2.18
Goodland	Black					.20			.20		.15					.20	.26							.53									1.54
Greenville	St. Francis					.26			.10		.70					.44								.43									1.93
Hailey	White				1.22						.18					1.73								.70									3.83
Koshkonong	Black					.20			.19		.43					.18	.10							.18									1.28
Lakeside	Osage				.01	.25			.33	T.						.47	.50																1.62
Lebanon	do							.65								.95			.35					.90									2.85
Leeper	Black	.05				.23	.03		.06			.49					.24								.16									1.26
Lockwood	Osage				.47	.50		.32	.62		T.					.72	.75							.55									3.93
Mountain Grove	White				T.	.31	T.		.46		.22					.20								.50									1.69
Neosho	Neosho				.58	.04			.88				.08			.47								.63									2.18
Owensville	Gasconade					T.			.38							.55	.37																1.30
Ozark Beach	White						.22		1.29			.56					.35							.42									2.84
Rolla	Meramec					.30			.34	.04						.27	.50							1.16									2.61
St. Thomas (near)	Osage				T.	.39			.26								.64																1.29
Salem	Meramec					.20			.33		T.					.35								.46									1.34
Seligman	Neosho				.35				.83		.46					.60								1.10									3.34
Springfield ***	White				.73	T.	T.	.47	.15		T.				T.	1.08	T.							.74									3.17
Steelville	Meramec					.30			.16							.14	.76							.89									2.25
Stover	Missouri					.20			.65	.05						T.	.50																1.40
Versailles	Osage				.27	.01	T.	.10	.29							.56	.15																1.38
Williamsville	Black	.87				.28			.08	.01		.58					.52							.14	.33								2.31
Willow Sprgs. (near)	White					.15			.40	.01		.37					.38							.50									1.81

Continued on next page

Daily Precipitation for November, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																
Appleton City	Osage				.11			.72	.52							.55	.02															1.92
Clinton	do		.10					.74	.51							**	.55															1.90
Concordia‖‖	Missouri								1.20	T.						.90	T.															2.10
Harrisonville‖‖	Osage				.02			.04	1.36								.74															2.16
Joplin‖‖	Neosho				.43			.37	.15						.60								.19	.14								1.88
Lamar‖‖	do					.15			.63							.25	.30															1.33
Lamonte	Missouri				.01			1.35	.25	T.						.45	.03															2.09
Marshall	do				T			.28	1.30	T.						.60																2.18
Nevada	Osage				.16			.74	.26							.31																1.47
Osceola‖‖	do					.38		.07	1.00							T.	.35															1.80
Warrensburg	Missouri				T.			.63	.53	T.						.50																1.66
Warsaw	Osage				.30			.15	.87							.46																1.78
Waverly ‖‖	Missouri								1.32	.20						.20	.25															1.97
Northwest Plateau																																
Bethany	Grand				.05			1.10	.90							T.																2.05
Chillicothe‖‖	do					.06			1.35	.47		T.					.22															2.10
Conception	Missouri				.03			.71	.31																							1.05
Edgerton	do				.02			.04	.59	.05	T.					.25																0.95
Gallatin ‖‖	Grand								1.26	.10						.10	T															1.46
Grant City	do																															....
Kansas City***	Missouri				T.		T.	.58	.44	T.		T.				.47																1.49
Kidder ‖‖	Grand				T.				.57	.10						.10	.10															0.87
King City	Missouri							.33	.74	.23						.06																1.36
Lexington ‖‖	do							.10	1.10	.15						.12	.57															2.04
Maryville‖‖	do				.05			1.04	.93	.10		T.																				2.12
Oregon	do				T			.67	.22	.03	T.																					0.92
St. Joseph***	do			T.	T.			.37	.20	T.	T.					.02																0.59
Tarkio	do							1.52		T.																						1.52
Trenton	Grand				T.			.78	1.05	T.	T.	T.				.09																1.92
																																....
																																....
																																....
																																....
																																....
																																....

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for November, 1932

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.045	.066	.087	.101	.023	.079	.053	.059	.074	.059	.060	.073	.057	.145	.188	....	....	....	....	....	....	....	....	.058	.031	.065	.047	.041	.035	.069	....	1.998
	Mean temperature	44	50	52	54	50	52	58	44	39	36	34	42	46	48	36	22	26	28	26	45	35	38	38	36	42	34	35	39	40	50	..	40.6
	Wind movement	94	47	43	56	63	60	43	93	167	119	133	119	75	72	96	91	45	45	52	69	94	76	50	71	40	62	57	46	36	53	..	2,167

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

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fall was remarkably heavy for so early in the season over most of the State, except the extreme northwestern portion and the Southeast Lowlands. The greatest monthly total was 12 inches at Clifton Hill.

MISCELLANEOUS PHENOMENA

Fogs, dense.—5th, 6th, 7th, 18th, and 25th.
Halos, solar.—17th and 18th.
Halos, lunar.—4th, 13th, 14th, and 21st.
Sleet.—General on 15th, local on 10th and 16th.
Thunderstorms.—Local on 7th, 8th, 10th, 15th, and 23d.
Winds.—No damaging winds reported. Strong winds on 15th, drifted snow badly in central and northeastern sections of the State.

Daily Temperatures for November, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	54	67	64	67	62	65	61	60	38	38	46	46	66	69	44	28	31	39	38	51	42	42	44	48	55	51	44	52	57	62	..	50.8
	Minimum	25	33	37	47	29	44	48	33	32	30	26	28	26	36	18	1	18	14	14	19	20	25	29	20	25	22	20	23	31	30	..	26.8
Columbia	Maximum	55	63	66	58	60	64	60	57	38	36	34	45	64	66	35	30	35	39	34	55	40	50	42	47	56	36	43	51	58	63	..	49.3
	Minimum	28	36	40	45	32	50	49	34	31	31	27	28	28	35	18	8	21	15	20	24	22	27	26	20	27	25	23	26	37	34	..	28.9
Fayette	Maximum	56	70	66	59	65	66	61	48	40	39	40	68	31	34	30	30	37	44	31	52	42	48	43	50	60	39	48	52	59	65	..	49.1
	Minimum	23	24	31	39	28	29	45	34	32	29	25	23	24	25	23	3	4	10	13	17	20	21	27	16	18	21	18	19	21	28	..	23.0
Hannibal	Maximum	50	59	60	62	60	65	64	61	35	35	30	43	59	66	34	29	34	38	34	50	34	42	40	46	55	36	40	49	58	60	..	47.6
	Minimum	29	35	37	46	34	44	49	35	32	30	26	29	27	34	21	12	16	15	18	22	19	24	30	22	29	25	23	24	34	30	..	28.4
Jefferson City §§	Maximum	56	66	69	65	62	70	66	62	39	37	37	47	65	67	46	33	36	39	35	64	44	50	45	50	62	58	50	45	54	67	..	52.9
	Minimum	28	28	38	39	37	37	46	35	32	31	25	25	27	29	30	7	7	16	17	19	21	24	26	21	22	26	26	20	21	21	..	26.0
Kirksville	Maximum	53	59	57	60	62	63	62	55	34	32	31	43	59	59	40	33	32	46	49	47	37	36	37	45	52	44	41	50	55	59	..	47.7
	Minimum	25	34	33	45	32	40	45	30	27	28	22	23	26	39	17	8	18	16	10	20	15	23	28	20	28	17	18	20	28	31	..	25.6
Louisiana	Maximum	48	60	65	60	66	70	57	42	40	37	35	50	66	63	41	27	31	35	45	50	46	37	42	45	52	46	45	51	52	57	..	48.7
	Minimum	23	40	36	40	33	40	35	35	33	30	25	26	20	40	20	12	8	4	14	12	19	18	26	18	18	25	20	22	32	26	..	25.0
Macon §§	Maximum	52	61	59	62	61	65	63	55	31	34	35	45	61	64	20	30	32	42	43	47	37	40	41	46	54	35	41	50	56	60	..	47.4
	Minimum	25	34	34	42	31	40	45	34	30	28	27	24	26	43	19	5	15	13	13	17	17	23	29	18	29	20	18	20	29	34	..	26.1
Mexico §§	Maximum	52	63	62	64	60	64	63	38	35	35	34	45	61	65	28	30	33	38	30	55	38	42	45	47	56	35	42	49	57	61	..	47.6
	Minimum	25	28	34	36	30	32	46	35	32	28	25	24	25	29	25	4	4	10	10	17	9	18	25	19	19	23	20	19	23	32	..	23.5
St. Louis	Maximum	50	62	63	66	60	64	65	59	40	39	34	43	56	62	49	32	38	36	33	57	36	49	48	44	57	39	38	47	57	61	..	49.5
	Minimum	35	40	39	46	43	52	52	36	37	32	29	29	30	43	22	19	21	22	21	21	23	26	34	29	35	27	24	29	33	41	..	32.4
" " Munic. Airport	Maximum	50	61	60	68	61	68	66	58	40	36	32	42	58	62	43	29	33	36	31	55	37	48	44	46	56	37	38	46	59	62	..	48.7
	Minimum	30	37	37	44	41	50	49	34	33	30	27	27	25	41	21	16	14	14	17	18	22	22	30	24	26	26	22	22	30	34	..	28.8
Unionville	Maximum	50	53	64	57	63	60	58	54	34	32	30	40	60	65	35	35	40	45	48	40	40	40	40	45	50	45	44	50	55	60	..	47.7
	Minimum	25	30	33	44	34	38	40	30	27	26	18	23	25	32	17	9	18	18	9	20	14	20	24	18	30	15	16	20	32	22	..	24.2
Warrenton	Maximum	51	62	63	70	60	68	67	62	37	36	34	43	61	62	59	30	34	42	37	58	47	40	45	50	57	50	42	50	59	63	..	51.3
	Minimum	28	38	34	46	36	43	49	35	33	30	26	26	26	43	20	11	15	12	21	16	19	22	37	22	28	25	20	22	31	38	..	28.4
Southeast Lowlands																																	
Campbell	Maximum	54	64	70	71	67	74	71	65	55	51	41	48	60	62	55	46	33	36	42	67	59	54	53	45	56	51	40	48	56	61	..	55.2
	Minimum	30	27	35	37	41	47	46	39	36	33	30	25	20	37	31	20	22	30	25	24	31	22	40	31	36	29	22	20	21	22	..	30.3
Caruthersville	Maximum	46	50	57	64	65	65	61	68	68	51	51	41	43	54	61	61	41	35	35	41	61	61	56	56	56	54	54	42	46	51	..	53.2
	Minimum	32	32	37	54	51	53	53	54	38	34	32	25	27	42	51	24	27	33	24	24	35	28	42	37	40	35	26	27	26	32	..	35.8
Doniphan	Maximum	52	70	70	75	70	72	69	68	67	64	48	53	65	68	60	44	40	40	47	65	60	56	50	68	64	54	48	55	59	60	..	59.4
	Minimum	28	27	31	36	52	54	45	36	38	28	29	23	21	33	32	20	22	33	22	25	26	22	40	40	39	34	22	16	20	22	..	30.5
Jackson	Maximum	48	62	67	70	64	67	68	62	57	53	46	41	54	63	59	54	51	34	38	61	61	53	51	47	54	53	48	46	52	59	..	54.8
	Minimum	26	24	30	39	47	49	47	36	33	27	25	21	17	38	26	17	16	24	20	23	25	16	36	25	27	26	12	15	18	22	..	26.9
Poplar Bluff	Maximum	54	65	67	74	60	67	74	73	56	56	50	52	61	67	58	44	35	38	45	67	54	56	56	58	68	48	44	50	57	66	..	57.3
	Minimum	29	29	35	43	43	45	48	40	34	29	30	25	20	40	28	21	23	30	26	25	31	23	35	29	36	28	21	20	20	22	..	30.3
Sikeston	Maximum	50	62	68	69	66	65	70	68	54	52	37	45	55	63	63	36	36	35	40	62	62	55	54	46	54	54	43	50	54	62	..	54.3
	Minimum	31	30	37	45	53	53	51	46	39	33	31	26	25	40	36	23	23	31	26	30	32	26	43	32	39	34	25	26	27	35	..	34.3
Cairo, Ill	Maximum	51	62	67	67	58	65	71	60	52	50	37	42	55	63	54	34	31	34	49	64	47	55	50	46	56	45	42	48	53	61	..	52.1
	Minimum	37	36	41	52	54	54	56	40	40	32	32	27	30	43	27	24	26	32	30	30	30	27	39	33	40	31	25	26	32	36	..	35.4
Ozark Plateau																																	
Arcadia §§	Maximum	54	68	64	67	55	65	66	43	49	37	36	47	58	62	40	37	43	36	36	63	48	50	45	49	58	42	43	51	58	66	..	51.2
	Minimum	26	28	31	31	50	43	47	42	31	30	26	26	20	28	39	17	17	18	25	22	27	18	24	25	24	29	16	15	15	35	..	27.5
Aurora	Maximum	57	65	66	60	55	67	70	59	49	42	40	49	63	66	58	31	38	39	33	72	61	58	56	47	61	46	50	57	60	68	..	54.8
	Minimum	32	42	44	50	46	44	50	37	33	32	27	27	32	44	30	10	24	21	29	32	30	34	28	28	28	25	25	30	33	40	..	32.9
Birchtree	Maximum	59	70	65	70	63	65	63	59	51	45	39	47	60	63	57	38	44	39	43	68	60	48	50	54	57	58	57	54	59	61	..	55 5
	Minimum	26	29	37	47	51	51	47	38	33	39	27	27	21	40	23	16	21	30	23	31	31	25	42	26	36	27	22	20	23	25	..	31.1
Eldon §§	Maximum	56	66	69	63	62	67	67	36	35	28	36	47	64	63	29	27	..	..	39	56	38	51	47	51	62	40	48	56	59	68	[b]	51.1
	Minimum	27	26	37	37	36	36	47	36	33	28	25	26	27	29	29	7	6	..	..	12	25	25	26	21	21	23	20	20	21	32	[b]	26.4
Farmington	Maximum	55	65	66	67	66	68	70	60	44	40	35	44	58	62	51	34	40	35	38	62	54	49	46	46	55	48	41	53	59	64	[a]	52.5
	Minimum	26	32	33	45	52	47	50	34	31	31	26	25	21	35	24	16	20	22	25	22	26	20	39	24	30	28	18	20	27	34	[a]	29.4
Koshkonong	Maximum	53	64	..	69	64	62	63	60	51	48	41	48	61	62	58	37	44	39	43	68	61	44	49	48	57	51	46	51	59	66	[a]	54.0
	Minimum	31	34	..	34	52	52	50	37	34	31	26	26	26	39	23	17	27	27	26	29	32	26	42	28	42	32	21	23	31	35	[a]	32.2
Lebanon	Maximum	52	56	68	65	65	65	55	68	58	39	47	56	65	51	30	36	36	39	54	53	45	39	41	46	48	45	50	58	60	68	..	52.0
	Minimum	23	33	36	47	39	47	28	30	27	22	21	23	40	14	5	10	6	19	23	23	23	30	12	22	22	12	23	29	36	49	..	25.8
Mountain Grove	Maximum	54	69	65	69	56	63	60	57	47	42	38	47	60	60	55	37	42	40	36	72	64	44	45	51	61	49	48	51	58	65	..	53.5
	Minimum	26	36	41	47	45	49	47	32	30	30	24	23	27	38	18	13	20	22	23	28	25	26	38	22	30	26	20	23	28	34	..	29.7
Neosho	Maximum	55	65	67	62	56	59	70	60	51	48	43	52	65	68	64	31	40	38	40	71	68	58	54	45	59	50	53	54	56	62	..	55.5
	Minimum	24	32	37	43	43	46	46	35	32	32	25	18	25	47	18	4	22	24	24	27	29	29	26	20	22	20	20	23	27	30	..	28.8
Rolla	Maximum	52	62	65	68	59	67	67	59	40	40	36	45	60	62	57	28	37	34	32	64	56	46	47	48	55	52	43	52	59	64	..	51.7
	Minimum	28	37	38	47	43	50	48	33	34	30	26	26	24	44	20	14	20	19	23	22	26	26	38	25	27	27	21	22	31	40	..	30.8
Springfield	Maximum	54	66	65	60	54	64	65	43	47	36	40	47	61	63	47	27	38	37	35	70	48	51	48	47	59	42	46	52	57	65	..	51.1
	Minimum	31	40	45	51	45	51	43	32	32	31	26	26	31	44	16	8	23	20	29	32	28	33	31	27	30	28	24	28	35	41	..	32.0
Southwest Plain																																	
Appleton City	Maximum	57	66	69	62	56	66	61	56	47	40	38	50	64	67	58	24	33	42	36	62	46	60	54	50	60	50	48	55	56	66	..	53.3
	Minimum	27	34	41	51	35	47	51	32	31	28	26	22	27	40	17	1	16	17	24	25	26	27	34	22	24	23	21	27	30	34	..	28.7
Clinton	Maximum	50	70	56	56	62	62	64	57	38	37	32	42	56	58	57	24	33	34	34	55	50	47	48	46	55	48	42	55	60	62	..	49.7
	Minimum	24	32	40	48	46	48	54	31	31	26	26	24	26	55	18	1	18	20	22	23	25	25	32	20	22	22	20	23	22	40	..	28.8
Harrisonville §§	Maximum	57	65	62	60	60	63	55	37	39	40	43	54	61	66	19	24	33	34	34	55	50	47	48	46	55	48	42	55	60	62	..	49.7
	Minimum	24	27	38	40	32	32	48	30	29	26	24	21	23	28	17	1	6	17	17	17	22	24	31	20	25	20	19	20	26	31	..	24.5
Lamar §§	Maximum	60	69	70	59	60	69	69	40	51	40	45	52	66	69	30	29	37	41	40	66	47	62	48	51	58	41	53	58	57	68	..	53.5
	Minimum	25	26	36	46	38	38	50	35	31	32	25	22	23	32	26	2	2	21	21	28	29	28	35	21	21	22	22	25	27	33	..	27.4
Lamonte	Maximum	58	67	69	61	61	64	58	53	38	35	37	47	65	66	48	36	36	40	35	55	42	55	44	50	58	41	50	56	57	65	..	51.6
	Minimum	24	31	40	44	30	46	49	31	32	27	25	25	28	27	17	− 1	16	9	17	21	23	27	28	19	24	23	26	19	33	34	..	26.5
Marshall	Maximum	55	58	64	60	65	63	64	56	34	34	33	46	64	64	47	26	34	46	39	51	51	50	49	55	55	50	52	54	58	62	..	51.3
	Minimum	27	32	36	50	33	31	30	31	33	30	25	26	26	42	18	5	17	16	16	20	20	23	27	22	22	22	21	20	34	35	..	26.3
Nevada	Maximum	57	65	67	57	59	67	65	55	49	44	44	51	64	67	57	23	36	40	36	63	46	60	53	48	57	46	49	55	55	66	..	53.4
	Minimum	25	36	42	50	33	49	51	33	31	29	25	24	29	47	16	0	17	14	26	26	27	30	33	21	24	24	21	29	33	39	..	29.5
Warrensburg	Maximum	56	67	69	60	63	63	59	59	39	37	40	49	65	65	48	42	33	40	35	55	42	55	47	48	59	45	50	55	57	65	..	52.2
	Minimum	25	35	38	49	30	46	45	29	31	25	24	23	29	43	15	4	13	10	12	20	22	25	32	22	26	20	17	25	21	34	..	26.3
Warsaw	Maximum	58	68	69	63	61	68	63	60	44	42	41	50	66	67	60	30	40	43	36	65	51	55	53	50	61	52	49	58	61	69	..	55.1
	Minimum	24	30	40	52	31	50	48	31	33	27	26	26	25	42	17	− 1	14	11	21	22	24	27	34	28	18	22	17	22	31	33	..	27.5
Northwest Plateau																																	
Chillicothe §§	Maximum	57	64	66	62	65	65	57	35	32	32	33	46	63	60	19	29	38	46	33	58	43	41	44	50	56	37	45	54	59	63	..	48.4
	Minimum	23	27	34	39	26	29	44	28	28	26	23	24	24	34	18	4	5	16	10	10	16	16	24	14	14	18	18	18	21	28	..	22.0
Grant City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	57	53	56	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	31	27	..	....
Kansas City	Maximum	58	65	67	60	61	61	58	38	37	36	38	49	64	62	28	27	33	43	38	55	41	55	44	50	56	36	45	56	59	64	..	49.6
	Minimum	34	44	43	45	36	45	38	30	32	28	28	27	36	28	15	11	20	23	17	29	25	31	35	30	32	22	24	33	39	41	..	30.7
Kidder §§	Maximum	54	60	64	59	61	60	54	33	32	33	32	41	60	57	20	26	33	42	35	50	40	42	41	46	62	33	42	53	58	60	..	46.1
	Minimum	25	28	37	38	29	30	43	29	28	28	23	23	24	37	16	5	7	17	14	14	18	18	26	20	20	19	19	22	25	32	..	23.8
Lexington §§	Maximum	68	69	62	65	68	57	37	35	36	38	65	65	66	46	22	38	43	42	54	44	51	45	51	59	39	48	57	60	65	67	..	52.1
	Minimum	28	32	40	33	30	32	31	30	30	29	25	26	33	46	8	6	7	17	14	21	22	24	26	22	21	20	21	25	29	34	..	25.4
Maryville	Maximum	57	62	66	58	63	60	53	45	33	32	34	47	62	46	29	31	36	48	51	54	45	50	45	52	54	42	46	57	60	64	..	49.4
	Minimum	20	29	36	47	28	33	43	26	26	22	19	26	27	15	6	20	18	8	21	14	24	24	16	25	15	17	23	33	24	..	23.7
Oregon	Maximum	60	70	68	59	64	59	54	43	37	35	37	51	65	55	33	30	36	49	43	56	50	53	45	52	56	43	49	58	61	66	..	51.2
	Minimum	27	34	40	46	34	41	42	30	29	29	25	24	32	28	17	8	22	23	11	26	19	28	30	24	32	12	21	30	36	34	..	27.8
St. Joseph	Maximum	60	64	66	58	60	58	56	37	35	35	37	48	65	52	24	27	36	47	34	55	43	50	44	50	54	37	48	56	61	63	..	48.5
	Minimum	28	34	42	40	30	41	36	29	30	26	25	26	33	24	15	10	22	21	12	26	22	29	27	22	27	20	22	30	39	36	..	27.5
Trenton	Maximum	53	60	62	59	60	60	54	54	32	33	33	42	60	56	31	30	35	43	36	50	40	42	42	48	54	39	41	54	55	59	..	47.2
	Minimum	24	30	39	48	26	36	42	30	28	29	24	26	27	31	18	9	21	18	11	21	18	26	30	18	28	28	20	24	31	29	..	26.3

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 12-21-32—990.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN, Meteorologist

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

VOL. XXXVI ST. LOUIS, MO., DECEMBER, 1932 No. 12

GENERAL SUMMARY

The month opened with quite mild weather, which lasted until the 7th, and another unusually mild spell prevailed from the 21st to the 30th. Between these two mild periods, or from the 8th to the 18th, inclusive, came one of the coldest spells of recent years, for so early in the winter, with minimum temperatures decidedly below zero on several days in the northern half of the State, and near zero on one or two days almost to the southern border. The lowest reported was 21° below zero, on the 16th, at Bethany, Harrison County, on the northwest border; but several stations had as low as 15° to 18° below zero.

This was the second severe cold spell of the season, the first one having occurred in the middle of the preceding month of November. As often happens, these periods of severe cold were preceded by, or began with, fairly heavy snowfall. The snowfall, however, was quite beneficial in giving protection to wheat. About the 19th the snow began to melt rapidly, and by the 23d the ground was again clear.

Precipitation was light to moderate during the first three weeks, excepting the rather heavy snowfall of the 8-10th, but heavy rains occurred over most of the State on the 22-23d, and again on the 29-30th in the southeastern counties. These heavy rains brought the monthly average for the State up to 4.46 inches, which is the second largest December average of record. The larger excesses occurred in the southern half of the State, especially in the southeast quarter. The upper northwestern counties received only slightly more than normal precipitation. The more than normal precipitation was decidedly beneficial, as it helped to restore the subsoil moisture that had been depleted during the preceding months.

Conditions were favorable during the first week and the last ten days of the month for outdoor work of the season. Wheat was in fair to good condition at the end of the month, but did not afford much pasturage. Livestock, however, were generally in good condition.

The rivers of the State were strongly affected by ice formations during the severe cold spell, although no great gorges formed. River stages were unusually low when the ice formations began and the blockades that occurred caused very low stages at some points, notably, St. Louis, where a stage of 3.4 feet below zero (the lowest of record) was registered on the 16th. On the other hand, some strong rises occurred with the breaking of ice gorges, although no serious damage resulted. The heavy rains of the 29-30th in the Southeast Lowlands caused minor floods in that section.

TEMPERATURE

The monthly mean for the State, 67 stations reporting, was 31.2°, or 2.7° below normal. The highest monthly mean was 39.2° at Caruthersville, and the lowest monthly mean was 23.4° at Tarkio. The highest temperature recorded was 77° at Poplar Bluff on the 6th and at Greenville on the 2d; the lowest, 21° below zero at Bethany on the 16th. The greatest daily range was 46° at Doniphan on the 1st.

PRECIPITATION

The average for the State, 120 stations reporting, was 4.46 inches, or 2.39 inches more than the normal. The greatest local monthly amount was 9.87 inches at Poplar Bluff, Butler County, and the least, 1.01 inches at Oregon, Holt County. The greatest precipitation in any twenty-four hours was 4.82 inches at Morehouse, New Madrid County, on the 30th. The average number of days with 0.01 inch or more of precipitation was 7. The snowfall averaged 5.7 inches for the State,

(Continued on page 59)

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA

Stations	Mean barometric pressure (Sea-level)	Mean relative humidity			Sunshine		Wind				
		7 a. m.	noon	7 p. m.	Total hours	Percentage of possible	Total movement miles	Average hourly velocity	Max. velocity: Miles per hour	Max. velocity: Direction	Max. velocity: Date
Columbia	30.15	81	66	67	136	46	6,655	8.9	26	sw.	24
Hannibal	30.14	74	68	..	...	..	6,721	9.0	34	sw.	24
Kansas City	30.15	74	62	66	185	63	7,202	9.7	35	w.	3
St. Joseph	30.14	84	64	71	160	55	6,214	8.4	27	nw.	3
St. Louis	30.15	76	64	66	116	39	9,500	12.8	38	sw.	24
Springfield	30.15	79	65	65	142	47	7,826	10.5	28	sw.	24
Cairo, Ill.	30.18	86	74	75	...	48	7,663	10.3	29	sw.	24
Keokuk, Iowa	30.16	75	61	68	159	55	6,389	8.6	27	w.	4

(Beginning January 1, 1932 wind velocities are corrected to true velocities).

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation				Number of days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall, unmelted	With .01 inch or more	Clear	Partly cloudy	Cloudy
Normals and Extremes	33.9	.....	84	−29	2.07	.....	6.95	3.6	6	13	6	12
1888	35.9	+ 2.0	70	0	2.29	+0 22	....	....	6	..	..	..
1889	46.8	+12.9	78	2	0.96	−1.11	....	....	5	..	..	..
1890	36.0	+ 2.1	76	− 3	1.03	−1.04	....	....	3	..	..	..
1891	39.8	+ 5.9	72	− 1	1.90	−0.17	....	....	6	..	..	..
1892	29.4	− 4.5	75	−22	2.38	+0.31	3.08	4.8	6	8	7	16
1893	35.2	+ 1.3	76	7	0.95	−1.12	2.95	2.7	5	11	11	9
1894	36.7	+ 2.8	75	− 7	2.13	+0.06	3.01	1.3	5	14	8	9
1895	34.3	+ 0.4	69	− 8	6.13	+4.06	6.95	3.4	8	9	8	14
1896	38.6	+ 4.7	79	− 5	0.93	−1.14	2.25	T.	3	13	8	10
1897	29.3	− 4.6	74	−14	2.80	+0.73	2.70	6.3	7	8	8	15
1898	28.7	− 5.2	74	−20	1.69	−0.38	2.50	5.1	5	17	6	8
1899	30.4	− 3.5	72	−13	2.11	+0.04	1.70	6.6	9	12	9	10
1900	35.6	+ 1.7	68	− 3	0.69	−1.38	1.08	0.6	4	14	8	9
1901	28.5	− 5.4	71	−29	2.93	+0.86	4.43	6.9	8	11	7	13
1902	30.7	− 3.2	68	− 7	2.91	+0.84	2.50	3.1	8	10	4	17
1903	30.2	− 3.7	65	11	1.51	−0.56	1.80	2.3	5	16	7	8
1904	32.9	− 1.0	75	−10	1.50	−0.57	1.55	6.0	5	16	7	8
1905	33.3	− 0.6	66	− 2	1.45	−0.62	2.24	1.7	4	18	6	7
1906	36.1	+ 2.2	73	0	2.27	+0.20	2.85	0.6	8	8	6	17
1907	37.7	+ 3.8	76	3	1.84	−0.23	1.78	3.7	7	11	7	13
1908	38.4	+ 4.5	80	− 4	0.85	−1.22	1.35	T.	3	16	7	8
1909	24.9	− 9.0	76	−17	2.86	+0.79	2.50	7.7	8	12	6	13
1910	31.2	− 2.7	67	− 5	1.25	−0.82	2.85	2.4	4	16	5	10
1911	36.7	+ 2.8	74	−11	2.80	+0.73	2.00	5.1	7	13	6	12
1912	36.5	+ 2.6	72	2	0.59	−1.48	0.91	0.6	3	19	5	7
1913	38.3	+ 4.4	74	− 3	2.27	+0.20	2.25	6.6	7	9	4	18
1914	26.8	− 7.1	68	−18	2.48	+0.41	2.30	6.6	9	7	5	19
1915	34.7	+ 0.8	84	−13	2.77	+0.70	3.20	7.8	6	12	6	13
1916	31.3	− 2.6	82	−29	1.85	−0.22	3.40	4.4	6	15	6	10
1917	25.5	− 8.4	82	−23	0.74	−1.33	2.51	7.3	5	11	7	13
1918	40.0	+ 6.1	83	−12	3.21	+1.14	5.50	7.8	7	13	6	12
1919	28.5	− 5.4	74	−22	0.69	−1.38	2.65	0.7	3	12	4	15
1920	35.6	+ 1.7	77	−10	1.93	−0.14	2.30	2.3	5	13	7	11
1921	36.9	+ 3.0	74	− 8	1.86	−0.21	1.91	1.9	6	13	7	11
1922	38.3	+ 2.4	75	− 6	2.11	+0.04	3.04	0.2	6	15	6	10
1923	41.0	+ 7.1	82	− 4	3.06	+0.99	2.23	0.8	8	11	6	14
1924	27.7	− 6.2	80	−28	3.43	+1.36	4.20	4.6	7	13	6	12
1925	31.6	− 2.3	80	−10	1.45	−0.62	2.81	4.8	4	13	7	11
1926	32.6	− 1.3	75	−12	2.18	+0.11	2.00	2.4	6	11	5	15
1927	29.9	− 4.0	74	−11	2.68	+0.61	5.65	2.9	6	15	5	11
1928	36.2	+ 2.3	81	0	2.24	+0.17	3.10	1.4	5	14	6	11
1929	35.2	+ 1.3	76	− 9	1.66	−0.41	1.75	3.7	6	13	5	13
1930	34.2	+ 0.3	70	2	1.23	−0.84	1.62	1.9	5	15	6	10
1931	42.7	+ 8.8	80	11	2.57	+0.50	4.00	1.7	8	11	6	14
1932	31.2	− 2.7	77	−21	4.46	+2.39	4.82	5.7	7	12	6	13

Climatological Data for December, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	51	30.2	− 0.4	66	1†	−13	16	34	4.00	+2.35	1.70	10.0	8	19	4	8	nw.	O. K. Benecke
Clifton Hill	Randolph	781	33	26.2	− 4.8	64	1	−18	16	36	4.13	+2.50	1.60	9.0	8	13	6	12	.....	Dr. A. J. Bradsher
Columbia	Boone	784	42	31.4	− 1.8	67	1	− 5	16	36	4.81	+2.95	2.62	6.7	7	10	6	15	sw.	U. S. Weather Bureau
Downing	Schuyler	876	11	27.3	− 2.3	62	1	−15	16	31	2.57	+1.07	1.27	5.0	7	12	9	10	s.	James Taylor
Elsberry	Lincoln	449	1	31.4	.....	68	6	−11	16	38	3.68	.....	1.75	4.7	9	5	11	15	s.	Ray E. Mills
Fayette	Howard	661	52	28.4	− 2.7	68	5	−14	16†	44	4.44	+2.76	1.84	7.0	6	..	..	..	.....	J. D Settle
Fulton	Callaway	818	44	30.6	− 2.9	68	5	− 8	17	41	3.95	+1.92	1.80	6.0	7	19	2	10	s.	Clyde C. Herring
Gorin	Scotland	700	45	....	.....	..	..	..	..	..	3.05	+1.39	1.13	5.2	7	12	3	16	sw.	J. W. Pulliam
Hannibal	Marion	534	49	29.4	− 2.1	65	5	−12	16	32	4.70	+3.16	2.67	9.5	9	11	7	13	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	42	31.6	− 1.3	70	6	− 4	12†	39	3.37	+1.43	1.45	3.5	4	8	15	8	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	43	26.8	− 2.8	64	1	−15	16	33	2.92	+1.31	1.45	4.5	7	13	4	14	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	38	28.6	− 3.2	67	6	−18	16	40	4.06	+2.30	1.50	5.0	6	17	7	7	s.	Stark Bros. Nurseries
Macon	Macon	875	33	27.0	− 3.1	66	1	−15	16†	38	3.80	+2.26	1.60	8.5	7	12	10	9	w.	W. C. Brown
Mexico	Audrain	800	43	28.4	− 3.4	67	2	−11	16	41	4.73	+2.73	1.80	8.0	7	20	0	11	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	10	....	.....	..	..	..	..	..	5.14	+3.47	2.52	7.0	6	9	10	12	s.	J. S. Conway
St. Charles	St. Charles	456	44	33.2	− 1.7	70	6	− 2	16	32	2.30	+0.42	1.00	4.0	8	8	9	14	s.	L. C. Saeger
St. Louis	St. Louis City	568	60	34.2	− 0.7	69	6	0	16	32	2.37	+0.16	0.89	3.9	11	9	8	14	s.	U. S. Weather Bureau
St. Louis University	St. Louis City	578	20	34.4	+ 0.1	69	6	0	16	31	1.88	−0.60	0.83	7.7	9	10	4	17	se.	St. Louis University
Shelbina	Shelby	779	39	....	.....	..	..	..	..	..	5.03	+3.40	2.15	10.5	8	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	34	27.6	− 3.0	65	1	−18	16	35	4.45	+2.82	2.10	10.0	8	15	3	13	s.	Frank Hall
Unionville	Putnam	1,062	39	27.2	− 0.4	65	2†	−16	16	32	2.70	+1.08	1.70	6.0	7	15	3	13	nw.	Geo. W. Davis
Warrenton	Warren	816	50	32.8	+ 0.4	70	6	− 6	16	33	3.60	+1.46	1.80	5.5	9	9	10	12	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	60	28.1	− 1.5	64	1	− 9	16	29	4.00	+2.55	1.46	6.6	9	12	7	12	sw.	U. S. Weather Bureau
Section means and	extremes	.....	..	29.7	− 2.0	70	6	−18	16	44	3.73	+1.95	2.67	6.7	8	12	7	12	s.	
Southeast Lowlands																				
Campbell	Dunklin	314	6	35.4	.....	69	6	4	18	41	5.46	.....	2.60	4.0	7	13	5	13	n.	Jeff. King
Caruthersville	Pemiscot	265	36	39.2	− 1.7	67	7†	10	16‡	45	7.56	+3.28	2.75	2.2	8	14	0	17	n.	Sam Smith
Doniphan	Ripley	344	28	35.8	− 2.0	72	6	1	18	46	8.19	+4.62	3.43	2.0	9	15	0	16	s.	W. W. Martin
Jackson	Cape Girardeau	428	41	33.8	− 2.8	68	6	− 3	17	39	8.34	+5.12	3.15	5.0	10	5	6	20	n.	John G. Putz
Marble Hill	Bollinger	470	37	34.8	−1.9	69	6	1	18	42	8.18	+4.67	3.10	4.0	7	7	9	15	n.	R. A. DeWitt
Morehouse	New Madrid	289	21	....	.....	..	..	..	..	..	7.87	+4.10	4.82	1.2	10	13	3	15	n.	John A. Spence
Poplar Bluff	Butler	339	27	36.6	− 1.2	77	6	4	18	45	9.87	+5.93	3.18	5.0	11	12	4	15	nw.	J. H. Wolpers
Sikeston	Scott	318	25	36.7*	− 1.0	69	6	..	..	..	7.50	+3.65	2.80	1.5	7	12	1	18	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	58	37.2	− 0.6	69	6	5	16	39	6.88	+3.48	4.50	2.0	14	6	7	18	s.	U. S. Weather Bureau
Section means and	extremes	....	..	36.2	− 1.6	77	6	− 3	17	46	7.76	+4.36	4.82	3.0	9	11	4	16	n.	
Ozark Plateau																				
Arcadia	Iron	926	51	32.4	− 1.9	68	6	2	16‡	35	5.68	+2.71	2.22	6.5	10	10	10	11	s.	Arcadia College
Aurora	Lawrence	1,370	31	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	W. T. Troughton
Birchtree (near)	Shannon	1,000	37	36.0	− 0.4	70	6	3	18	41	5.50	+2.75	2.10	4.0	7	16	1	14	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	1	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	B. H. Darby
Caplinger Mills	Cedar	750	6	....	.....	..	..	..	..	..	4.22	.....	1.82	4.0	5	12	8	11	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	28	34.3	− 3.2	70	6	− 5	17	41	7.30	+5.03	3.25	6.0	5	11	11	9	ne.	H. E. Dean
Eldon	Miller	931	37	30.2	− 4.1	68	1†	− 4	13	37	4.35	+2.27	2.01	4.0	6	11	16	4	sw.	E. H. Shepherd
Farmington	St. Francois	918	21	34.3	− 2.4	70	6	0	16	36	5.00	+2.24	1.70	3.9	8	11	10	10	sw.	Robert Forsyth
Goodland	Iron	1,000	39	34.2	− 0.6	71	6	2	16	45	4.51	+1.96	1.62	6.0	7	12	7	12	n.	F. M. Adams
Greenville	Wayne	381	23	35.0	− 1.2	77	2	− 5	18	44	8.29	+5.26	2.63	7.0	8	12	6	13	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	7	....	.....	..	..	..	..	..	8.29	+6.36	4.68	7.0	5	8	9	14	c.	A. W. Madison
Koshkonong	Oregon	958	31	36.4[b]	− 2.0	71	6	6	16	39	6.64	+3.23	2.43	5.0	10	10[b]	3[b]	16[b]	nw.	Geo. R. Hitt
Lebanon	Laclede	1,265	44	30.5[b]	− 4.3	70	6	− 6	12	35	7.60	+5.12	4.00	8.0	7	19	1	11	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	26	35.0	− 1.1	68	6	− 2	12	28	6.05	+3.99	2.47	5.0	8	16	3	12	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	31	33.2	− 1.5	71	6	1	16	43	4.16	+1.68	1.79	4.1	11	9	8	14	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	45	35.4	− 1.7	68	1†	− 8	17	43	7.58	+5.09	4.50	6.0	8	12	12	7	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	32	33.8	− 0.8	70	6	0	12	28	3.27	+1.11	1.45	4.0	8	..	..	..	sw.	F. H. Lane
Salem	Dent	1,173	28	33.8	− 1.6	71	6	1	16	35	3.04	+0.66	1.42	4.0	6	9	6	16	s.	E. E. Martin
Seligman	Barry	1,542	31	34.8	− 2.5	70	6	0	12	31	6.59	+4.09	2.84	7.2	7	13	7	11	w.	Floyd E. Fawver
Springfield	Greene	1,324	54	34.2	− 2.0	69	6	0	12	38	4.83	+2.52	3.30	8.8	9	11	7	13	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	..	33.0	.....	68	1†	−12	16	40	5.89	.....	2.40	5.4	6	15	2	14	sw.	I. M. Wilson
Section means and	extremes	.....	..	33.9	− 2.0	77	2	−12	16	45	5.73	+3.30	4.68	5.6	7	12	7	12	sw.	
Southwest Plain																				
Appleton City	St. Clair	853	37	32.2	− 2.4	68	5	− 7	12	31	4.12	+2.46	1.90	5.5	7	11	10	10	sw.	W. G. Bigelow
Clinton	Henry	765	39	31.2	− 3.5	65	2†	− 5	16†	31	5.15	+3.28	2.75	4.2	6	10	10	11	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	54	28.5	− 2.8	69	3†	−10	16†	39	2.72	+1.03	1.17	6.5	4	8	6	17	s.	John H. Patterson
Lamar	Barton	980	44	32.8	− 2.4	69	6	− 4	12	37	5.09	+3.11	2.40	6.0	5	17	2	12	sw.	Jesse A. Mann
Lamonte	Pettis	867	31	31.0	− 2.9	68	5	−11	12	35	4.23	+2.48	1.65	5.9	7	14	1	16	sw.	J. E. Wheeler
Marshall	Saline	779	45	31.2	− 0.7	67	5	− 9	16	31	4.88	+3.20	2.25	10.0	5	16	4	11	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	39	33.2	− 2.1	68	5	− 6	12	31	4.66	+2.83	3.03	3.0	4	14	6	11	s.	George A. Kaupp
Warrensburg	Johnson	878	45	30.8	− 2.6	67	3†	−13	16	34	3.28	+1.52	1.52	7.0	7	12	7	12	sw	E. A. Markey
Warsaw	Benton	687	31	33.8	− 1.9	69	2†	− 7	12	39	5.86	+3.58	2.50	5.5	7	16	4	11	s.	Everett Martin
Section means and	extremes	.....	..	31.6	− 2.4	69	2†	−13	16	39	4.44	+2.61	3.03	6.0	6	13	6	12	sw.	
Northwest Plateau																				
Bethany	Harrison	916	37	25.8	− 4.3	62	5	−21	16	32	1.95	+0.70	1.14	6.0	6	15	6	10	s	A. S. Cumming
Chillicothe	Livingston	779	23	25.6	− 7.3	67	1	−20	16	42	2.52	+1.06	1.06	7.5	7	16	6	9	se.	Wm. J. Olenhouse
Conception	Nodaway	980	43	25.5	− 3.7	62	5	−17	16	35	1.72	+0.78	0.68	4.0	6	13	8	10	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	12	25.4	− 5.0	65	5	−20	16	34	1.72	+0.51	0.63	4.2	8	15	1	15	n.	Fred L. Stiff
Grant City	Worth	1,134	28	25.1	− 2.9	63	2	−19	16	37	1.64	+0.57	0.80	3.7	6	8	11	12	sw.	Howard Rybolt
Kansas City	Jackson	963	43	30.0	− 2.5	68	1	− 5	16	35	2.41	+1.08	1.05	6.4	8	13	7	11	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	40	25.5	− 3.7	65	5	−11	16	33	1.73	+0.47	0.60	5.5	6	11	7	13	sw.	Roscoe L. Terry
King City	Gentry	1,095	6	....	.....	..	..	..	..	..	1.57	+0.50	0.85	5.7	6	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	47	28.8	− 3.2	69	4	− 9	16	40	2.82	+1.04	1.04	10.0	6	18	8	5	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	42	26.4	− 0.4	64	2	−16	12	32	1.67	+0.67	0.58	5.0	7	16	3	12	s	J. R. Brink
Oregon	Holt	1,048	76	28.2	− 0.5	65	5	−11	12	33	1.01	−0.36	0.31	4.0	7	16	6	9	sw.	Mina Wright
St. Joseph	Buchanan	967	24	27.5	− 3.2	66	5	− 9	16	33	1.41	+0.30	0.66	5.3	8	12	9	10	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	29	23.4	− 3.0	62	5	−15	16	32	1.22	+0.34	0.51	4.5	6	10	7	14	se.	Albert Volker
Trenton	Grundy	822	36	26.7	− 2.9	64	1†	−17	16	34	2.03	+0.61	1.01	6.2	8	12	8	11	s.	W. H. Estes
Section means and	extremes	.....	..	26.5	− 3.3	69	4	−21	16	42	1.82	+0.59	1.14	5.6	7	13	7	11	sw.	
State means and	extremes	.....	..	31.2	− 2.7	77	2†	−21	16	46	4.46	+2.39	4.82	5.7	7	12	6	13	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. * Partially estimated.

Daily Precipitation for December, 1932

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi				.28		.03			.06	.30	.34												1.60	1.15								3.76
Boonville	Missouri				.06					T.	.50	.10												2.59	1.50	.34						T.	5.09
Bowling Green	Mississippi				.55						.41	.40												1.21	1.06								3.63
Brunswick	Grand				.04			.02	T.	.02	.52	.15												1.70	1.20	.35							4.00
Canton	Mississippi			.55							.28	.36												1.06	.96	.32							3.53
Clifton Hill	Chariton			.23	.01		T.	T.	T.	T.	**	.50											.40	1.60	1.36				.03				4.13
Columbia***	Missouri			.37			T.	T.	T.	.35	T.	.23											1.30	1.90	.65						.01		4.81
Downing	Mississippi			.13			.18		.05		.15	.24												.55	1.27								2.57
Edina	do				.24		.10	.26	T.	.08	.27	.30												.93	1.05	.11							3.34
Elsberry	do			.22	.07		.53				.25	.02												1.75	.60						.14	.10	3.68
Farber	do				.36						.30	.24												1.20	.62	.76							3.48
Fayette	Missouri				.35						.35	.30												1.84	1.30	.30							4.44
Fulton	do			.43						T.	.28	.24												1.80	.95	.19					.06		3.95
Gorin	Mississippi			.41			.32		.03	.11	.24												.81	T.	1.13							3.05
Hannibal***	do			.57			.03		.02	.08	.38	.32											2.13	.72	.45					T.		4.70
Hermann	Missouri				.64			.03		T.	.34	.05	T.											.84	1.28	.04						.23	3.45
Jefferson City	do										.50													1.30	1.45							.12	3.37
Kahoka	Mississippi				.42			.30		.07	.12	.32												.93	.88	.18							3.22
Kirksville	do			.26			.11		.10			.35											.10	.55	1.45								2.92
LaBelle	do				.50		.23			**	**	.65												1.50	.95								3.83
Linneus	Grand			.10			.06	T.	.07	.35	.25												.51	T.	1.11				T.			2.46
Louisiana	Mississippi			.70						.24		.17											**	**	2.95							4.06
Lucerne	Grand				.10			.04	T.	.05	.20	.15												.39	.60	.31							1.84
Macon	Chariton				.18		.09				.41	.36												1.60	1.06	.10							3.80
Memphis	Mississippi					T.		.30	T.	T.	.28	.35												.66	.60	.46							2.65
Mexico	do				.52		T.	.10			.40	.40												1.80	1.28	.23							4.73
Milan	Grand				.24					.02	.28	.19												.43	.80	.22							2.18
Monroe City	Mississippi			.63			.17			.36		.32											**	2.52	1.14								5.14
New London	do				.31			.11		.03	.34	.37	T.						.07					1.70	.77	.04							3.74
Pacific	Meramec						.12	.18			.30	.11												.08	.80	.02					.05	.90	2.56
Palmyra	Mississippi				.57		T.	.07	.03	.40	.35													1.43	1.30	.10							4.25
Paris	do			.55							.25	.30												2.40	1.06	.14							4.70
Perry	do				.47						.36	.40												2.12	.87								4.22
Philadelphia	do				.52		.05		T.	.38		.34												1.52	1.16	.20							4.17
St. Charles	Missouri			.17			.02	.04			.30													.25	1.00						.47	.05	2.30
St. Louis***	Mississippi			.12		.02	.45		T.	.16	.19	.01					.02	T.			T.	T.	.01	.31	.19						.89		2.37
St. Louis University*	do			.03			.13	.07			.35	.21					.02				T.	T.		.10	.14						.83		1.88
Shelbina	do			.16		.45	.02				.55	.30												2.15	1.22	.18							5.03
Steffenville	do			.40			.15		.05	.05	.20	.20											T.	2.10	1.30								4.45
Troy	do				.29		.02	.10			.13	.13	.26											.85	1.21	.02						.14	3.15
Union	Meramec				.14		.03	.11			.30	.12												.14	.87	.02						.69	2.42
Unionville	Chariton			.20			.30		.10		.30	.10												.60	1.10								2.70
Valley Park	Meramec				.17		.04	.33			.35	T.						T.				T.		.21	.48	T.					T.	1.00	2.58
Warrenton	Mississippi			.25	.10		.05	T.		T.	.30	.05											T.	1.80	.90						.12	.03	3.60
West Ely	do			.26		T.	T.		.02	.40	.43	T.											2.21	.77	.08						T.		4.17
Winfield	do				.90					.35														.90	1.12							.21	3.48
Keokuk, Ia.***	do			.64			.38	T	.07	.05	.08	.40					T.						.97	.50	.91								4.00
Southeast Lowlands																																	
Bragg City	St. Francis																																
Campbell	do			.09							.48			.47								.04		.83	.95						2.60		5.46
Cape Girardeau	Mississippi							.75			.34			.01	.14	T.		.01						.05	2.68						1.65	2 33	7.96
Caruthersville	do				.10			.08			.10							.12					.50		1.26						2.65	2.75	7.56
Dexter	St. Francis							1.03			.70							.16							1.79						3.84	1.33	8.85
Doniphan	Black			.25				.74		.25		T.						.24				T.	.06	1.72	1.35						3.43	.15	8.19
Fisk	St. Francis				.11			.39			.61		T.	T.	.04			.19				.05	.05	.26	2.04						2.57	2.66	8.97
Jackson	Mississippi			.23				.76			.47				.22			.05				.05	.03	1.55	1.83						3.15	T.	8.34
Marble Hill	do			.20				.72			.48													3.10	.92						2.30	.46	8.18
Morehouse	do			.02				.35			.68	T.			.08			.04				T.	.02	.76	.83						4.82	.27	7.87
New Madrid	do				.05			.09			.91	.02	.02	.01	T.	T.		.20					.08	.08	1.37	.03					1.90	2.87	7.58
Parma	St. Francis							.40			.75							.02							1.42						2.35	2.80	7.74
Poplar Bluff	Black				.40			.56			.61		.10		.05			.28					.05	.47	2.74						3.18	1.43	9.87
Sikeston	Mississippi						.50			.30								.15				.10	1.65						2.00	2.80		7.50
Cairo, Ill.***	do			.03			T.	.16		.55	T.	.05		.07	.10	T.	.08	.02				T.	.01	T.	.72	.53					.19	4.36	.01	6.88
Ozark Plateau																																	
Arcadia	St. Francis			.23		T.	.58			T.	.36	.04	T.		.40									.04	2.22	.02					.58	1.21	5.68
Aurora	Neosho																																
Birchtree (near)	Black			.09				.48			.47				.19									.95	1.22						2.10		5.50
Buffalo	Osage																																
Caplinger Mills	do			.02						.40													.70	1.82	1.28							4.22
Chaonia	St. Francis				.35			.53			.10				.30			.20				.13	.02	.10	3.37	.01					1.63	1.93	8.67
Dean	Neosho			T.		T.	T.			.36	T.				.22									3.25	3.12					.35			7.30
Eldon	Missouri				.38						.03	.11												2.01	1.66	.16							4.35
Farmington	St. Francis			.23				.72			.38	.13	T.											.38	1.22						1.70	.24	5.00
Fredericktown	do				.28			.52			.28		.04		.22			.17						.08	1.94	.06						.72	1.12	5.43
Galena	White										.72					.32								.41	1.93						.12	.10	3.60
Goodland	Black			.16				.27			.30		.45											.11	1.60						1.62		4.51
Greenville	St. Francis							.61			.15	T			.35			.82					.23	1.83	2.17						2.63		8.29
Hailey	White									.66		.33												1.82	4.68						.80		8.29
Koshkonong	Black			.07			T.	.20			.27	.19			.20			.20					.05	1.71	1.32						2.43		6.64
Lakeside	Osage				.32						.35	.05												1.67	1.94	.08							.49	4.90
Lebanon	do			.22			T.				.38	.40											.24	1.81	4.00						.55		7.60
Leeper	Black				.32			.41			.37				.34			.12					T.	.10	3.13						1.05	1.22	7.06
Lockwood	Osage			.03						.20	.40	.50											.20	2.47	2.05						.20		6.05
Mountain Grove	White			.16		.01		.02			.53	.07			.15							T.	T.	.34	1.79	.03					.31	.75	4.16
Neosho	Neosho							T.	T	.05	.36				.25								.08	**	6.48	.02					.34		7.58
Owensville	Gasconade										.39	.46													.91	.57						.54	2.87
Ozark Beach	White						.14				.44				.30									.38	1.38						.27	.57	3.48
Rolla	Meramec				.26		T.	.12			.44	.09												.32	1.45						.08	.51	3.27
St. Thomas (near)	Osage				.24						.20													1.39	2.03							.75	4.61
Salem	Meramec			.06		T.					.50	T.						T.					.04	.15	1.42						.87	T.	3.04
Seligman	Neosho			T.		T.				.25	.75	T.			.40							.35	.04	1.96	2.84								6.59
Springfield***	White			.08		T.	T.	T.		.53	.03	.12			.20	T.				T.		T.	.12	2.86	.54						.35		4.83
Steelville	Meramec				.12		.09	.20			.41	.07												.25	1.25	T.					.10	.77	3.26
Stover	Missouri										.29	.22												2.02	2.46								4.99
Versailles	Osage			.36						T.	.32	.23											.24	2.40	2.34						T.		5.89
Williamsville	Black				.13			.56			.34		.08	.02	.20			.16					.02	.09	3.56						1.50	1.46	8.12
Willow Sprgs. (near)	White				.09			.19			.47				.31			.07						.09	2.42	.03					1.01	.94	5.62

Continued on next page

Daily Precipitation for December, 1932—Continued from preceding page

Stations	Drainage-basins	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage			.04	T.					.06	.35	.17											.27	1.90	1.33								4.12
Clinton	do			.06						.02	.35												.42	2.75	1.55								5.15
Concordia	Missouri			.15							.81													1.32	1.28								3.56
Harrisonville	Osage									T.	.36	.24												1.17	.95								2.72
Joplin	Neosho									.23	.05			.81									.98	3.61	.45						.04		5.67
Lamar	do			T.							.28	.36												2.00	2.40	.05							5.09
Lamonte	Missouri			.10						.50	.06	.17											.85	.90	1.65								4.23
Marshall	do			.33			T.			T.	.60	.40											T.	2.25	1.30								4.88
Nevada	Osage										.20	.10												3.03	1.33								4.66
Osceola	do				.09						.45	.20												2.52	2.22	.09							5.57
Warrensburg	Missouri			.23			T.			.05	.45	.20											.18	1.52	.65								3.28
Warsaw	Osage			.16						.05	.38	.12											.46	2.50	2.19								5.86
Waverly	Misouri										.10	.26												1.37	1.16								2.89
Northwest Plateau																																	
Bethany	Grand								.05		.10	.45											.21	.44	.70								1.95
Chillicothe	do			T.	.11		T.	.11	T.	.07	.34	.16												.67	1.06								2.52
Conception	Missouri			T.					.10		.20	.10											.27	.37	.68								1.72
Edgerton	do			T.			.02		.06	.01	.25	.05											.20	.63	.50				T.				1.72
Gallatin	Grand				.06				.10	T.	.40	.10												.49	.71								1.86
Grant City	do			T.	T.			.03	T.		.15	.19											.03	.44	.80								1.64
Kansas City***	Missouri			.01			.02		T.	.30	.16	.12											.88	.30	.62								2.41
Kidder	Grand				.19		T		.05		.35	.10												.60	.44								1.73
King City	Missouri			T.					.07		.16	.21											.10	.18	.85								1.57
Lexington	do			.04								.41	.32											.98	1.04	.03							2.82
Maryville	do			.02					.10		.10	.30											.04	.58	.53								1.67
Oregon	do			.03					.06		.15	.12											.31	.30	.04								1.01
St. Joseph***	do			.01			T.		.03	.15	.13	.11			T.		T.						.31	.07	.60								1.41
Tarkio	do								.10		.04	.12											.25	.20	.51								1.22
Trenton	Grand			.07			.02		.07		.27	.18											.07	.39	1.01								2.03

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for December, 1932

(See precipitation data in table on preceding page)

Station	Data	Day of month																															Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.066	.117	.067	.120	.092	.092	.114																						.032	.073		
	Mean temperature	48	51	56	48	52	54	41	18	15	18	20	10	17	27	8	8	18	22	24	34	40	37	44	54	44	38	37	38	43	34	28	33.1
	Wind movement	53	90	76	138	71	105	152	93	70	85	66	129	100	106	88	101	60	64	46	64	124	43	58	75	143	54	49	39	51	47	172	2,612

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

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or 2.1 inches more than normal. The greatest monthly total was 10.5 inches at Shelbina.

MISCELLANEOUS PHENOMENA

Auroras.—None.

Fogs, dense.—18th, 19th, 21st, 22d, 23d, 24th, 28th, 30th.

Hail.—Light at Clifton Hill and Versailles on 3d; no damage.

Halos, solar.—1st, 12th, 15th, 22d, 29th, 30th.

Halos, lunar.—4th, 12th.

Sleet.—6th, 7th, 9th, 10th, 11th, 30th.

Thunderstorms.—3d, 6th, 7th, 9th, 22d, 23d, 24th.

Winds.—No damaging winds reported.

ERRATA

Report for November, 1932, page 51 Comparative Data table, highest temperature should be 75 instead of 83.

Daily Temperatures for December, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	66	61	64	61	66	63	42	17	15	18	24	19	25	31	20	7	25	32	35	39	46	44	43	53	54	48	49	40	54	47	41	40.3
	Minimum	42	50	50	31	37	34	14	12	9	10	15	− 8	2	12	− 5	−13	− 9	− 2	15	19	31	24	35	38	32	23	25	25	28	32	15	20.1
Columbia	Maximum	67	66	61	54	66	64	28	20	15	18	24	12	24	31	14	9	28	33	37	41	47	42	51	60	49	46	51	51	57	45	30	40.0
	Minimum	44	48	44	39	43	28	17	13	9	12	6	− 3	8	14	0	− 5	0	3	29	24	28	29	42	47	31	24	28	28	35	27	16	22.8
Fayette	Maximum	67	63	60	56	68	62	27	20	15	20	25	9	25	34	11	11	30	32	37	42	48	43	56	56	44	48	51	46	58	37	33	39.8
	Minimum	32	37	47	36	37	40	15	12	9	9	11	− 8	4	6	− 7	−14	−14	− 7	− 7	20	22	19	21	39	34	21	20	22	26	29	14	16.9
Hannibal	Maximum	64	63	60	49	65	64	32	15	12	18	24	12	24	27	11	7	24	30	33	36	45	41	48	60	48	43	49	40	55	45	26	37.7
	Minimum	47	51	45	37	40	32	15	10	7	10	12	− 3	4	11	− 8	−12	− 5	− 2	22	26	28	22	39	44	35	25	26	26	26	26	15	21.0
Jefferson City §§	Maximum	69	69	61	45	68	70	31	22	17	21	26	16	29	34	12	11	32	40	38	42	52	53	60	57	49	45	52	54	58	43	56	43.0
	Minimum	34	41	41	38	41	43	29	13	10	10	13	− 4	− 4	10	1	− 4	− 2	2	10	19	21	27	27	46	16	23	24	25	28	30	17	20.2
Kirksville	Maximum	64	59	54	52	61	56	43	17	11	16	21	18	20	26	20	9	20	26	32	35	43	40	38	52	46	46	46	37	50	40	33	36.5
	Minimum	29	37	49	30	36	31	10	7	1	6	11	−11	− 3	12	− 8	−15	− 7	5	10	9	29	24	33	35	32	23	28	27	24	30	10	17.2
Louisiana	Maximum	63	63	59	58	64	67	41	22	15	25	22	12	22	29	10	7	30	30	32	31	42	39	50	42	42	46	48	44	55	40	44	38.5
	Minimum	28	49	40	34	40	40	20	12	9	11	10	− 2	− 3	10	− 3	−18	−10	−10	10	22	25	17	34	36	20	20	22	26	36	17	18.8
Macon §§	Maximum	66	60	57	42	65	48	22	16	14	21	23	8	22	29	6	6	23	30	32	38	44	41	54	54	40	46	48	36	36	35	39	35.5
	Minimum	41	50	50	33	38	40	12	10	6	7	11	− 4	− 6	6	− 6	−15	−15	− 6	12	19	27	22	26	36	33	24	28	27	24	32	12	18.5
Mexico §§	Maximum	65	67	57	52	65	64	26	19	14	20	26	13	23	31	10	10	27	34	37	40	45	49	58	58	43	44	49	47	55	39	28	39.2
	Minimum	33	39	47	35	36	40	16	11	8	8	10	− 5	− 5	9	− 5	−11	− 9	− 4	− 4	19	19	22	29	38	35	20	20	23	25	31	13	17.5
St. Louis	Maximum	65	63	62	51	63	69	37	24	20	24	30	16	26	35	24	10	27	34	37	40	49	47	58	60	51	41	49	53	54	46	32	41.8
	Minimum	40	47	51	40	41	37	16	14	12	15	16	5	14	19	4	0	9	13	27	25	40	28	47	40	36	33	27	35	34	32	19	26.6
Unionville	Maximum	64	65	58	55	65	54	35	12	10	12	20	15	22	25	22	12	18	28	32	36	45	48	45	45	45	47	46	40	50	46	35	37.2
	Minimum	40	44	44	30	33	30	7	5	0	5	10	− 9	− 4	16	−10	−16	−12	5	6	20	28	25	33	35	30	24	26	25	24	27	8	17.1
Warrenton	Maximum	63	65	60	55	66	70	41	22	19	19	29	25	27	31	27	8	30	39	34	36	50	43	54	60	53	43	52	54	55	51	35	42.5
	Minimum	38	48	50	37	40	41	20	11	9	11	18	− 2	7	13	− 2	− 6	2	6	21	21	28	27	35	46	39	25	24	29	31	34	15	23.1
Southeast Lowlands																																	
Campbell	Maximum	65	64	57	60	64	69	66	53	36	26	33	25	26	38	30	17	30	37	30	32	40	51	59	60	61	47	49	55	55	48	43	46.0
	Minimum	24	43	33	30	29	53	27	17	16	20	20	15	17	19	14	6	6	4	13	22	29	33	38	51	41	26	26	21	20	39	19	24.9
Caruthersville	Maximum	56	59	59	58	58	60	67	67	40	34	42	35	38	38	34	35	28	28	35	30	35	42	47	62	66	65	62	48	54	57	59	48.3
	Minimum	37	44	44	39	37	53	38	22	20	25	27	20	24	25	24	10	10	12	12	25	27	32	41	46	47	34	35	24	31	41	29	30.2
Doniphan	Maximum	68	69	60	60	68	72	67	34	27	28	32	32	30	38	33	19	34	42	34	32	42	43	57	52	50	46	41	45	48	44	41	44.8
	Minimum	22	47	47	38	28	57	32	18	16	20	21	14	20	20	17	8	8	1	15	25	31	35	40	47	40	22	21	22	36	40	24	26.8
Jackson	Maximum	61	66	64	59	62	68	65	39	31	29	33	33	29	41	37	25	29	37	36	31	39	45	57	64	59	52	45	52	51	50	42	46.2
	Minimum	24	39	42	36	30	47	26	13	12	15	19	7	11	15	7	− 1	− 3	− 2	12	19	24	29	39	39	40	22	19	18	13	35	17	21.4
Poplar Bluff	Maximum	68	67	65	59	67	77	65	36	27	29	32	32	36	42	35	25	35	41	31	35	41	42	58	63	61	46	56	51	46	46	42	47.0
	Minimum	23	44	43	33	35	57	27	17	16	20	24	15	18	20	19	7	8	4	15	24	33	34	41	50	33	19	23	20	25	41	24	26.2
Sikeston	Maximum	63	65	65	63	65	69	68	41	31	29	33	32	28	40	39	20	30	40	40	36	38	41	58	60	61	60	48	57	54	51	42	47.3
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....
Cairo, Ill	Maximum	64	67	63	57	64	69	65	29	27	27	31	30	22	34	25	11	26	36	33	36	41	51	62	62	62	42	49	54	55	47	34	44.4
	Minimum	41	47	49	41	41	55	26	19	19	24	26	16	19	22	10	5	10	15	19	25	36	38	51	54	38	32	33	27	32	34	23	29.9
Ozark Plateau																																	
Arcadia §§	Maximum	65	64	60	56	62	68	37	29	20	25	30	19	30	41	16	12	34	38	36	36	43	54	62	57	54	45	53	53	53	42	29	42.7
	Minimum	30	32	45	40	35	38	28	15	14	14	15	7	7	10	13	2	2	6	6	24	24	25	29	50	45	23	19	18	21	27	19	22.0
Aurora	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	....
Birchtree	Maximum	61	67	58	54	66	70	67	30	28	25	31	30	30	44	33	21	33	39	35	33	42	42	57	63	53	54	53	54	54	46	39	45.5
	Minimum	28	40	45	50	48	57	26	15	14	16	21	9	16	21	13	6	8	3	12	21	30	32	42	52	41	26	20	23	24	38	21	26.4
Eldon §§	Maximum	68	68	52	56	64	67	21	14	12	20	23	10	24	24	9	9	12	39	39	42	56	50	60	56	39	48	52	56	59	41	21	39.1
	Minimum	40	38	48	38	38	44	21	13	11	11	11	− 3	− 4	10	3	− 3	− 2	2	8	22	24	29	28	46	39	25	25	25	26	26	19	21.2
Farmington	Maximum	64	65	60	54	59	70	62	28	21	23	31	28	30	38	31	9	33	41	38	34	47	42	56	57	55	42	50	56	57	46	37	44.0
	Minimum	36	42	48	37	36	54	26	14	13	11	20	5	9	14	8	0	6	7	21	24	28	25	39	54	42	26	19	22	23	37	17	24.6
Koshkonong	Maximum	66	..	66	58	66	71	67	32	26	30	31	32	28	40	34	15	32	41	34	32	..	48	59	62	54	45	53	55	55	47	40	[b]45.5
	Minimum	36	..	43	37	38	57	28	16	15	17	22	10	18	22	14	6	10	15	22	25	..	31	39	51	43	29	27	31	31	39	22	[b]27.4
Lebanon	Maximum	68	65	57	59	60	70	39	25	21	23	27	23	26	25	31	11	35	36	..	..	..	..	..	..	..	48	48	50	53	48	39	[g]41.1
	Minimum	39	45	48	32	40	35	12	9	8	9	14	− 6	8	− 3	− 3	6	..	18	..	..	..	..	..	..	..	22	24	26	31	29	14	[h]19.9
Mountain Grove §§	Maximum	63	64	58	57	65	71	65	31	21	28	29	17	27	39	15	13	32	38	34	37	50	51	61	51	47	43	51	52	52	40	31	43.0
	Minimum	40	44	47	34	35	52	22	13	12	12	14	2	2	15	10	1	2	6	18	21	24	29	35	50	41	23	23	24	30	31	17	28.5
Neosho	Maximum	68	66	64	61	65	68	40	26	42	28	28	20	29	38	35	33	35	41	40	46	54	56	55	58	52	46	47	55	58	52	41	46.7
	Minimum	43	53	49	29	32	40	19	18	16	19	18	2	11	11	8	5	− 8	3	20	18	39	27	48	39	36	22	22	25	32	34	20	24.2
Rolla	Maximum	64	63	66	56	65	70	45	26	21	22	28	25	24	34	29	10	29	38	35	34	48	45	58	62	52	41	42	54	56	50	33	42.7
	Minimum	42	47	51	37	40	44	22	13	13	13	18	0	11	13	6	1	2	10	29	23	29	27	43	51	37	25	22	26	28	32	17	24.9
Springfield	Maximum	65	65	64	55	65	69	31	26	20	27	27	16	26	34	23	15	29	35	34	41	52	47	61	62	51	42	49	51	53	44	30	42.2
	Minimum	44	51	45	34	42	31	19	15	14	13	8	0	12	18	6	3	8	16	27	23	39	35	47	47	35	29	29	34	36	29	19	26.1
Southwest Plain																																	
Appleton City	Maximum	66	67	61	58	68	63	37	24	19	18	21	16	20	35	26	11	29	35	38	43	52	47	46	49	48	47	50	53	57	50	37	41.6
	Minimum	38	51	54	31	40	37	14	14	11	12	15	− 7	2	9	2	− 5	− 2	4	28	20	33	30	41	41	32	25	26	26	33	33	18	22.8
Clinton	Maximum	60	65	65	58	65	52	38	21	18	17	21	16	21	35	25	10	24	33	37	42	47	47	45	48	48	48	40	50	54	48	28	39.5
	Minimum	45	52	52	42	38	32	15	13	10	10	16	9	1	11	− 1	− 5	− 5	2	28	20	33	28	42	42	33	23	25	25	30	28	18	23.0
Harrisonville §§	Maximum	67	63	69	57	69	57	27	20	13	16	21	12	26	34	12	10	29	30	37	40	50	44	46	49	42	49	51	50	57	41	34	39.4
	Minimum	31	43	52	31	33	39	10	9	7	7	9	− 9	− 7	5	− 4	−10	−10	− 2	8	20	22	28	28	35	31	23	24	24	24	30	15	17.6
Lamar §§	Maximum	67	66	67	59	68	69	30	23	19	25	24	13	28	37	15	14	30	39	40	45	54	53	56	51	48	47	50	55	58	40	35	42.7
	Minimum	37	46	55	34	34	44	17	16	11	13	16	− 4	− 1	13	11	3	1	2	13	22	24	29	37	45	34	24	24	27	28	35	20	22.9
Lamonte	Maximum	66	63	64	55	68	63	34	18	17	18	22	16	24	30	15	10	28	36	39	45	49	42	45	52	47	48	50	50	56	47	34	40.4
	Minimum	43	53	47	34	39	33	14	13	9	10	15	−11	2	11	− 5	0	− 6	1	26	23	28	27	38	39	32	23	27	25	34	32	17	21.7
Marshall	Maximum	65	61	63	64	67	61	38	24	16	20	25	19	24	30	26	8	25	33	35	41	48	42	46	51	51	50	50	47	57	52	37	41.2
	Minimum	46	52	52	45	37	35	14	18	9	10	9	− 8	4	11	− 3	− 9	− 1	2	19	21	21	20	30	40	27	29	29	26	29	33	16	21.2
Nevada	Maximum	67	66	67	58	68	66	35	22	19	20	21	12	25	34	30	13	29	35	39	45	50	50	50	50	47	49	54	57	47	45	42.6
	Minimum	41	52	54	33	40	35	14	15	13	11	12	− 6	7	15	5	− 3	− 1	10	29	22	33	31	42	42	33	24	29	25	34	32	19	23.9
Warrensburg	Maximum	66	62	67	63	67	61	35	22	15	16	22	16	22	30	24	10	26	32	35	41	49	45	45	49	48	47	49	51	56	51	38	40.6
	Minimum	43	46	51	48	33	34	12	12	8	8	8	− 9	3	11	− 1	−13	− 1	3	24	22	30	24	35	35	31	25	26	24	29	30	16	20.9
Warsaw	Maximum	67	69	69	60	68	66	36	26	21	21	23	20	27	36	27	17	31	40	42	45	54	48	52	59	53	49	52	56	59	52	38	44.6
	Minimum	42	53	53	37	42	35	15	13	11	11	17	− 7	5	12	0	− 5	− 5	1	28	20	36	23	44	45	35	20	23	25	31	33	17	22.9
Northwest Plateau																																	
Chillicothe §§	Maximum	67	62	62	56	66	36	28	15	12	16	21	13	21	33	9	13	24	30	35	41	48	42	43	47	44	50	49	31	53	39	34	36.6
	Minimum	28	45	47	32	32	34	9	9	3	5	8	−11	− 9	4	− 6	−20	−18	− 6	− 5	7	21	22	24	34	31	22	24	25	24	27	12	14.6
Grant City	Maximum	57	63	59	51	56	51	32	14	8	14	19	9	24	29	21	8	20	24	30	32	46	40	40	42	43	45	45	37	41	37	32	34.5
	Minimum	39	26	42	32	32	28	6	6	1	6	6	9	−17	− 3	11	− 9	−19	− 7	− 2	0	22	19	27	32	35	31	23	26	27	25	28	12	15.7
Kansas City	Maximum	68	64	65	55	67	58	24	15	11	15	19	11	25	31	14	13	26	30	35	38	48	40	41	50	44	48	48	40	54	39	32	37.7
	Minimum	46	54	44	35	44	23	11	7	6	9	2	− 4	6	14	− 1	− 5	7	11	19	25	29	35	35	36	33	33	34	27	32	24	18	22.2
Kidder §§	Maximum	62	63	63	53	65	35	19	13	10	15	20	10	23	29	6	8	19	29	36	35	45	40	39	47	42	48	46	32	50	37	31	34.5
	Minimum	34	45	45	32	33	34	8	9	6	6	9	−10	−10	5	− 8	−11	−10	− 1	6	10	21	21	27	34	31	25	27	26	25	29	14	16.5
Lexington §§	Maximum	67	67	56	69	50	41	18	14	20	22	12	26	36	16	14	26	30	36	42	52	39	44	51	47	50	52	36	58	41	35	47	39.2
	Minimum	37	37	37	30	37	41	12	10	8	9	12	− 5	0	9	0	− 9	− 7	5	6	12	25	28	31	35	32	27	28	25	27	18	16	18.5
Maryville	Maximum	57	64	60	55	62	53	29	13	8	14	17	13	28	32	24	14	25	25	36	34	49	43	43	43	49	45	37	40	35	34		36.3
	Minimum	39	33	41	28	31	29	6	8	1	7	9	−16	− 1	12	− 8	−13	− 1	3	4	23	18	24	33	34	30	21	26	25	25	29	13	16.5
Oregon	Maximum	60	63	61	53	65	57	26	16	11	15	14	10	29	36	21	16	26	33	38	35	50	47	42	47	46	48	46	37	43	37	35	37.5
	Minimum	46	39	45	31	38	24	6	7	2	7	7	−11	2	14	− 5	− 9	2	8	9	24	22	31	33	34	32	26	28	24	28	28	14	18.9
St. Joseph	Maximum	62	61	62	56	66	53	20	14	9	15	17	11	26	33	9	13	24	28	35	36	47	42	42	46	44	48	43	36	47	37	33	36.0
	Minimum	47	45	42	32	41	20	8	6	5	7	1	− 8	4	9	− 3	− 9	1	5	9	25	23	31	35	35	30	26	29	26	29	23	16	19.0
Trenton	Maximum	64	59	60	51	64	54	32	14	10	14	20	12	22	29	16	9	21	30	32	36	45	42	40	47	45	48	45	34	50	36	30	35.8
	Minimum	38	44	46	34	35	32	10	8	4	4	8	−11	− 1	15	− 6	−17	−10	− 4	2	20	25	24	34	37	38	22	26	28	24	28	18	17.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 1-23-33—915.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

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VOL. XXXVI ST. LOUIS, MO., YEAR, 1932 No. 13

GENERAL SUMMARY

Outstanding features of the weather of the year were: (1) the extreme mildness of January and February, especially February; (2) the severe cold of March; (3) the persistent above-normal—though not extreme—temperatures of April, May, June, July, and August; (4) the persistent subnormal temperatures of September, October, November, and December, especially the severe cold spells of November and December; (5) the deficient precipitation of February, March, April, and May; (6) the marked excesses of precipitation in August and December.

The average temperature for the year was slightly above normal and the average precipitation slightly deficient.

The winter of 1931-32 was the mildest in the last 44 years in Missouri, considering the State as a whole.

The summer of 1932 averaged unusually warm, but it had but few days of extremely high temperature, and, on the whole, was probably considered by most people a rather moderate summer.

Irregular distribution of rainfall during the summer caused considerable contrast in crop conditions; notably, the abundant rainfall in north-central counties produced a fine corn crop, while the scant rainfall of the southwestern and south-central counties was largely responsible for the comparatively poor corn crop in those sections. Peaches were practically all killed and apples heavily damaged by the severe March freeze. The weather of the year was fairly good for crops in general.

There was no very destructive storm during the year, but several storms causing local damage to property occurred. (For accounts of these, see "Climatological Data" for the respective months).

TEMPERATURE

The annual mean temperature for the State, was 55.6°, or 0.8° above the normal. The highest annual mean was 61.4°, at Caruthersville, and the lowest was 50.8° at Tarkio. The highest temperature recorded was 109°, at Doniphan, on July 22d, and at Warsaw on July 16th; the lowest was 21° below zero at Bethany, on December 16th. The greatest daily range was 56° at Fayette, on April 1st.

PRECIPITATION

The average precipitation for the State was 37.78 inches, or 1.69 inches less than normal. The greatest annual amount was 60.29 inches at New Madrid, and the least was 25.49 inches at Edgerton. The greatest local monthly amount was 14.12 inches at Joplin, in June; and the least local monthly amount was 0.23 inch at Eldon, in February. The greatest precipitation in any twenty-four hours was 6.23 inches at Springfield, on June 26-27th. The average number of days with .01 inch or more of precipitation was 86.

The snowfall averaged 16.1 inches, for the State, or 2.3 inches less than normal. The greatest annual amount was 35.2 inches at Brunswick and the least annual amount was 2.0 inches at Dexter. The greatest monthly snowfall was 12.5 inches at Edina, in March.

CONDENSED STATE SUMMARY FOR 1932

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	36.4	+ 5.9	73	− 7	3.32	+1.28	9.92	0.29	9
February	42.4	+10.0	83	− 3	1.41	−0.70	5.25	0.23	6
March	38.3	− 5.6	81	− 2	1.89	−1.13	4.84	0.30	7
April	57.6	+ 2.5	95	22	2.57	−1.24	5.79	1.12	8
May	66.1	+ 1.7	98	31	1.91	−2.76	5.58	0.32	6
June	75.2	+ 2.0	103	47	4.95	+0.08	14.12	1.57	10
July	79.8	+ 2.5	109	48	3.67	−0.33	8.07	0.52	7
August	77.2	+ 1.2	106	46	5.98	+2.23	13.96	0.61	9
September	67.8	− 1.2	99	33	2.36	−1.48	11.06	0.24	6
October	55.7	− 1.7	90	22	3.45	+0.56	7.32	0.99	5
November	39.5	− 4.9	75	− 9	1.82	−0.58	3.93	0.59	5
December	31.2	− 2.7	77	−21	4.46	+2.39	9.87	1.01	7
Year	55.6	+ 0.8	109	−21	37.78	−1.69	14.12	0.23	86

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature Deg. Fahr.			Precipitation inches		Average number of days				Prevailing wind direction
	Mean	Highest	Lowest	Average	Average snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
1888	52.9	111	−32	41.22	....	86	....	....	....	.....
1889	54.3	107	− 9	37.91	....	88	....	....	....	.....
1890	54.7	106	−19	35.71	....	81	....	....	....	.....
1891	53.9	108	−11	38.04	....	88	....	....	....	.....
1892	52.8	101	−11	42.76	....	91	141	95	130	se.
1893	53.1	107	−20	38.19	13.2	84	155	117	93	s.
1894	55.1	111	−35	33.18	15.4	70	170	120	75	s.
1895	53.2	106	−26	39.30	23.7	85	161	108	96	s.
1896	55.5	108	−10	44.63	12.6	86	154	111	101	se.
1897	55.0	108	−16	38.82	19.5	76	167	104	94	s.
1898	54.4	104	−20	53.67	18.6	100	162	102	101	s.
1899	54.0	108	−32	37.32	28.8	88	166	110	89	s.
1900	53.6	105	−16	38.34	18.5	90	171	106	88	se.
1901	55.5	116	−29	25.28	19.2	72	190	98	77	s.
1902	54.1	103	−17	44.96	17.0	103	159	103	103	s.
1903	53.6	102	−25	40.15	16.0	96	170	96	99	se.
1904	53.2	100	−23	41.62	18.8	85	180	99	87	s.
1905	53.6	103	−40	45.43	22.3	92	176	90	99	sw.
1906	55.0	101	−13	37.34	27.5	105	163	91	111	s.
1907	55.4	109	−15	41.81	12.0	95	175	81	109	s.
1908	56.7	102	−10	42.56	9.7	91	184	92	90	s.
1909	55.6	110	−20	45.16	18.4	92	173	90	102	s.
1910	54.6	109	−24	36.86	16.6	81	188	78	99	s.
1911	56.7	113	−19	38.94	15.3	87	169	86	110	s.
1912	53.5	105	−36	38.68	37.7	82	195	78	93	s.
1913	56.5	110	−12	37.47	25.0	87	172	78	115	s.
1914	56.1	109	−18	34.72	29.0	86	166	85	114	s.
1915	55.0	102	−24	49.62	25.5	100	157	88	120	s.
1916	55.3	109	−29	40.33	19.0	89	191	75	100	s.
1917	52.6	107	−23	31.94	13.7	80	182	93	90	sw.
1918	55.4	111	−25	37.16	27.9	82	182	86	97	s.
1919	55.3	106	−23	40.05	10.7	84	177	88	100	s.
1920	54.3	105	−10	37.17	15.4	90	171	86	109	s.
1921	58.2	109	− 8	43.77	11.5	93	173	92	100	s.
1922	56.8	108	− 6	39.99	8.5	85	188	82	95	s.
1923	55.3	108	−11	41.23	8.6	98	165	90	110	s.
1924	53.0	106	−28	40.01	29.4	94	170	94	102	sw.
1925	55.5	110	−14	39.78	16.4	86	170	94	101	s.
1926	54.5	108	−20	43.07	22.9	96	161	87	117	sw.
1927	55.6	102	−24	53.86	12.7	97	163	91	111	sw.
1928	55.2	102	−18	45.59	7.0	91	173	96	97	sw.
1929	53.5	105	−23	46.61	22.3	102	154	95	116	s.
1930	55.9	114	−31	31.27	17.2	76	194	83	88	sw.
1931	58.0	110	− 5	40.36	14.8	96	175	83	107	s.
1932	55.6	109	−21	37.78	16.1	86	177	93	96	sw
.....	....	....	....	.....	....	...	...	...	...	.....
Normals and extremes	54.8	116	−40	39.47	18.4	89	171	93	101	s.

THE WEATHER BY MONTHS

JANUARY.—Following an extremely mild December, January was the warmest January since 1923, but only slightly warmer than January, 1931. Only a few days had temperatures below

(Continued on page 65)

Climatological Data for Year, 1932

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain.																				
Brunswick	Chariton	652	52	55.4	103	July 22	−13	Dec. 6	54	32.31	4.00	Dec.	1.29	Sept.	35.2	99	220	21	125	nw.
Clifton Hill	Randolph	731	34	53.2	101	July 16	−18	Dec. 16	24	28.24	4.27	Aug.	0.95	Feb.	31.7	108	189	74	103	.....
Columbia	Boone	784	43	55.3	100	July 22	− 5	Dec. 16	43	34.37	6.44	Aug.	1.01	Feb.	17.6	98	134	107	125	sw.
Downing	Schuyler	876	12	52.4	98	July 15†	−15	Dec. 16	24	36.00	7.54	Aug.	0.83	Feb.	20.1	102	185[a]	103[a]	77[a]	e.
Elsberry	Lincoln	449	2	54.7	101	July 15	−11	Dec. 16	2	31.83	5.32	Aug.	1.09	Mar.	15.7	79	108	87	171	s.
Fayette	Howard	661	53	54.2	101	July 16†	−14	Dec. 16†	50	26.77	4.44	Dec.	0.85	Mar.	21.3	80	..	..	..	.....
Fulton	Callaway	818	45	54.2	99	July 23	− 8	Dec. 17	41	32.08	5.55	June	0.98	Nov.	15.6	88	214	74	78	sw.
Gorin	Scotland	700	..	....	..	.....	....	.....	46	43.06	9.20	Aug.	1.10	Sept.	17.5	81	147	81	138	sw.
Hannibal	Marion	534	41	54.3	100	July 15	−12	Dec. 16	49	38.51	10.15	Aug.	1.08	Nov.	22.8	101	135	109	122	sw.
Jefferson City	Cole.	557	43	56.0	102	July 23	− 4	Dec. 12†	51	31.09	5.81	Aug.	0.98	Feb.	10.0	92	119	142	105	s.
Kirksville	Adair.	969	44	52.5	99	July 19	−15	Dec. 16	51	44.94	13.96	Aug.	0.64	Feb.	16.5	74	203	49	114	sw.
Louisiana	Pike	469	39	54.4	100	July 15	−18	Dec. 16	52	40.22	9.79	Aug.	1.03	Feb.	12.7	64	230	72	64	s.
Macon	Macon	875	34	53.1	100	July 15†	−15	Dec. 16†	40	35.13	6.58	June	0.77	Feb.	21.8	84	197	80	89	w.
Mexico	Audrain	800	44	53.5	102	July 14	−11	Dec. 16	55	33.55	5.92	Aug.	1.06	Nov.	21.2	88	250	4	112	w.
Monroe City	Monroe	748	..	....	..	.....	....	.....	7	41.35	11.96	Aug.	0.88	Feb.	17.8	69	165	87	114	ne.
St. Charles	St. Charles	456	45	56.7	105	July 15	− 2	Dec. 16	55	31.58	7.64	Aug.	0.60	Feb.	10.0	91	144	118	104	s.
St. Louis	St. Louis City	568	59	57.4	101	July 15	0	Dec. 16	96	38.01	8.68	Aug.	1.33	Mar.	9.6	109	158	112	96	s.
St. Louis University	St. Louis City	578	21	57.1	100	July 15†	0	Dec. 16	22	32.12	9.21	Aug.	1.11	Mar.	15.1	106	193	92	81	w.
Shelbina	Shelby	779	..	....	..	.....	....	.....	40	36.41	6.59	Aug.	0.80	Feb.	27.1	94	..	..	..	.....
Steffenville	Lewis	650	35	53.0	100	July 16	−18	Dec. 16	40	47.38	12.13	Aug.	1.17	Feb.	32.5	90	178	111	77	s.
Unionville	Putnam	1,062	40	52.1	102	July 15†	−16	Dec. 16	40	37.86	10.60	Aug.	1.12	Sept.	27.0	86	212	43	111	sw.
Warrenton	Warren	816	51	56.2	102	July 18†	− 6	Dec. 16	43	29.54	5.77	Aug.	0.97	Feb.	18.7	88	119	164	83	sw.
Keokuk, Iowa	Lee, Iowa	614	61	52.8	97	July 20	− 9	Dec. 16	61	36.66	8.93	Aug.	0.98	Feb.	18.5	99	127	107	132	sw.
Division means	and extremes	.....	..	54.4	105	July 15	−18	Dec. 16	..	35.61	13.96	Aug.	0.60	Feb.	19.8	90	173	87	106	sw.
Southeast Lowlands.																				
Campbell	Dunklin	314	7	59.0	106	July 19†	4	Dec. 18	7	48.69	9.37	Jan.	0.62	May	4.5	94	185	77	104	s.
Caruthersville	Pemiscot	265	37	61.4	104	July 15†	10	Dec. 16†	41	51.96	9.14	Jan.	1.57	June	3.2	79	204[a]	42[a]	119[a]	s.
Doniphan	Ripley	344	29	59.9	109	July 22	1	Dec. 18	29	46.13	8.19	Dec.	0.80	May	3.6	77	224	56	86	s.
Jackson	Cape Girardeau.	428	42	56.5	105	Aug. 2	− 3	Dec. 17	43	51.86	9.90	Aug.	0.54	July	15.5	88	94	89	183	s.
Marble Hill	Bollinger	470	38	58.6	107	July 15	1	Dec. 18	40	44.87	8.18	Dec.	0.52	July	6.0	72	137	129	100	w.
Morehouse	New Madrid	289	..	....	..	.....	....	.....	22	51.11	8.85	Jan.	0.81	May	2.7	95	201	74	91	sw.
Poplar Bluff	Butler	339	28	58.9	103	July 16	1	Dec. 18	29	52.33	9.87	Dec.	0.85	May	5.8	93	225	69	72	w.
Sikeston	Scott	318	26	59.7	100	July 15†	....	.....	36	51.68	11.06	Sept.	1.07	May	5.5	85	163	65	138	n.
Cairo, Ill.	Alexander, Ill.	356	61	59.4	98	July 15	5	Dec. 16	61	46.33	7.02	Jan.	0.50	May	6.5	113	89	115	162	s.
Division means	and extremes	.....	..	59.2	109	July 22	− 3	Dec. 17	..	49.44	11.06	Sept.	0.50	May	5.9	88	169	80	117	s.
Ozark Plateau.																				
Arcadia	Iron	926	52	54.4	100	July 14	2	Dec. 16†	55	38.12	7.23	Aug.	0.62	Feb.	8.9	85	213	51	102	w.
Aurora	Lawrence	1,370	32	58.4	97	July 17	....	....	45	42.72	9.04	June	0.62	Feb.	7.9	80	..	..	..	sw.
Birchtree(near)	Shannon	1,000	38	58.1	100	July 21	3	Dec. 18	39	38.79	6.49	Oct.	1.14	May	9.0	74	239	53	74	s.
Caplinger Mills	Cedar	750	..	....	..	.....	....	.....	6	32.51	9.20	June	0.50	Feb.	10.0	66	131	164	71	s.
Dean	McDonald	1,000	29	57.2	101	July 17	− 5	Dec. 17	34	45.06	7.67	June	0.46	May	8.5	66	200	97	69	sw.
Eldon	Miller	934	38	55.0	101	July 18	− 4	Dec. 13	34	30.18	5.49	Aug.	0.23	Feb.	11.4	77	121[b]	162[b]	81[b]	sw.
Farmington	St. Francis	918	22	56.8	104	July 14†	0	Dec. 16	36	33.59	5.69	Oct.	0.98	Feb.	8.7	101	163	135	68	sw.
Goodland	Iron	1,000	40	56.2	101	July 17†	2	Dec. 16	40	35.62	7.44	Aug.	0.95	Feb.	9.0	89	202	77	87	s.
Greenville	Wayne	381	9	57.0	103	July 15†	− 5	Dec. 18	26	44.99	8.29	Dec.	0.45	May	9.0	60	241	56	69	sw.
Hailey	Barry	1,350	..	....	..	.....	....	.....	8	48.44	8.29	Dec.	1.18	Aug.	10.5	68	177	75	114	.....
Koshkonong	Oregon	958	32	59.7	101	July 18†	6	Dec. 16	33	35.42	6.64	Dec.	0.95	Aug.	6.0	76	163[g]	74[g]	122[g]	sw.
Lebanon	Laclede	1,265	45	55.1	99	Aug. 10	− 6	Dec. 12	46	46.80	7.60	Dec.	0.33	Sept.	13.5	74	225	46	95	e.
Lockwood	Dade	1,078	27	57.6	97	July 16†	− 2	Dec. 12	37	43.03	8.89	June	0.80	Feb.	11.5	84	215	87	64	sw.
Mountain Grove(near)	Wright	1,463	32	56.8	97	July 16†	1	Dec. 16	36	40.73	8.19	June	0.75	Sept.	6.8	108	171[a]	118[a]	76[a]	se.
Neosho	Newton	1,011	46	57.8	99	July 17†	− 8	Dec. 17	50	38.42	7.58	Dec.	1.18	Aug.	11.5	81	178	131	57	sw.
Rolla	Phelps	1,099	33	57.0	97	Aug. 6	0	Dec. 12	49	31.73	4.68	Oct.	0.80	May	9.1	96	53	158	155	s.
Salem	Dent	1,173	29	56.7	100	July 22	1	Dec. 16	32	33.55	5.45	Oct.	1.13	Feb.	6.0	83	162	119	85	s.
Seligman	Barry	1,542	32	57.7	96	July 16†	0	Dec. 12	30	39.33	6.59	Dec.	0.50	May	12.7	76	209[a]	78[a]	78[a]	s.
Seymour(near)	Webster	1,642	27	56.0	94	July 15†	....	.....	27	44.20	8.24	June	0.24	Sept.	15.1	75	..	..	..	s.
Springfield	Greene	1,324	45	56.9	95	July 16	0	Dec. 12	45	43.80	10.08	June	0.54	Feb.	18.0	97	197	100	69	s.
Division means	and extremes	.....	..	56.9	104	July 14†	− 8	Dec. 17	..	39.35	10.08	June	0.23	Feb.	10.2	81	181	99	86	s.
Southwest Plain.																				
Appleton City	St. Clair	853	38	56.4	100	July 15	− 7	Dec. 12	41	27.05	4.12	Dec.	0.61	Sept.	9.8	85	109	207	50	sw.
Clinton	Henry	765	40	56.2	101	July 19	− 5	Dec. 16†	46	34.30	5.15	Dec.	0.65	Sept.	17.7	87	142	157	67	sw.
Harrisonville	Cass	904	55	54.1	100	July 15	−10	Dec. 16†	58	30.95	6.42	Aug.	0.62	Feb.	20.2	85	101	88	177	s.
Lamar	Barton	980	45	56.9	101	July 17†	− 4	Dec. 12	52	34.83	7.46	June	0.90	Aug.	11.0	74	220	67	79	sw.
Lamonte	Pettis	867	32	55.3	..	.....	−11	Dec. 12	47	39.55	10.22	Aug.	0.88	Feb.	22.1	87	207	70	89	se.
Marshall	Saline	779	46	55.6	99	July 22	− 9	Dec. 16	43	33.22	4.96	July	0.84	Feb.	26.8	62	220	87	59	sw.
Nevada	Vernon	862	40	57.1	99	July 16	− 6	Dec. 12	41	32.77	5.69	June	0.72	Feb.	8.0	65	194	75	97	s.
Warrensburg	Johnson	878	46	55.4	100	July 16†	−13	Dec. 16	53	36.54	8.50	Aug.	0.30	Mar.	17.4	75	210[a]	76[a]	79[a]	sw.
Warsaw	Benton	687	32	57.7	109	July 16	− 7	Dec. 12	38	34.11	5.86	Dec.	0.82	Feb.	11.7	92	195	67	104	s.
Division means	and extremes	.....	..	56.1	109	July 16	−13	Dec. 16	..	33.70	10.22	Aug.	0.30	Mar.	16.1	79	178	99	89	sw.
Northwest Plateau.																				
Bethany	Harrison	916	38	51.8	99	July 22	−21	Dec. 16	40	32.81	5.64	Aug.	0.74	Feb.	29.3	80	200	93	73	nw.
Chillicothe	Livingston	779	24	52.5	105	July 16	−20	Dec. 16	27	35.83	5.95	Aug.	1.07	Feb.	26.6	92	184	102	80	sw.
Conception	Nodaway	980	44	51.9	99	July 15	−17	Dec. 16	49	39.89	9.37	Aug.	0.88	Mar.	25.5	83	147	129	90	nw.
Edgerton	Platte	856	13	52.2	99	July 15	−20	Dec. 16	22	25.49	4.72	Aug.	0.29	Jan.	17.6	87	224[e]	40[e]	97[e]	s.
Grant City	Worth	1,134	29	51.0	100	July 15	−19	Dec. 16	41	31.68	6.89	Aug.	0.71	Mar.	24.6	82	..	..	..	sw.
Kansas City	Jackson	963	44	55.7	98	July 15	− 5	Dec. 16	44	27.07	4.90	Aug.	0.63	Feb.	22.5	104	157	120	89	sw.
Kidder	Caldwell	1,020	41	52.0	99	July 22	−11	Dec. 16	45	30.54	5.71	Aug.	0.87	Nov.	24.0	91	175	88	103	se.
King City	Gentry	1,095	..	....	..	.....	....	.....	7	30.22	6.25	June	0.86	Feb.	32.0	77	..	..	..	.....
Lexington	Lafayette	688	48	56.0	103	July 16	− 9	Dec. 16	49	30.42	4.41	June	1.40	Feb.	30.2	98	205	111	50	sw.
Maryville	Nodaway	1,169	43	51.8	100	July 15†	−16	Dec. 12	39	34.35	6.29	June	0.93	Mar.	32.0	92	149	124	93	s.
Oregon	Holt	1,048	77	54.3	102	July 16	−11	Dec. 12	77	29.80	5.19	June	0.60	Jan.	20.5	88	205	96	65	sw.
St. Joseph	Buchanan	967	25	53.5	98	July 16	− 9	Dec. 16	61	29.40	6.09	June	0.59	Nov.	22.1	98	179	93	94	se.
Tarkio	Atchison	916	30	50.8	98	July 15	−15	Dec. 16	39	29.64	6.35	Aug.	0.61	Mar.	24.5	72	170	82	114	se.
Trenton	Grundy	822	37	53.1	100	July 15†	−17	Dec. 16	38	37.87	8.21	Aug.	0.72	Feb.	21.7	87	178	119	69	s.
Division means	and extremes	.....	..	52.8	105	July 16	−21	Dec. 16	..	31.79	9.37	Aug.	0.29	Jan.	25.2	88	181	100	85	sw.
State means	and extremes	.....	..	55.6	109	July 16†	−21	Dec. 16	..	37.78	13.96	Aug.	0.23	Feb.	16.1	86	177	93	96	sw.

† Also on other dates.

[a], [b], [c], indicate the number of days missing from records, a, 1; b, 2; c, 3; etc

Monthly and Annual Mean Temperatures for the Year 1932, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	33.3	+ 6.6	39.6	+ 9.8	35.4	− 6.5	58.8	+ 4.6	67.6	+ 3.4	76.7	+ 3.7	81.2	+ 5.1	78.2	+ 4.0	68.5	+ 1.5	56.4	+ 1.1	38.8	− 2.8	30.2	− 0.4	55.4	+ 2.5
Clifton Hill	34.8	+ 6.7	40.3	+10.1	35.8	− 6.4	55.4	+ 1.9	64.2	+ 0.6	75.2*	+ 2.8	78.2	+ 1.8	74.8	− 1.2	65.8	− 2.8	53.1	− 3.6	34.8	− 8.6	26.2	− 4.8	53.2	− 0.3
Columbia	36.2	+ 7.0	42.6	+10.8	37.0	− 5.6	57.4	+ 2.5	66.3	+ 2.0	75.1	+ 2.3	79.1	+ 2.2	77.0	+ 1.4	67.1	− 1.1	55.2	− 1.4	39.1	− 4.2	31.4	− 1.8	55.3	+ 1.2
Downing	31.2	+ 5.8	36.6	+ 4.3	33.0	− 8.6	54.0	+ 0.8	65.4	+ 2.7	73.7	+ 2.3	77.9	+ 1.5	73.9[a]	− 1.0	65.6	− 2.0	53.8	− 2.1	36.8	− 4.8	27.3	− 2.8	52.4	− 0.3
Elsberry	38.0	.....	41.4	.....	38.0	.....	56.2	.....	65.6	.....	75.2	.....	77.8	.....	74.5	.....	65.0	.....	56.4	.....	36.8	.....	31.4	.....	54.7	.....
Fayette	35.6	+ 8.6	41.1	+10.5	36.8	− 5.1	56.0	+ 1.8	64.9	+ 1.1	75.3	+ 2.5	79.1	+ 1.9	77.0	+ 1.1	66.8	− 1.3	54.0	− 2.4	36.0	− 6.2	28.4	− 2.7	54.2	+ 0.8
Fulton	34.8	+ 5.3	39.9	+ 6.8	37.0	− 7.1	56.4	+ 1.8	64.4	− 0.2	75.0	+ 1.8	79.4	+ 1.7	75.3	− 1.1	66.2	− 2.7	54.4	− 3.0	36.9	− 7.3	30.6	− 2.9	54.2	− 0.6
Hannibal	35.5	+ 8.4	40.9	+11.2	35.4	− 5.6	55.8	+ 2.4	66.4	+ 1.8	75.0	+ 2.5	79.0	+ 2.2	75.4	+ 0.4	66.5	− 1.2	54.7	− 1.3	38.0	− 4.1	29.4	− 2.1	54.3	+ 1.2
Jefferson City	36.7	+ 6.9	42.0	+ 9.9	37.2	− 6.4	57.9	+ 1.9	66.6	+ 1.9	75.5	+ 1.7	80.8	+ 2.7	78.1	+ 1.4	69.0	− 0.3	57.3	+ 0.5	39.4	− 4.7	31.6	− 1.3	56.0	+ 1.2
Kirksville	31.7	+ 6.9	37.6	+10.5	33.5	− 6.2	53.8	+ 1.9	65.2	+ 2.9	73.0	+ 1.3	77.8	+ 1.8	74.9	+ 0.9	64.8	− 1.5	53.9	− 0.8	36.6	− 4.0	26.8	− 2.8	52.5	+ 0.9
Louisiana	36.6	+ 8.5	41.0	+10.1	37.1	− 6.4	57.2	+ 3.2	65.9	+ 2.2	73.5	+ 1.4	78.4	+ 2.0	76.2	+ 1.3	65.4	− 2.6	56.2	0.0	36.8	− 7.3	28.6	− 3.2	54.4	+ 0.8
Macon	32.4	+ 4.9	38.4	+ 8.8	34.4	− 7.8	54.4	+ 1.3	65.3	+ 1.8	74.3	+ 1.9	78.9	+ 1.7	75.4	− 0.7	66.0	− 1.9	54.0	− 2.3	36.8	− 6.0	27.0	− 3.1	53.1	− 0.1
Mexico	34.8	+ 6.8	39.8	+ 9.7	35.8	− 6.2	55.0	+ 1.2	65.0	+ 1.0	74.4	+ 1.2	79.0	+ 1.7	76.0	0.0	65.2	− 3.3	53.5	− 2.8	35.6	− 7.3	28.4	− 3.4	53.5	− 0.1
St. Charles	38.6	+ 7.6	43.3	+10.0	39.0	− 5.5	57.6	+ 2.0	67.2	+ 4.1	76.7	+ 2.8	80.8	+ 2.7	76.7	− 0.1	69.2	+ 0.9	58.1	− 0.1	40.3	− 5.0	33.2	− 1.7	56.7	+ 1.5
St. Louis	39.8	+ 8.7	44.6	+ 9.8	38.8	− 5.3	58.0	+ 1.9	68.0	+ 1.0	77.6	+ 2.6	81.6	+ 2.8	77.8	+ 0.3	69.6	− 0.9	57.4	− 1.4	41.0	− 4.4	34.2	− 0.7	57.4	+ 1.2
St. Louis University	39.1	+ 8.9	44.0	+11.8	38.2	− 5.4	58.0	+ 2.8	67.8	+ 1.7	77.2	+ 2.3	81.6	+ 1.5	77.9	+ 0.7	69.4	− 0.8	57.5	− 1.4	40.6	− 5.9	34.4	+ 0.1	57.1	+ 1.4
Steffenville	34.1	+ 6.7	38.4[a]	+ 8.7	34.8	− 7.4	54.4	+ 1.3	65.3	+ 1.5	73.9	+ 1.3	78.0	+ 0.2	74.3	− 2.2	64.8	− 4.2	53.8	− 3.6	36.6	− 6.9	27.6	− 3.0	53.0	− 0.6
Unionville	30.4	+ 6.9	36.0	+ 9.3	32.4	− 6.5	54.6	+ 3.6	64.8	+ 2.7	73.8	+ 2.5	78.6	+ 2.1	73.5	− 1.3	65.0	− 2.1	53.3	− 1.9	36.0	− 4.3	27.2	− 0.4	52.1	+ 0.9
Warrenton	37.4[c]	+ 8.2	43.0	+12.1	38.2	− 4.3	57.8	+ 3.0	66.6	+ 1.7	75.7	+ 2.3	81.0	+ 3.2	77.3	+ 0.8	67.6	− 1.4	57.4	+ 1.4	39.8	− 3.4	32.8	+ 0.4	56.2	+ 2.0
Keokuk, Iowa	32.7	+ 7.8	38.0	+ 9.6	32.9	− 6.0	53.3	+ 1.0	65.3	+ 1.5	74.5	+ 2.0	78.3	+ 1.4	74.4	− 0.6	66.2	− 1.3	53.2	− 2.2	37.0	− 4.1	28.1	− 1.5	52.8	+ 0.6
Division means	35.2	+ 7.2	40.4	+ 9.7	36.0	− 6.2	56.1	+ 2.2	65.9	+ 1.9	75.1	+ 2.1	79.3	+ 2.1	75.8	0.0	66.7	− 1.5	55.2	− 1.4	37.7	− 5.3	29.7	− 2.0	54.4	+ 0.7
Southeast Lowlands																										
Campbell	41.9	.....	47.0	.....	44.5	.....	60.5	.....	67.8	.....	79.0	.....	82.6	.....	77.5	.....	71.0	.....	57.4	.....	42.8	.....	35.4	.....	59.0	.....
Caruthersville	47.4	+ 8.3	50.2	+ 9.9	47.6	− 3.8	62.0	+ 1.8	70.4	+ 0.6	80.2	+ 1.8	84.2	+ 2.9	82.0	+ 1.7	71.8	− 2.7	57.6[a]	− 4.6	44.5	− 5.9	39.2	− 1.7	61.4	+ 0.7
Doniphan	43.4	+ 7.6	48.4	+ 9.1	45.6[c]	− 3.4	63.4	+ 4.9	70.0	+ 3.5	78.8	+ 3.8	83.4	+ 4.8	80.1	+ 2.5	71.4	+ 0.2	56.8	− 1.7	45.0	− 2.3	35.8	− 2.0	59.9	+ 2.2
Jackson	38.0	+ 4.2	42.2	+ 5.7	38.2	− 9.0	60.0	+ 2.9	66.5*	+ 0.9	76.8[c]	+ 2.7	80.0	+ 2.4	77.6	+ 1.5	68.4	− 1.7	56.2	− 1.7	40.8	− 5.8	33.8	− 2.8	56.5	− 0.1
Marble Hill	42.4	+ 7.8	46.6	+10.0	42.4	− 5.2	60.0	+ 2.8	66.8	+ 1.2	77.5	+ 3.5	82.8	+ 5.0	79.3	+ 2.3	69.8	− 0.9	57.8	− 0.4	43.2	− 2.0	34.8	− 1.9	58.6	+ 1.8
Poplar Bluff	42.3	+ 6.3	47.6	+ 9.5	44.0	− 4.6	60.4	+ 0.9	67.0	− 0.5	77.6	+ 2.2	81.6	+ 2.4	78.7	+ 0.7	70.0	− 1.7	57.6	− 2.5	43.8	− 3.9	36.6	− 1.2	58.9	+ 0.6
Sikeston	44.2	+ 7.2	47.8	+10.6	44.4	− 4.2	60.8	+ 2.7	68.6	+ 0.1	79.0	+ 4.7	82.0	+ 3.4	79.3	+ 1.7	70.6	− 0.5	58.4	− 0.9	44.3	− 2.9	36.7	− 1.0	59.7	+ 1.7
Cairo, Ill	44.1	+ 9.2	48.6	+10.1	42.7	− 4.5	60.3	+ 2.2	68.4	0.0	78.2	+ 1.9	81.5	+ 1.9	79.0	+ 1.2	70.2	− 1.3	58.2	− 2.2	43.8	− 3.5	37.2	− 0.6	59.4	+ 1.2
Division means	43.0	+ 7.2	47.3	+ 9.3	43.7	− 5.0	60.3	+ 1.9	68.4	+ 0.8	78.1	+ 2.9	82.3	+ 3.3	79.2	+ 1.7	70.4	− 1.2	57.5	− 2.0	43.5	− 3.8	36.2	− 1.6	59.2	+ 1.2
Ozark Plateau																										
Arcadia	37.8	+ 5.9	41.2	+ 7.1	37.8	− 6.8	56.8	+ 1.5	62.4	− 1.7	72.4	+ 0.6	77.9	+ 2.1	74.6	+ 0.3	66.2	− 1.4	54.1	− 1.9	39.4	− 4.5	32.4	− 1.9	54.4	− 0.1
Aurora	40.4	+ 7.1	47.5	+13.0	42.6	− 3.3	61.5[f]	+ 5.4	65.7	− 0.1	74.4	+ 1.1	81.4	+ 3.7	78.9	+ 2.2	70.2	− 0.3	59.2	+ 0.6	43.8	− 2.0	34.9*	− 0.6	58.4	+ 2.2
Birchtree(near)	42.0	+ 7.5	46.6	+10.3	43.2	− 4.1	60.2	+ 3.1	65.5	+ 0.5	76.2	+ 3.5	80.4	+ 3.8	77.4	+ 1.3	69.3	− 0.5	57.3	− 1.1	43.3	− 3.3	36.0	− 0.4	58.1	+ 1.7
Buffalo	39.2	.....	44.6	.....	40.7	.....	63.0	.....	69.4	.....	73.0	.....	78.9	.....	78.7	.....	68.6	.....	58.7	.....	40.2*	.....	32.4*	.....	57.3	.....
Dean	40.0	+ 4.1	46.0	+10.3	43.2	− 5.6	58.6	+ 1.9	66.0	+ 0.3	74.8	+ 2.1	78.6	+ 1.3	78.2	+ 0.5	69.6	− 1.4	55.5	− 3.2	41.0	− 8.3	34.3	− 3.2	57.2	− 0.1
Eldon	37.0	+ 5.9	42.2	+ 9.1	37.0[e]	− 6.6	56.6	+ 1.2	65.3	+ 1.1	75.5	+ 2.5	78.7	+ 1.5	78.0[b]	+ 1.6	66.2	− 3.2	54.8	− 2.6	38.8[b]	− 6.0	30.2	− 4.1	55.0	0.0
Farmington	40.4	+ 7.8	44.7	+ 7.8	39.9	− 6.6	57.8	+ 0.9	65.4	+ 1.7	75.9	+ 3.1	81.0	+ 4.7	77.4	+ 2.0	67.7	− 1.9	56.6	− 0.2	41.0	− 3.8	34.3	− 2.4	56.8	+ 1.1
Goodland	41.2	+ 8.6	44.6	+10.3	40.8	− 4.2	57.4	+ 2.4	64.3	+ 0.3	74.3	+ 2.4	78.4	+ 2.8	75.7	+ 1.2	66.9	− 0.9	56.0	+ 0.1	41.2	− 3.5	34.2	− 0.6	56.2	+ 1.6
Greenville	40.8	+ 5.8	45.0	+ 9.2	41.4	− 6.3	57.6	+ 1.0	64.8	− 1.1	76.1	+ 2.5	80.4	+ 3.0	77.6	+ 0.9	68.2	− 2.6	56.0	− 1.6	40.9	− 4.5	35.0	− 1.2	57.0	+ 0.4
Koshkonong	42.6	+ 6.1	49.0	+ 9.9	44.4	− 5.0	62.2	+ 3.7	68.4[a]	+ 1.8	77.8	+ 3.4	82.4	+ 3.6	80.9[a]	+ 3.0	71.1[a]	− 0.3	57.7[b]	− 1.9	43.1[a]	− 5.9	36.4[b]	− 2.0	59.7	+ 1.4
Lebanon	39.4	+ 6.9	44.6	+10.2	39.3	− 5.7	55.9	+ 0.4	64.7	− 0.2	73.1	+ 0.4	77.4	+ 0.5	76.8	+ 0.7	66.4	− 3.0	54.6	− 3.1	38.9	− 6.7	30.5[b]	− 4.3	55.1	− 0.3
Lockwood	39.9	+ 6.6	46.8	+ 9.8	42.2	− 5.1	59.8	+ 3.3	66.8	+ 2.4	74.8	+ 1.2	79.7	+ 2.1	78.9	+ 1.7	68.6	− 2.3	57.1	− 1.6	41.4	− 5.6	35.0	− 1.1	57.6	+ 1.0
Mountain Grove(near)	38.4[e]	+ 5.6	44.4	+ 9.3	41.3	− 4.1	58.9	+ 4.0	65.8	+ 2.0	74.4	+ 2.6	78.9	+ 2.5	77.6	+ 2.1	70.1	− 1.2	56.9	− 0.7	41.6	− 4.3	33.2	− 1.5	56.8	+ 1.4
Neosho	42.0	+ 6.9	47.2	+ 9.6	42.2	− 5.9	60.0	+ 1.7	65.8	− 0.2	75.1	+ 1.3	80.4	+ 2.9	78.3	+ 1.2	70.2	− 0.3	55.4	− 3.8	41.9	− 5.4	35.4	− 1.7	57.8	+ 0.5
Rolla	40.1	+ 8.2	45.3	+ 9.0	40.0	− 5.5	59.6	+ 3.7	66.2	+ 1.7	75.0	+ 2.0	79.6	+ 1.9	78.0	+ 1.8	67.8	+ 0.1	57.4	+ 0.9	41.0	− 4.0	33.8	− 0.8	57.0	+ 1.6
Salem	40.6	+ 8.0	45.8	+10.0	40.4	− 6.0	58.8	+ 2.8	65.5	+ 1.0	75.3	+ 2.9	79.6	+ 2.8	77.2	+ 1.3	66.7	− 2.5	55.8	− 1.8	41.0	− 5.1	33.8	− 1.6	56.7	+ 1.0
Seligman	41.2	+ 6.1	48.5[b]	+11.0	43.8	− 2.8	59.6[a]	+ 3.0	65.9[f]	+ 1.4	73.2	+ 0.8	78.0[b]	+ 1.3	78.0	+ 1.8	69.9[a]	+ 0.3	57.3[a]	− 1.7	42.6	− 4.7	34.8	− 2.5	57.7	+ 1.2
Seymour(near)	40.1	+ 6.1	46.0	+11.0	40.2	− 5.2	57.3	+ 1.6	63.5	− 0.2	72.6	+ 0.9	76.8	+ 1.3	76.1	+ 1.1	67.8	− 1.0	56.0	− 1.4	41.6*	− 4.3	33.7*	− 1.7	56.0	+ 0.7
Springfield	38.8	+ 5.3	46.2	+11.0	40.1	− 5.1	58.9	+ 2.9	65.5	+ 1.0	74.2	+ 1.7	79.0	+ 2.2	78.3	+ 2.6	69.6	+ 0.7	56.9	− 1.3	41.6	− 4.1	34.2	− 2.0	56.9	+ 1.2
Versailles	....	.....	44.3	.....	38.6	.....	58.5	.....	66.4	.....	75.4	.....	80.4	.....	78.0	.....	67.6	.....	57.7	.....	40.6	.....	33.0	.....	.....	.....
Division means	40.2	+ 6.6	45.5	+ 9.9	40.9	− 5.3	59.0	+ 2.4	65.7	+ 0.6	74.7	+ 1.9	79.4	+ 2.4	77.7	+ 1.5	68.4	− 1.2	56.6	− 1.5	41.3	− 4.8	33.9	− 2.0	56.9	+ 0.9
Southwest Plain																										
Appleton City	36.4	+ 5.1	44.4	+10.5	39.2	− 5.9	58.8	+ 2.7	66.0	+ 1.0	75.0	+ 0.6	79.8	+ 1.6	78.5	+ 0.7	69.0	− 1.4	56.9	− 2.0	41.0	− 5.0	32.2	− 2.4	56.4	+ 0.5
Clinton	35.8	+ 4.1	44.0	+10.4	39.0	− 6.0	58.7	+ 2.4	65.8	+ 0.3	75.3	+ 1.5	80.4	+ 2.1	79.4	+ 1.8	68.6	− 2.2	56.8	− 4.7	39.2	− 7.8	31.2	− 3.5	56.2	− 0.1
Harrisonville	32.2	+ 4.9	40.6	+ 9.9	36.2	− 5.1	55.7	+ 1.8	65.4	+ 1.6	74.8	+ 1.7	79.0	+ 1.3	77.6	+ 1	67.8	− 0.7	54.0	− 2.1	37.2	− 5.3	28.5	− 2.8	54.1	+ 0.6
Lamar	37.6	+ 5.5	44.6	+ 9.3	40.4	− 5.6	58.6	+ 2.0	66.8	+ 1.2	75.0	+ 0.8	80.6	+ 2.2	80.2	+ 2.5	70.0	− 0.8	55.7	− 3.2	40.4	− 5.9	32.8	− 2.4	56.9	+ 0.5
Lamonte	35.2	+ 6.3	42.6	+ 9.4	37.0	− 7.0	56.8	+ 1.6	65.4	+ 0.8	74.1	+ 0.1	80.1*	+ 1.0	77.8*	+ 0.7	68.2*	− 2.0	56.6	− 1.4	39.0	− 5.4	31.0	− 2.9	55.3	+ 0.1
Marshall	35.4	+ 7.5	42.6	+11.7	37.7	− 5.3	57.7	+ 2.9	66.2	+ 2.0	75.2	+ 2.0	79.8	+ 2.3	77.5	+ 1.5	68.4[b]	− 0.4	56.4	− 0.2	38.8	− 6.4	31.2	− 0.7	55.6	+ 1.4
Nevada	37.8	+ 5.9	45.6	+11.7	40.6	− 4.3	60.0	+ 4.3	66.2	+ 1.7	74.6	+ 1.1	80.2	+ 0.6	78.8	+ 1.7	68.8	− 0.7	57.6	0.0	41.4	− 3.4	33.2	− 2.1	57.1	+ 1.4
Warrensburg	35.0	+ 6.3	42.2	+ 9.7	37.9	− 6.1	56.6	+ 0.5	66.4	+ 1.4	74.6	+ 0.7	80.0	+ 1.2	78.4[a]	+ 1.3	67.6	− 2.6	56.2	− 1.8	39.2	− 5.8	30.8	− 2.6	55.4	+ 0.2
Warsaw	39.0	+ 6.1	44.3	+ 8.7	41.7[c]	− 5.3	60.1	+ 3.4	67.2	+ 1.7	76.2	+ 2.4	82.1	+ 3.8	79.9	+ 2.3	69.1	− 1.4	58.2	− 0.8	41.3	− 5.9	33.8	− 1.9	57.7	+ 1.1
Division means	36.0	+ 5.7	43.4	+10.1	38.9	− 5.6	58.3	+ 2.5	66.2	+ 1.3	75.0	+ 1.2	79.8	+ 1.4	78.8	+ 1.7	68.4	− 1.6	56.5	− 1.8	39.7	− 5.7	31.6	− 2.4	56.0	+ 0.6
Northwest Plateau																										
Bethany	29.2	+ 4.4	36.4	+ 8.9	33.1	− 7.2	54.3	+ 2.8	63.8	+ 1.3	73.0	+ 1.0	78.0	+ 1.7	75.0	0.0	64.4	− 2.7	52.4	− 2.4	35.8	− 7.0	25.8	− 4.3	51.8	− 0.3
Chillicothe	30.4	+ 3.6	37.6	+ 5.6	33.2	− 7.9	54.8	+ 1.7	65.4	+ 0.2	74.7	+ 1.8	79.1	+ 0.2	75.5	− 0.2	65.8	− 2.8	52.2	− 4.6	35.2	− 6.5	25.6	− 7.3	52.5	− 1.4
Conception	26.0[h]	+ 1.3	35.2	+ 7.0	33.7	− 6.1	55.0	+ 2.8	65.0	+ 2.9	74.0	+ 2.5	78.8	+ 2.2	75.4	+ 0.7	65.6	− 1.6	52.6	− 2.8	36.2	− 5.2	25.5	− 3.7	51.9	0.0
Edgerton	29.6[f]	+ 2.7	36.8[a]	+ 4.5	32.9[b]	−10.3	55.1[b]	+ 1.3	66.8[a]	+ 3.8	73.4	+ 1.5	79.0[a]	+ 2.9	76.3[a]	+ 1.2	64.4	− 3.5	52.0[a]	− 4.3	34.7[a]	− 7.1	25.4	− 5.0	52.2	− 1.0
Grant City	26.8	+ 2.0	34.0	+ 5.4	32.4	− 8.9	53.2	+ 1.0	63.9	+ 1.9	72.4	+ 1.6	77.4	+ 1.2	73.2	− 1.7	65.0*	− 2.0	52.5*	− 2.6	36.2*	− 5.7	25.1	− 2.9	51.0	− 0.9
Kansas City	32.8	+ 4.6	42.0	+10.8	36.4	− 6.3	57.8	+ 3.0	67.0	+ 2.2	76.5	+ 2.9	81.4	+ 3.3	79.2	+ 2.6	69.0	+ 0.1	55.8	− 1.9	40.1	− 3.6	30.0	− 2.5	55.7	+ 1.3
Kidder	28.7	+ 2.7	36.2	+ 7.8	31.8	− 9.0	55.0	+ 2.8	65.0	+ 2.4	73.8	+ 2.0	79.3	+ 2.7	76.3	+ 0.9	65.8	− 1.5	51.6	− 4.2	35.0	− 6.8	25.5	− 3.7	52.0	− 0.3
Lexington	33.2	+ 5.4	41.0	+10.0	36.2	− 7.2	59.2	+ 4.6	67.8	+ 3.4	77.3	+ 4.4	82.8	+ 5.4	80.9	+ 4.7	70.5	+ 1.7	55.2	− 2.3	38.8	− 5.4	28.8	− 3.2	56.0	+ 1.8
Maryville	26.4	+ 3.5	35.0	+ 9.2	33.4	− 4.5	54.7	+ 3.9	64.4	+ 3.1	73.2	+ 3.4	78.2	+ 2.5	75.2	+ 1.4	65.2	− 0.4	52.6	− 0.9	36.6	− 2.8	26.4	− 0.4	51.8	+ 1.5
Oregon	28.8	+ 4.7	38.4	+ 9.6	35.6	− 4.0	57.2	+ 4.5	67.0	+ 3.8	75.0	+ 2.8	80.4	+ 4.8	78.4	+ 3.2	67.8	+ 0.7	54.8	− 0.3	39.5	− 1.0	28.2	− 0.5	54.3	+ 2.4
St. Joseph	29.0	+ 2.1	38.8	+ 6.7	34.6	− 7.9	56.3	+ 2.2	66.0	+ 2.1	74.8	+ 1.0	79.6	+ 0.8	77.6	+ 0.9	66.8	− 2.3	53.4	− 3.4	38.0	− 5.6	27.5	− 3.2	53.5	− 0.6
Tarkio	23.4	+ 0.5	33.8	+ 4.8	33.6	− 6.5	55.0	+ 2.8	64.5	+ 1.9	73.2	+ 1.4	77.9	+ 1.1	74.6	− 0.6	64.1	− 2.2	51.0	− 3.8	35.5	− 4.6	23.4	− 3.0	50.8	− 0.7
Trenton	31.0	+ 4.7	37.7	+ 8.3	34.0	− 7.1	55.4	+ 2.7	65.4	+ 1.9	75.0	+ 2.8	79.6	+ 2.8	76.1	+ 0.9	66.0	− 1.2	53.8	− 2.1	36.8	− 5.4	26.7	− 2.9	53.1	+ 0.4
Division means	28.9	+ 3.2	37.1	+ 7.6	33.9	− 7.2	55.6	+ 2.8	65.5	+ 2.4	74.3	+ 2.2	79.4	+ 2.4	76.4	+ 1.1	66.3	− 1.3	53.1	− 2.8	36.8	− 5.1	26.5	− 3.3	52.8	+ 0.2
State means	36.4	+ 5.9	42.4	+10.0	38.3	− 5.6	57.6	+ 2.5	66.1	+ 1.7	75.2	+ 2.0	79.8	+ 2.5	77.2	+ 1.2	67.8	− 1.2	55.7	− 1.7	39.5	− 4.9	31.2	− 2.7	55.6	+ 0.8

* Partially estimated

Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days, etc.

Monthly and Annual Precipitation for the Year 1932, with Departures

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Bethel	1.41	.....	*1.69	.....	*0.98	.....	2.85	.....	3.49	.....	9.87	.....	3.11	.....	11.57	.....	2.04	.....	3.46	.....	1.89	.....	3.76	.....	46.12	.....
Boonville	1.62	−0.19	1.39	−0.83	0.87	−2.27	1.88	−2.13	1.06	−4.03	3.70	−1.90	3.01	−0.72	5.26	+1.40	2.32	−2.39	2.61	−0.51	0.87	−1.45	5.09	+3.21	29.68	−11.81
Bowling Green	1.64	.....	0.67	.....	1.20	.....	2.56	.....	1.05	.....	4.95	.....	4.82	.....	9.64	.....	1.73	.....	2.43	.....	1.24	.....	3.63	.....	35.56	.....
Brunswick	1.70	+0.12	1.31	−0.48	1.33	−1.18	3.73	+0.18	2.97	−1.76	3.92	−1.57	2.94	−1.41	3.74	−0.10	1.29	−3.20	2.59	−0.33	2.79	+0.75	4.00	+2.35	32.31	−6.63
Canton	1.37	.....	0.98	.....	1.70	.....	1.12	.....	3.13	.....	5.07	.....	2.35	.....	9.24	.....	2.85	.....	3.11	.....	1.43	.....	3.53	.....	35.88	.....
Clifton Hill	1.27	−0.31	0.95	−0.48	0.95	−1.69	2.15	−1.71	2.25	−2.29	3.10	−1.79	3.24	−0.16	4.27	+0.26	1.95	−2.50	1.73	−0.83	2.25	+0.11	4.13	+2.50	28.24	−8.89
Columbia	1.79	−0.13	1.01	−1.08	1.16	−1.78	2.04	−1.73	1.67	−2.79	6.28	+1.52	3.39	−0.10	6.44	+2.84	2.15	−2.20	2.36	−0.25	1.27	−0.93	4.81	+2.95	34.37	−3.68
Downing	1.60	+0.17	0.83	−0.49	1.50	−0.83	3.59	−0.17	3.14	−0.59	3.95	−1.51	4.40	−0.09	7.54	+3.82	1.34	−4.26	3.52	+0.67	2.02	+0.16	2.57	+1.07	36.00	−2.05
Edina	1.65	.....	1.05	.....	1.85	.....	2.72	.....	1.88	.....	6.82	.....	6.26	.....	12.90	.....	2.33	.....	4.78	.....	2.05	.....	3.34	.....	47.63	.....
Elsberry	2.17	.....	1.39	.....	1.09	.....	3.10	.....	1.21	.....	2.80	.....	4.21	.....	5.32	.....	2.60	.....	2.67	.....	1.59	.....	3.68	.....	31.83	.....
Farber	2.57	.....	0.80	.....	0.46	.....	1.73	.....	1.06	.....	5.48	.....	2.07	.....	6.81	.....	0.86	.....	2.18	.....	1.07	.....	3.48	.....	28.57	.....
Fayette	1.91	+0.05	1.28	−0.52	0.85	−1.95	1.91	−1.71	1.89	−2.66	2.34	−2.45	3.05	−0.55	3.81	+0.05	2.10	−2.65	2.34	−0.34	1.35	−0.78	4.44	+2.76	26.77	−10.75
Fulton	2.19	−0.04	1.38	−0.38	1.33	−1.69	2.39	−1.79	2.13	−2.69	5.55	+0.88	3.39	−0.46	3.96	+0.49	2.02	−2.27	2.81	−0.28	0.98	−1.38	3.95	+1.92	32.08	−7.69
Gorin	1.28	−0.20	1.87	+0.43	1.23	−1.19	1.83	−2.00	3.48	−0.79	5.52	+1.23	8.07	+4.16	9.20	+6.08	1.10	−3.56	4.33	+1.53	2.10	+0.11	3.05	+1.39	43.06	+7.19
Hannibal	1.53	−0.19	1.19	−0.72	1.68	−0.92	2.20	−0.99	1.68	−2.67	6.71	+2.81	3.48	+0.39	10.15	+6.81	2.21	−1.76	1.90	−0.49	1.08	−0.98	4.70	+3.16	38.51	+4.45
Hermann	3.21	+1.12	0.83	−1.27	1.37	−1.69	2.21	−1.67	1.06	−3.31	5.29	−0.67	2.07	−1.57	6.30	+3.10	3.01	−0.97	3.51	+0.57	1.75	−1.02	3.45	+1.60	34.06	−5.78
Jefferson City	2.66	+0.53	0.98	−0.94	1.25	−1.85	2.17	−1.68	2.68	−1.84	3.10	−1.17	2.68	−0.77	5.81	+2.56	1.79	−1.74	3.07	+0.28	1.53	−0.84	3.37	+1.43	31.09	−6.03
Kahoka	1.74	.....	0.96	.....	1.56	.....	1.25	.....	2.06	.....	4.26	.....	4.15	.....	10.27	.....	1.10	.....	4.33	.....	2.26	.....	3.22	.....	37.16	.....
Kirksville	1.71	+0.26	0.64	−1.06	2.05	−0.67	2.94	−0.65	2.69	−2.07	4.33	−0.38	4.62	+0.55	13.96	+10.45	1.91	−2.55	5.22	+2.24	1.95	+0.04	2.92	+1.31	44.94	+7.47
LaBelle	1.38	.....	0.88	.....	1.28	.....	2.24	.....	2.79	.....	8.07	.....	3.41	.....	11.09	.....	1.90	.....	3.57	.....	2.25	.....	3.83	.....	42.69	.....
Linneus	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.31	.....	1.53	.....	3.98	.....	1.94	.....	2.45	.....	.....	.....
Louisiana	1.45	−0.52	1.03	−1.25	1.11	−1.99	2.98	−0.46	1.98	−2.50	7.15	+2.96	5.27	+2.03	9.79	+5.97	1.20	−2.88	3.15	+0.26	1.05	−1.37	4.06	+2.30	40.22	+2.55
Lucerne	1.68	+0.70	0.73	−0.73	1.05	−0.78	3.47	−0.47	4.02	+1.88	4.89	−1.65	3.00	−0.12	11.76	+8.36	2.81	−3.07	2.65	−0.85	1.15	−0.71	1.84	+0.52	39.05	+3.08
Macon	1.64	+0.07	0.77	−1.05	1.12	−1.50	2.15	−1.21	2.02	−2.38	6.58	+1.69	4.32	+0.95	5.44	+1.90	1.18	−3.12	3.77	+0.77	2.34	+0.24	3.80	+2.26	35.13	−1.38
Memphis	1.64	.....	0.49	.....	2.14	.....	1.84	.....	1.45	.....	5.18	.....	3.84	.....	11.67	.....	1.12	.....	4.37	.....	1.80	.....	2.65	.....	38.19	.....
Mexico	2.72	+0.71	1.53	−0.57	1.55	−1.27	2.41	−1.25	1.44	−3.25	5.10	+0.02	2.67	+0.93	5.92	+2.68	2.14	−2.46	2.28	−0.39	1.06	−1.32	4.73	+2.73	33.55	−3.44
Milan	2.54	+1.43	1.09	−0.32	1.49	−0.90	3.11	−0.81	2.45	−0.58	6.10	−0.75	4.63	+1.71	10.74	+6.94	4.83	−0.35	3.83	+0.02	1.73	−0.85	2.18	+0.77	44.72	+6.31
Monroe City	1.25	−0.78	0.88	−0.61	1.39	−1.33	2.27	−1.44	1.28	−2.33	7.90	+2.83	3.42	−0.31	11.96	+7.39	3.23	−0.78	1.54	−1.14	1.09	−1.04	5.14	+3.47	41.35	+3.93
New London	2.30	.....	1.53	.....	2.09	.....	2.64	.....	1.34	.....	9.20	.....	3.32	.....	10.74	.....	3.52	.....	3.21	.....	1.18	.....	3.74	.....	44.81	.....
Pacific	2.45	+0.09	1.19	−0.95	1.46	−2.25	2.44	−1.73	0.50	−4.45	3.84	−0.69	2.99	−0.65	6.30	+2.61	3.12	−0.68	3.90	+0.87	1.91	−0.84	2.56	+0.36	32.66	−8.31
Palmyra	*1.85	.....	1.00	.....	1.17	.....	1.82	.....	1.35	.....	8.60	.....	3.98	.....	8.17	.....	2.31	.....	2.30	.....	0.99	.....	4.25	.....	37.79	.....
Paris	1.55	.....	0.92	.....	1.15	.....	1.99	.....	0.92	.....	7.39	.....	2.62	.....	7.08	.....	3.07	.....	2.03	.....	1.15	.....	4.70	.....	34.57	.....
Perry	1.74	.....	1.36	.....	1.49	.....	2.61	.....	0.95	.....	7.44	.....	2.90	.....	8.13	.....	2.61	.....	1.98	.....	1.17	.....	4.22	.....	36.60	.....
Philadelphia	*1.86	.....	1.25	.....	1.41	.....	2.02	.....	2.33	.....	9.98	.....	3.19	.....	11.49	.....	3.10	.....	2.11	.....	1.72	.....	4.17	.....	44.63	.....
St. Charles	2.46	+0.27	0.60	−1.89	1.15	−1.89	2.60	−1.05	0.70	−3.60	2.67	−1.45	4.57	+1.45	7.64	+4.16	2.35	−0.96	3.56	+0.84	0.98	−1.54	2.30	+0.42	31.58	−5.24
St. Louis	2.50	+0.16	1.59	−1.04	1.33	−2.05	3.19	−0.62	2.09	−2.25	2.45	−1.37	5.30	+2.32	8.68	+5.69	2.15	−1.31	4.28	+1.56	2.08	−0.75	2.37	+0.16	38.01	+0.50
St. Louis University	2.52	+0.01	1.81	−0.13	1.11	−2.27	3.35	−0.79	1.39	−2.82	1.65	−2.02	4.32	+1.85	9.21	+4.96	1.31	−2.93	2.07	+1.28	1.50	−1.12	1.88	−0.60	32.12	−7.14
Shelbina	1.70	+0.11	0.80	−1.13	1.42	−1.40	1.95	−1.63	2.13	−2.52	5.32	+0.31	4.81	+0.93	6.59	+3.57	2.90	−1.18	2.28	−0.62	1.48	−0.71	5.03	+3.40	36.41	−0.87
Steffenville	2.75	+0.70	1.17	−0.62	2.03	−0.93	1.89	−1.80	3.52	−1.10	6.66	+2.18	4.34	+0.07	12.13	+8.42	2.43	−1.94	3.19	+0.75	2.82	+0.71	4.45	+2.82	47.38	+9.26
Troy	2.43	.....	1.01	.....	2.08	.....	2.48	.....	1.04	.....	2.82	.....	5.37	.....	8.57	.....	1.44	.....	3.50	.....	1.47	.....	3.15	.....	35.36	.....
Union	2.92	+1.05	1.02	−0.31	1.30	−2.12	2.40	−2.28	1.35	−3.42	3.86	−0.58	2.94	+0.29	5.38	+0.82	1.82	−2.19	3.21	−0.59	2.16	−0.90	2.42	+0.06	30.78	−10.17
Unionville	2.10	+0.34	1.25	−0.52	1.45	−0.97	2.90	−0.82	2.59	−1.89	4.22	−0.87	4.63	+0.57	10.60	+6.53	1.12	−3.81	2.90	+0.07	1.40	−0.56	2.70	+1.08	37.86	−0.85
Valley Park	2.77	+1.05	1.35	+0.04	1.52	−1.86	2.85	−1.80	0.87	−3.88	2.53	−1.21	3.00	+0.94	8.02	+4.38	2.11	−1.30	4.03	+0.43	1.17	−1.52	2.58	+0.13	32.80	−4.60
Warrenton	2.75	+0.45	0.97	−1.08	1.01	−2.33	1.41	−2.75	1.31	−3.33	2.01	−2.21	2.44	−0.82	5.77	+1.37	2.11	−1.91	4.37	+1.37	1.79	−0.90	3.60	+1.46	29.54	−10.68
West Ely	1.89	.....	0.96	.....	1.71	.....	1.66	.....	1.34	.....	8.53	.....	2.77	.....	7.48	.....	1.81	.....	1.55	.....	1.14	.....	4.17	.....	35.01	.....
Winfield	3.10	.....	1.15	.....	1.20	.....	3.03	.....	0.54	.....	4.00	.....	3.79	.....	8.10	.....	1.67	.....	3.42	.....	1.00	.....	3.48	.....	34.48	.....
Keokuk, Iowa	1.28	−0.28	0.98	−0.62	1.56	−0.82	1.20	−1.79	2.50	−1.43	5.51	+1.38	4.53	+1.12	8.93	+5.73	1.43	−2.41	2.96	+0.70	1.78	−0.16	4.00	+2.55	36.66	+3.97
Division means	1.95	+0.07	1.14	−0.74	1.33	−1.48	2.45	−1.27	2.12	−2.25	4.56	+0.05	4.09	+0.58	7.85	+4.37	1.91	−2.40	3.00	+0.23	1.65	−0.56	3.73	+1.95	35.61	−1.64
Southeast Lowlands																										
Bragg City	8.70	.....	2.60	.....	3.61	.....	4.57	.....	0.96	.....	2.10	.....	1.43	.....	5.60	.....	6.26	.....	3.53	.....	2.31	.....	.....	.....	.....	.....
Campbell	9.37	.....	3.51	.....	4.53	.....	3.54	.....	0.62	.....	2.62	.....	3.50	.....	2.98	.....	6.42	.....	3.27	.....	2.87	.....	5.46	.....	48.69	.....
Cape Girardeau	5.98	+2.03	2.85	+0.52	3.96	+0.34	3.77	−0.29	0.96	−3.32	2.03	−2.34	1.52	−1.31	4.89	+1.10	5.44	+2.03	5.05	+1.86	2.21	−1.74	7.96	+4.57	46.62	+3.45
Caruthersville	9.14	+4.30	3.98	+0.36	4.84	+0.33	5.79	+1.34	1.61	−2.91	1.57	−2.45	1.66	−1.73	3.10	−0.28	7.66	+4.52	2.88	−0.22	2.17	−1.79	7.56	+3.28	51.96	+4.75
Dexter	5.29	0.00	4.31	+1.50	3.60	+0.45	3.54	−1.42	0.58	−4.38	1.79	−2.77	2.43	−0.97	5.13	+0.82	5.87	+1.11	4.25	−0.19	2.37	−1.54	8.85	+5.51	48.01	−1.88
Doniphan	6.25	+1.85	4.31	+1.26	3.33	−0.78	2.45	−2.93	0.80	−3.63	3.23	−1.36	3.80	−0.31	4.68	+0.40	2.25	−1.47	5.40	+2.28	1.44	−2.09	8.19	+4.62	46.13	−2.16
Fisk	6.60	.....	2.87	.....	3.47	.....	2.06	.....	0.89	.....	1.70	.....	3.72	.....	7.04	.....	3.65	.....	3.42	.....	2.11	.....	8.97	.....	46.50	.....
Jackson	6.00	+2.22	3.15	+0.31	3.85	−0.45	3.57	−0.97	0.96	−3.48	4.17	−0.55	0.54	−2.94	9.90	+6.29	3.69	−0.09	5.95	+2.71	1.74	−1.69	8.34	+5.12	51.86	+6.48
Marble Hill	5.89	+2.22	1.98	−1.27	2.98	−1.43	3.79	−0.93	0.57	−3.78	3.59	−1.12	0.52	−3.88	5.50	+1.90	4.07	+0.33	5.44	+2.52	2.36	−1.27	8.18	+4.67	44.87	−2.04
Morehouse	8.85	+4.00	5.04	+2.10	4.36	−0.20	3.18	−1.90	0.81	−4.01	1.99	−3.04	1.63	−1.39	2.50	−1.48	7.65	+2.89	4.37	+0.85	2.86	−1.21	7.87	+4.10	51.11	+0.71
New Madrid	9.92	+4.56	3.23	−0.57	5.09	−0.18	4.60	0.00	0.70	−3.94	3.28	−1.20	3.70	−0.33	7.85	+4.05	7.66	+4.03	3.42	+0.04	3.26	−0.77	7.58	+3.23	60.29	+8.92
Parma	8.65	+4.92	3.18	+0.46	3.54	−2.35	3.12	−1.47	0.32	−4.38	2.27	−1.62	3.97	+0.27	6.19	+2.04	8.19	+3.11	2.89	−0.53	2.79	−1.71	7.74	+2.97	52.85	+1.71
Poplar Bluff	7.29	+3.07	4.13	+1.22	3.24	−1.32	2.39	−2.31	0.85	−4.21	3.23	−1.44	4.57	+1.09	6.23	+1.86	2.92	−0.87	5.49	+2.35	2.12	−1.50	9.87	+5.93	52.33	+3.87
Sikeston	7.35	+2.91	5.25	+2.19	4.50	+0.07	2.51	−1.97	1.07	−3.29	2.92	−1.31	2.59	−1.78	2.19	−1.67	11.06	+7.73	3.22	+0.40	1.52	−2.22	7.50	+3.65	51.68	+4.71
Cairo, Ill	7.02	+3.26	4.43	+1.21	4.19	+0.44	3.28	−0.44	0.50	−3.21	1.78	−2.05	2.58	−0.49	3.79	+0.77	5.67	+2.78	3.56	+0.80	2.65	−1.03	6.88	+3.48	46.33	+5.52
Division means	7.46	+3.02	3.98	+0.92	3.98	−0.42	3.39	−1.26	0.87	−3.56	2.79	−1.83	2.38	−1.43	4.54	+0.97	5.71	+1.98	4.40	+1.46	2.19	−1.60	7.76	+4.36	49.44	+2.73
Ozark Plateau																										
Arcadia	3.30	+0.26	0.62	−2.32	2.05	−1.75	2.86	−1.82	1.19	−3.51	2.34	−2.35	5.12	+0.98	7.23	+3.50	1.51	−2.23	4.84	+1.72	1.38	−2.24	5.68	+2.71	38.12	−7.05
Aurora	5.01	+2.56	0.62	−2.03	2.48	−1.41	2.63	−1.82	1.31	−4.20	9.04	+3.78	4.04	−1.15	3.40	−1.08	1.35	−2.49	3.52	+0.14	2.64	−0.30	*6.68	+4.14	42.72	−3.86
Birchtree (near)	5.51	+2.32	1.31	−1.17	2.97	−1.18	1.59	−3.21	1.14	−3.23	2.91	−1.67	4.12	+0.26	4.20	−0.38	1.85	−1.78	6.49	+3.50	1.20	−1.93	5.50	+2.75	38.79	−5.72
Buffalo	3.88	.....	1.19	.....	2.07	.....	2.46	.....	2.28	.....	9.61	.....	4.51	.....	1.68	.....	1.08	.....	2.93	.....	3.30	.....	*6.22	.....	41.21	.....
Caplinger Mills	1.75	.....	0.50	.....	0.51	.....	2.11	.....	3.06	.....	9.20	.....	1.89	.....	1.48	.....	3.33	.....	2.59	.....	1.87	.....	4.22	.....	32.51	.....
Chaonia	7.33	.....	3.15	.....	3.84	.....	2.83	.....	0.39	.....	2.52	.....	1.52	.....	5.08	.....	3.09	.....	5.49	.....	1.93	.....	8.67	.....	45.84	.....
Dean	6.69	+4.35	1.31	−0.47	2.32	−1.20	2.46	−2.14	0.46	−5.37	7.67	+1.63	6.59	+2.40	2.11	−2.05	3.00	−0.93	3.29	−0.52	1.86	−1.48	7.30	+5.03	45.06	−0.75
Eldon	2.51	+0.88	0.23	−1.57	0.73	−2.36	1.76	−2.80	1.75	−2.92	2.84	−1.78	3.71	+0.17	5.49	+1.67	2.38	−1.71	2.43	−0.83	2.00	−0.49	4.35	+2.27	30.18	−9.47
Farmington	3.90	+1.38	0.98	−1.98	1.85	−1.56	3.18	−1.06	1.33	−4.12	2.06	−2.59	1.58	−1.86	5.20	+1.63	1.82	−1.55	5.69	+2.75	1.00	−2.75	5.00	+2.24	33.59	−9.47
Fredericktown	5.99	+2.55	1.42	−1.18	3.67	−0.11	1.81	−3.18	1.15	−2.49	3.68	−1.51	2.55	−1.27	4.90	+0.84	2.12	−2.21	6.20	+1.79	1.38	−1.80	5.43	+2.67	40.30	−5.90
Galena	6.13	+3.84	0.79	−1.08	1.74	−1.45	3.32	−0.79	3.04	−2.12	7.33	+2.61	3.12	−0.85	1.09	−3.02	0.95	−3.37	2.57	−0.52	2.18	−1.09	3.60	+1.07	35.86	−6.77
Goodland	4.11	+1.43	0.95	−1.37	2.16	−1.97	1.73	−3.27	1.40	−3.44	3.58	−0.68	1.39	−2.49	7.44	+3.46	1.32	−2.50	5.49	+2.10	1.51	−1.38	4.51	+1.96	35.62	−8.15
Greenville	6.57	+3.51	2.26	−0.74	3.31	−1.19	2.14	−2.85	0.45	−3.74	3.26	−1.52	3.38	−0.39	4.66	+1.31	1.42	−1.72	7.32	+4.45	1.93	−1.75	8.29	+5.26	44.99	+0.63
Hailey	6.35	+3.62	1.75	−0.09	2.96	+0.79	3.73	−1.29	1.54	−4.39	6.06	+0.04	6.90	+2.90	1.18	−4.19	1.85	−2.27	4.00	+0.40	3.83	+1.34	8.29	+6.36	48.44	+3.22
Koshkonong	4.70	+1.04	2.45	−0.30	2.00	−1.93	2.50	−2.77	1.31	−3.26	2.26	−2.45	3.56	−0.11	0.95	−3.39	1.79	−1.89	5.98	+2.79	1.28	−2.02	6.64	+3.23	35.42	−11.06
Lakeside	2.38	.....	0.68	.....	1.13	.....	2.11	.....	0.81	.....	5.00	.....	2.95	.....	6.04	.....	3.00	.....	2.67	.....	1.62	.....	4.90	.....	33.29	.....
Lebanon	5.40	+2.87	1.60	−0.69	2.86	−0.68	2.99	−1.37	3.36	−2.09	3.88	−1.37	6.97	+3.00	6.17	+3.29	0.33	−3.92	2.79	−0.54	2.85	+0.23	7.60	+5.12	46.80	+3.85
Leeper	5.64	+1.33	2.21	−0.15	3.39	+0.09	1.71	−3.92	0.60	−4.38	2.77	−3.52	2.30	−1.43	5.43	+1.50	1.85	−1.14	5.16	+1.29	1.26	−2.27	7.06	+3.87	39.38	−8.73
Lockwood	2.11	+0.37	0.80	−0.97	1.83	−1.00	2.87	−1.44	3.18	−1.78	8.89	+3.55	5.45	+0.74	2.77	−1.59	2.23	−2.33	2.92	−0.60	3.93	+1.48	6.05	+3.99	43.03	+0.42
Mountain Grove	5.18	+2.36	1.36	−0.86	2.88	−1.24	2.07	−2.89	1.53	−3.30	8.19	+3.41	4.76	+0.93	2.48	−1.84	0.75	−3.49	5.68	+2.43	1.69	−1.07	4.16	+1.68	40.73	−3.88
Neosho	4.58	+2.08	1.22	−1.02	2.25	−1.23	1.98	−2.46	3.34	−2.52	6.02	+0.21	3.34	−0.97	1.18	−2.96	1.80	−2.59	2.95	−0.53	2.18	−0.98	7.58	+5.09	38.42	−7.88
Owensville	3.07	+1.20	0.43	−1.12	1.30	−2.28	1.79	−1.95	0.45	−5.02	2.80	−2.49	2.60	−0.18	4.70	+1.34	1.47	−2.42	3.31	−0.27	1.30	−1.56	2.87	+0.63	26.09	−14.12
Ozark Beach	6.70	+3.86	1.34	−0.27	2.78	+0.86	2.16	−3.42	2.01	−3.07	6.45	+0.61	5.19	+2.18	1.08	−3.40	0.60	−3.25	5.39	+1.38	2.84	+0.12	3.48	+0.64	40.02	−3.76
Rolla	3.37	+0.93	1.36	−0.79	1.85	−1.87	1.47	−3.15	0.80	−4.19	3.58	−0.68	2.33	−1.55	4.59	+0.51	1.82	−2.09	4.68	+1.63	2.61	+0.09	3.27	+1.11	31.73	−10.05
St. Thomas(near)	3.42	.....	0.88	.....	1.31	.....	1.82	.....	1.31	.....	3.27	.....	2.37	.....	6.00	.....	3.89	.....	3.00	.....	1.29	.....	4.61	.....	33.17	.....
Salem(near)	3.68	+0.89	1.13	−1.14	2.63	−0.99	1.25	−3.38	1.86	−2.84	4.18	−0.52	2.57	−0.79	5.12	+0.64	1.30	−2.78	5.45	+1.72	1.34	−1.28	3.04	+0.66	33.55	−9.81
Seligman	6.39	+3.51	1.15	−0.74	3.01	−0.51	2.71	−1.63	0.50	−5.14	6.16	+1.81	3.42	−0.89	0.61	−3.43	2.25	−2.12	3.20	−0.15	3.34	+0.47	6.59	+4.09	39.33	−4.73
Seymour(near)	5.30	+2.75	1.71	−0.46	2.76	−1.11	2.53	−1.76	2.48	−2.77	8.24	+2.84	5.63	+1.39	2.58	−1.38	0.24	−4.23	5.80	+2.50	*2.43	−0.24	*4.50	+2.19	44.20	−0.28
Springfield	3.79	+1.45	0.54	−1.89	2.52	−0.87	3.26	−0 60	3.18	−2.01	10.08	+5.40	3.88	−0.33	3.14	−0.95	0.55	−2.97	4.86	+1.81	3.17	+0.38	4.83	+2.52	43.80	+1.94

Continued on next page

Monthly and Annual Precipitation for the Year 1932, with Departures—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Ozark Plateau—concluded																										
Steelville	2.95	+0.89	1.62	−0.55	1.98	−0.76	1.68	−2.80	0.54	−3.96	3.09	−1.07	3.21	+0.05	5.94	+2.30	1.09	−2.32	5.11	+1.86	2.25	−0.49	3.26	+0.97	32.72	−5.88
Stover	1.87	+0.09	0.56	−0.93	0.86	−1.88	1.82	−2.52	1.12	−4.47	4.04	−1.41	5.67	+2.57	7.39	+3.72	1.92	−1.97	2.76	−1.55	1.40	−1.37	4.99	+3.09	34.40	−6.63
Tuscumbia	3.21	+1.71	0.91	−0.24	1.35	−2.31	2.09	−2.67	1.48	−2.96	5.12	+1.24	....	.....	....	.....	....	....	....	.....	....	.....	....	.....	....	.....
Versailles	....	.....	1.07	.....	1.15	.....	2.72	.....	1.60	.....	4.56	.....	4.51	.....	6.38	.....	1.48	.....	2.79	.....	1.38	.....	5.89	.....	....	.....
Williamsville	6.92	+2.72	2.44	−0.11	2.39	−1.14	2.31	−2.98	0.71	−3.65	2.77	−3.83	3.23	−0.13	7.71	+2.26	2.20	−1.55	6.87	+2.75	2.31	−1.84	8.12	+4.30	47.48	−2.70
Willow Springs(near)	5.56	+2.13	1.11	−1.53	2.40	−2.58	2.02	−2.78	0.95	−4.03	4.28	−0.48	3.58	−0.64	1.47	−2.51	1.22	−3.02	5.59	+2.52	1.81	−1.70	5.62	+2.79	35.61	−11.83
Division means	4.48	+2.19	1.19	−1.08	2.23	−1.28	2.42	−2.20	1.76	−3.41	5.66	+0.87	4.08	+0.13	8.64	−0.38	1.61	−2.40	4.85	+1.30	2.21	−0.76	5.78	+3.30	39.35	−4.82
Southwest Plain																										
Appleton City	1.70	−0.14	1.01	−0.77	0.78	−2.40	2.35	−2.06	2.84	−2.34	3.31	−1.94	3.88	−0.63	2.01	−1.67	0.61	−3.51	2.52	−0.05	1.92	−0.82	4.12	+2.46	27.05	−13.37
Clinton	1.63	−0.36	1.34	−0.63	0.96	−2.15	3.32	−0.99	3.33	−2.00	4.14	−0.88	3.47	−0.36	4.54	−1.17	0.65	−3.41	3.87	+0.82	1.90	−0.17	5.15	+3.28	34.30	−8.02
Concordia	0.91	−0.31	•0.88	−0.82	0.78	−1.92	2.09	−1.56	2.21	−1.76	4.03	−1.98	2.92	+0.04	2.17	−0.98	3.82	−0.41	2.13	−2.09	2.10	−0.81	3.56	+2.01	27.60	−10.59
Harrisonville	1.36	−0.19	0.62	−1.24	0.72	−1.96	2.08	−1.46	2.31	−2.22	6.22	+1.59	2.82	−0.94	6.42	+2.37	1.70	−2.88	1.82	−1.01	2.16	+0.09	2.72	+1.03	30.95	−6.82
Joplin	3.92	+1.82	1.06	−1.09	1.50	−1.37	2.74	−1.77	1.80	−3.87	14.12	+8.48	3.69	−0.66	1.03	−3.19	3.22	−0.41	4.01	+0.52	1.88	−0.69	5.67	+3.73	44.14	+1.50
Lamar	2.78	+1.02	1.32	−0.77	1.15	−1.85	3.00	−1.48	1.24	−4.13	7.46	+2.21	3.86	−0.32	0.90	−3.33	3.70	−0.82	3.00	−0.16	1.33	−1.00	5.09	+3.11	34.83	−7.52
Lamonte	1.71	−0.27	0.88	−1.01	1.23	−1.67	2.52	−1.39	2.76	−2.19	6.00	+1.17	3.58	−0.37	10.22	+4.26	1.70	−2.92	2.63	−0.05	2.09	−0.07	4.23	+2.48	39.55	−2.03
Marshall	1.33	−0.38	0.84	−0.90	1.57	−1.22	2.29	−1.55	2.53	−2.32	3.82	−0.81	4.96	+1.12	4.62	+0.98	3.02	−2.12	1.18	−1.68	2.18	−0.08	4.88	+3.20	33.22	−5.76
Nevada	2.42	+0.39	0.72	−1.05	1.52	−1.43	3.20	−1.00	1.46	−3.85	5.69	+0.17	3.52	−0.42	2.48	−1.16	2.78	−1.52	2.85	−0.14	1.47	−0.56	4.66	+2.83	32.77	−7.74
Osceola	1.96	−0.17	0.68	−1.04	1.36	−1.83	3.04	−1.34	0.76	−4.71	6.89	+1.66	4.29	+0.43	1.87	−2.20	4.41	−0.40	3.26	+0.10	1.80	−0.98	5.57	+3.44	35.89	−7.04
Warrensburg	0.78	−0.99	0.63	−1.40	0.30	−2.37	2.25	−1.10	3.73	−0.81	6.23	+1.20	5.17	+1.32	8.50	+5.01	1.44	−2.35	2.57	−0.15	1.66	−0.34	3.28	+1.52	36.54	−0.46
Warsaw	1.93	−0.35	0.82	−1.51	1.12	−2.46	2.35	−2.23	1.34	−3.78	5.11	−0.27	4.56	+0.47	3.26	−1.03	2.76	−1.96	3.22	−0.25	1.78	−0.81	5.86	+3.58	34.11	−10.60
Waverly	1.96	+0.43	0.87	−0.50	1.58	−1.31	2.81	−1.27	1.89	−2.79	3.44	−2.08	3.60	−0.02	4.68	+0.76	1.69	−3.62	4.69	+1.50	1.97	−0.40	2.89	+1.43	31.92	−7.87
Division means	1.74	−0.14	0.91	−1.03	1.04	−1.95	2.60	−1.48	2.39	−2.63	5.33	+0.27	3.98	−0.01	4.77	+0.47	1.95	−2.50	2.63	−0.30	1.83	−0.36	4.44	+2.61	33.70	−6.92
Northwest Plateau																										
Albany	....	.....	....	.....	....	.....	....	.....	2.91	+0.23	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....
Bethany	1.37	+0.11	0.74	−0.71	0.96	−1.34	2.93	−0.34	2.91	−1.52	5.45	+0.63	4.87	+0.14	5.64	+1.69	2.07	−2.09	2.37	−0.08	2.05	+0.22	1.95	+0.70	32.81	−2.59
Chillicothe	2.19	+0.66	1.07	−0.79	2.24	−0.24	1.49	−2.80	2.67	−1.31	5.57	−0.27	4.09	−0.07	5.95	+1.49	2.34	−3.34	3.60	−0.13	2.10	−0.24	2.52	+1.06	35.83	−5.98
Conception	1.99	+1.08	1.12	−0.07	0.88	−0.84	2.78	−0.07	3.90	−0.47	8.77	+3.83	5.12	+0.79	9.37	+5.67	1.92	−2.20	1.27	−1.43	1.05	−0.41	1.72	+0.78	39.89	+6.66
Edgerton	0.29	−0.77	0.49	−0.87	0.98	−1.19	2.72	−0 73	2.26	−2.03	4.58	+0.08	2.84	−1.04	4.72	+1.50	2.42	−1.38	1.52	−1.13	0.95	−0.58	1.72	+0.51	25.49	−7.63
Gallatin	1.82	+0.66	0.64	−0.92	1.25	−0.96	1.67	−2.12	5.58	+0.83	3.74	−2.11	6.79	+2.71	4.47	+0.60	1.97	−2.46	2.82	−0.20	1.46	−0.45	1.86	+0.41	34.07	−4.01
Grant City	1.73	+0.81	0.90	−0.23	0.71	−1.84	3.28	+0.26	3.04	−1.22	5.32	+0.41	2.89	−1.94	6.89	+3.15	•1.84	−2.42	•1.80	−1.02	•1.64	+0.02	1.64	+0.57	31.68	−2.95
Kansas City	1.12	−0.07	0.63	−1.19	2.30	−0.23	2.50	−0.64	2.63	−2.02	2.73	−2.26	2.57	−1.56	4.90	+0.81	1.36	−3.20	2.43	−0.49	1.49	−0.34	2.41	+1.08	27.07	−10.11
Kidder	1.63	+0.04	0.96	−0.55	1.09	−1.00	1.51	−1.67	4.44	−0.23	3.40	−1.60	4.22	+0.80	5.71	+1.84	2.14	−2.43	2.84	−0.07	0.87	−1.04	1.73	+0.47	30.54	−5.94
King City	1.42	+0.13	0.86	−0.56	1.50	−0.06	1.62	−2.73	3.62	−0.83	6.25	+0.83	3.67	−0.18	4.55	+0.84	1.64	−2.98	2.16	−0.68	1.36	−0.38	1.57	+0.50	30.22	−6.10
Lexington	1.70	+0.08	1.40	−0.58	2.19	−0.35	2.91	−0.81	2.18	−2.85	4.41	−0.71	3.05	−1.63	3.25	−0.20	1.76	−2.98	2.71	−0.27	2.04	−0.03	2.82	+1.04	30.42	−9.29
Maryville	1.09	+0.07	1.03	−0.36	0.93	−0.91	4.36	+1.31	4.53	−0.46	6.29	+1.20	3.37	−1.76	5.81	+1.85	1.74	−2.76	1.41	−1.40	2.12	+0.49	1.67	+0.67	34.35	−2.06
Oregon	0.60	−0.74	0.76	−0.84	1.50	−0.58	3.97	+0.65	4.21	−0.47	5.19	+0.18	4.20	−0.06	4.25	+0.24	2.20	−1.71	0.99	−1.66	0.92	−0.81	1.01	−0.36	29.80	−6.16
St. Joseph	1.30	+0.40	0.69	−0.76	1.52	−0.80	2.82	−0.39	3.21	−0.91	6.09	+1.11	4.06	+0.97	3.82	+0.33	2.67	−2.44	1.22	−1.67	0.59	−1.50	1.41	+0.30	29.40	−5.36
Tarkio	1.30	+0.56	1.11	+0.02	0.61	−1.11	2.80	−0.35	4.70	−0.41	3.11	−1.99	3.72	−0.02	6.35	+2.30	2.09	−1.75	1.11	−1.49	1.52	+0.04	1.22	+0.34	29.64	−3.86
Trenton	1.32	−0.03	0.72	−0.81	1.73	−0.69	3.41	−0.06	4.06	−0.75	4.82	−0.18	4.59	+0.53	8.21	+4.52	1.76	−2.77	3.30	+0.38	1.92	+0.04	2.03	+0.64	37.87	+0.82
Division means	1.46	+0.18	0.89	−0.59	1.37	−0.76	2.79	−0.60	3.45	−1.07	5.14	+0.09	3.77	−0.40	5.67	+1.86	2.01	−2.46	2.07	−0.78	1.46	−0.35	1.82	+0.59	31.79	−4.32
State means	3.32	+1.28	1.41	−0.70	1.89	−1.13	2.57	−1.24	1.91	−2.76	4.95	+0.08	3.67	−0.33	5.98	+2.23	2.36	−1.48	3.45	+0.56	1.82	−0.58	4.46	+2.39	37.78	−1.69

• Estimated

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normal; however, on the 30th zero temperatures occurred at many stations in the northern half of the State. Precipitation was decidedly more than normal over the Ozark Plateau and the Southeast Lowlands and near normal in other sections. Pastures were green most of the month.

FEBRUARY.—Very mild weather continued in February, averaging 10° above normal for the month. Temperatures in the eighties occurred on the 10th. Precipitation was light, except in the Southeast Lowlands. Much plowing was done; oats was sown in central and southwestern counties; winter wheat looked well, fully covering the ground in most fields. Fruit buds were swollen and unusually advanced.

MARCH.—It was the coldest March since 1915. Very low temperatures occurred from the 5th to the 15th, with as low as 2° below zero on the 6th in the north (Unionville, Putnam County), and as low as 10° above zero near the southern border (Poplar Bluff) on the 9th. Vegetation and fruit, being unusually advanced, were heavily damaged. Some oats and clover were killed; peaches were almost entirely killed; apples were badly hurt; some wheat was damaged. Precipitation was much less than normal. Strong winds prevailed on several days, especially on the 21st, when thunderstorms and hail occurred at several stations, with some damage to property.

APRIL.—The month was rather mild for the most part, but freezing temperatures occurred pretty generally on the 27th, with heavy frost in many localities, damaging potatoes and other vegetation to some extent. Although precipitation was much less than normal, it was well distributed and came in gentle or moderate showers, keeping a fair supply of moisture in the top soil; but subsoil moisture was decreasing. Wheat made fair progress. Conditions were favorable for preparation of seed beds and planting.

MAY.—Temperatures fluctuating considerably, from rather warm to moderately subnormal, and rainfall in most sections far less than normal, characterized the month. The lack of moisture was felt by crops, especially wheat and oats. Hail occurred on the 6th, 8th, and 30th, causing considerable damage on the 8th and 30th.

JUNE.—The month was considerably warmer than normal. The rainfall was greater than normal, at most stations, but it was irregular, with very heavy falls in some localities and moderate amounts in others. The southeastern quarter of the State received rather light rainfall for the most part, while the northwestern counties received excessive amounts. Damaging storms occurred on the 4th, 9th, 17th, 19th, and 20th, but none was very destructive.

JULY.—Unusually warm weather prevailed most of the month. From the 12th to the 22d, inclusive, a hot and rainless spell occurred. However, only a few days were marked by extremely high temperatures. Good rains fell about the 3d-5th and 23d-27th, so that moisture conditions were fairly satisfactory over most of the State except during the dry, hot period of the 12th to 22d. Wheat was being threshed and showed fair to good yields. Condition of corn varied from poor to excellent, mostly fair to good. Severe thunderstorms occurred on the 4th over the northwestern quarter of the State.

AUGUST.—Temperatures showed no very outstanding features; they averaged above normal and were high on the last four days

of the month. Rainfall was greatly in excess of normal over the northern half of the State, especially the northeast quarter, while less than normal was received in the southwestern counties. However, the rainfall fulfilled the needs generally. A severe hailstorm occurred on the 6th in Platte County.

SEPTEMBER.—The month was mostly rather cool, with light rainfall, except in the southeastern counties. Much needed general and substantial rainfall came on the 26-27th, but subsoil moisture was still deficient in central and western areas. A light frost occurred in northern counties on the 30th.

OCTOBER.—Although averaging cooler than usual, pleasant temperatures prevailed. The first freezing temperatures and frosts of the season occurred on the 6th (excepting the light frost of September 30 along the northern border); however, forage crops and other late-growing vegetation remained green over most of the southeastern counties throughout the month. Rainfall was somewhat more than normal on an average, but unevenly distributed, and subsoil moisture was deficient in some central and western areas. The average stage of the river at St. Louis was the lowest of record for October.

NOVEMBER.—A notable cold spell occurred from about the 8th to the 28th, with greatest intensity during the 15th to 19th. Heavy snow fell on the 15th, the heaviest of record for so early in the season at some stations. For the State as a whole the month averaged the third coldest November in the last 45 years. Total precipitation for the month was light. Rivers continued very low, with lowest average stage of record for November at St. Louis.

DECEMBER.—The outstanding feature was the cold spell of the 8th to the 18th, which was one of the most severe of recent years, with minimum temperatures as low as 21° below zero in the northern counties and as low as zero almost to the southern border. Mild weather, however, prevailed the first and fourth weeks of the month. Precipitation was decidedly more than normal. Rather heavy snow occurred on the 8-10th and heavy rains on the 22-23d and the 29-30th. Ice began in the rivers at an unusually early date. The formation and breaking of ice blockades caused strong fluctuations in river stages, but no great damage resulted. Wheat was in fair to good condition at the end of the month.

KILLING FROSTS, 1932

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
Northeast Plain			*Ozark Plateau (continued)*		
Brunswick	April 27	Oct. 6*	Goodland	May 2*	Oct. 6*
Clifton Hill	April 27*	Oct. 6	Greenville	April 28	Oct. 6
Columbia	Mar. 31	Oct. 6	Koshkonong	Mar. 22*	Nov. 1*
Downing	April 27*	Oct. 30	Lebanon	April 28*	Oct. 6
Elsberry	May 2*	Oct. 6*	Lockwood	Mar. 31*	Oct. 6
Fayette	April 27*	Oct. 6*	Mountain Grove	April 27*	Oct. 6
Fulton	April 27	Oct. 21	Neosho	April 10*	Oct. 6*
Hannibal	April 14	Oct. 6	Rolla	Mar. 31*	Oct. 11*
Jefferson City	April 13*	Nov. 1	Salem(near)	April 27	Oct. 6
Kirksville	April 27	Oct. 21	Seligman	Mar. 22*	Oct. 6*
Louisiana	May 2*	Oct. 6*	Seymour(near)	Mar. 31*	Oct. 6
Macon	April 28*	Oct. 11*	Springfield	Mar. 14	Nov. 1
Mexico	April 27*	Oct. 6*	Versailles	April 27*	Oct. 6
St. Charles	April 14	Oct. 11*			
St. Louis	Mar. 15	Nov. 1	*Southwest Plain*		
St. Louis Univ.	Mar. 22*	Nov. 10*	Appleton City	April 27*	Oct. 6*
Steffenville	April 28*	Oct. 11	Clinton	Mar. 23*	Oct. 6
Unionville	April 27*	Oct. 30	Harrisonville	April 27*	Oct. 11
Warrenton	April 27*	Oct. 30	Lamar	April 1*	Oct. 6*
Keokuk, Iowa	Mar. 31*	Oct. 11	Lamonte	April 27	Oct. 11
			Marshall	April 27*	Oct. 30*
Southeast Lowlands			Nevada	Mar. 31*	Oct. 6*
Campbell	April 13*	Oct. 6*	Warrensburg	April 26*	Oct. 6*
Caruthersville	Mar. 19*	Nov. 1	Warsaw	April 27*	Oct. 6
Doniphan	Mar. 28*	Oct. 6*			
Jackson	April 28*	Oct. 6	*Northwest Plateau*		
Marble Hill	April 27*	Oct. 6*	Bethany	April 27*	Oct. 6
Poplar Bluff	April 13*	Oct. 6*	Chillicothe	April 27*	Oct. 6*
Sikeston	Mar. 23*	Oct. 27*	Conception	April 27*	Oct. 6*
Cairo, Ill.	Mar. 18	Nov. 2	Edgerton	April 27*	Oct. 6
			Grant City	April 27	
Ozark Plateau			Kansas City	Mar. 23	Oct. 26
Arcadia	May 2*	Nov. 1	Kidder	April 27*	Oct. 11*
Aurora	Mar. 31	Oct. 6	Lexington	Mar. 31*	Oct. 26
Birchtree(near)	Mar. 28*	Oct. 5*	Maryville	April 27	Oct. 6
Buffalo	Mar. 31*	Oct. 6*	Oregon	April 27	Oct. 26
Dean	April 12	Oct. 6	St. Joseph	Mar. 31*	Oct. 11
Eldon	April 27	Oct. 6	Tarkio	April 27	Oct. 6
Farmington	April 27*	Oct. 6	Trenton	April 27*	Oct. 6*

* Occurrence of killing frost not recorded, dates given are last in spring and first in fall of temperature 32° or lower.

WBO, St. Louis, 3-10-33—1150.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

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VOL. XXXVII ST. LOUIS, MO., JANUARY, 1933 No. 1

GENERAL SUMMARY

In strong contrast with a spell of severe winter weather in the preceding month of December, January, 1933, will long be remembered for its extreme mildness. It was the warmest January in Missouri since general records for the State began, which was in 1888; but, considering the St. Louis records and those for some other long-record stations, it was evidently the warmest January in Missouri since 1880. Its mildness has been exceeded at St. Louis only once in January, viz , in 1880, during the last 97 years (using the Dr. George Engelmann records for the period of 1837 to 1873). Excepting a few comparatively cold days, about the 1st, 12th, and 28th, the temperatures were mostly such as normally occur in the middle of March.

Wheat fields showed green during most of the month, and fruit buds began to swell in the southern half of the State.

The first half of the month was unusually dry, but in the second half—principally during the 17th to 22d—substantial rains came over most of the State, except the northwestern counties, where precipitation was light for the month as a whole. Some heavy local rains occurred in the Southeast Lowlands during the period of the 17th-22d, causing floods in small streams, mostly in Bollinger County and adjacent areas.

Snowfall, except in the northern half of the State, principally the Northwest Plateau, was hardly more than a few flurries.

The principal rivers of the Section were free of ice and the stages averaged somewhat above normal.

The wind movement was greater than normal over most of the State; but damaging winds were few, although some small tornadoes (see descriptions under another head) occurred on the 18th and 21st.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 41.4°, or 10.9° above normal. The highest monthly mean was 47.4° at Caruthersville and the lowest monthly mean was 35.8° at Grant City. The highest temperature recorded was 72° at Marble Hill on the 18th and the lowest was 8° at Goodland on the 12th and Unionville on the 14th. The greatest daily range was 49° at Dean on the 28th.

PRECIPITATION

The average precipitation for the State, 122 stations reporting, was 2.43 inches, or 0.39 inch more than normal. The greatest local monthly amount was 7.87 inches at Marble Hill, and the least local monthly amount was 0.32 inch at Tarkio. The greatest amount in any twenty-four hours was 2.46 inches at Caruthersville on the 20th. The average number of days with 0.01 inch or more of precipitation was 6. The snowfall averaged 0.5 inch for the State, or 4.0 inches less than normal. The greatest monthly total was 3.0 inches at Edgerton.

MISCELLANEOUS PHENOMENA

Auroras.—None.

Floods.—Locally, Marble Hill.

Fogs, dense.—3d, 4th, 8th, 9th, 17th, 18th, 20th, 21st, 22d, 26th, and 30th.

Hail.—18th, 21st, 27th, and 31st. Light or moderate, with no damage.

Halos, solar.—2d, 5th, 6th, 7th, 8th, 15th, 17th, 20th, and 24th.

Halos, lunar.—6th, 7th, 8th, and 9th.

Sleet.—13th, 17th, 18th, 28th, 29th, and 31st.

Thunderstorms.—Local, on 12th, 19th, 20th, 23d, 24th, 25th, 26th, and 31st. General, on 18th, 21st, and 22d.

Winds.—See special tornado report.

Dust.—See special report.

(Continued on page 4)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.00	30.55	1	29.32	26	9.9	34	sw.	10	77	58	59	71
Hannibal.....	29.99	30.56	1	29.29	22	10.3	30	sw.	10	75	59	..	..
Kansas City...	29.97	30.44	11	29.26	22	9.9	31	nw.	11	67	49	57	80
St. Joseph.....	29.94	30.43	11	29.20	22	9.6	31	nw.	10	73	52	56	70
St. Louis	30.00	30.58	1	29.32	26	14.2	44	sw.	10	72	62	66	53
Springfield	30.00	30.57	1	29.34	26	11.6	31	nw.	26	71	52	60	58
Cairo, Ill.....	30.06	30.61	1	29.39	26	9.9	28	sw.	22	83	65	64	62
Keokuk, Iowa.	29.98	30.56	1	29.26	22	9.5	29	w.	19	72	59	64	58

COMPARATIVE DATA FOR JANUARY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	21.5	− 9.0	74	−32	1.91	−0.13	3.34	0.60	....	6	..	..	..
1889....	31.8	+ 1.3	69	− 2	2.36	+0.32	4.05	1.00	....	6	..	..	..
1890....	33.8	+ 3.3	81	−19	4.25	+2.21	10.50	0.85	....	9	..	..	..
1891....	34.1	+ 3.6	74	− 1	1.52	−0.52	3.27	0.10	4.3	6	..	..	..
1892....	24.0	− 6.5	67	−31	1.80	−0.24	3.79	0.55	....	4	14	8	9
1893....	22.5	− 8.0	66	−14	0.45	−1.59	1.75	0.00	2.4	3	9	11	11
1894....	31.4	+ 0.9	77	−35	2.21	+0.17	5.36	0.20	2.7	5	13	9	9
1895....	24.7	− 5.8	78	−22	1.49	−0.55	5.82	0.17	9.4	5	14	8	9
1896....	32.9	+ 2.4	71	− 9	1.17	−0.87	3.97	0.27	3.1	4	10	7	14
1897....	28.4	− 2.1	72	−14	4.90	+2.86	10.37	1.05	4.0	8	12	7	12
1898....	34.3	+ 3.8	75	−10	3.98	+1.94	7.31	1.98	8.4	9	11	8	12
1899....	30.2	− 0.3	70	−21	1.55	−0.49	12.61	0.01	4.0	6	12	8	11
1900....	34.5	+ 4.0	77	− 9	1.22	−0.82	5.21	T.	0.2	4	14	7	10
1901....	35.0	+ 4.5	72	−11	1.30	−0.74	3.57	0.22	0.8	4	17	7	7
1902....	30.1	− 0.4	72	−17	1.23	−0.81	6.31	0.28	6.9	5	16	7	8
1903....	31 4	+ 0.9	73	−11	1.36	−0.68	3.45	0.06	5.0	6	13	6	12
1904....	27.0	− 3.5	66	−23	2.85	+0.81	5.29	0.77	7.4	8	14	6	11
1905....	22.3	− 8.2	72	−19	1.79	−0.25	4.28	0.10	6.8	8	14	6	11
1906....	35.6	+ 5.1	77	− 8	3.64	+1.60	7.88	0.52	9.2	6	14	5	12
1907....	34.3	+ 3.8	79	− 5	5.16	+3.06	9.45	1.23	2.8	12	7	6	18
1908....	34.4	+ 3.9	68	−10	1.51	−0.55	4.80	0.00	3.6	5	19	5	7
1909....	33.7	+ 3.2	83	−20	2.17	+0.13	5.24	0.42	6.5	7	6	7	18
1910....	32.3	+ 1.8	78	−24	1.83	−0.21	3.98	0.37	3.5	5	13	6	12
1911....	34.6	+ 4.1	78	−19	1.20	−0.84	3.70	0.00	0.7	5	8	7	16
1912....	20.0	−10.5	70	−36	1.06	−0.98	3.97	T.	6.5	4	14	7	10
1913....	33.1	+ 2.6	74	−12	3.67	+1.63	15.65	0.36	2.6	8	13	6	12
1914....	38.1	+ 7.6	78	− 1	1.42	−0.62	3.47	0.05	1.0	4	12	7	12
1915....	29.1	− 1.4	76	−24	2.92	+0.88	5.81	1.48	5.4	8	12	5	14
1916....	31.6	+ 1.1	72	−24	7.36	+5.32	14.12	1.37	3.4	12	9	4	18
1917....	32.9	+ 2.4	76	−10	1.52	−0.52	5.54	0.20	2.3	5	15	7	9
1918....	16.4	−14.1	67	−24	1.68	−0.36	7.18	0.22	16.6	7	12	7	12
1919....	34.0	+ 3.5	70	−23	0.40	−1.64	4.47	0.00	1.4	2	20	5	6
1920....	28.6	− 1.9	72	− 5	1.57	−0.47	7.46	0.10	5.7	5	15	5	11
1921....	37.1	+ 6.6	74	− 1	1.88	−0.16	4.06	0.51	5.4	6	10	7	14
1922....	29.5	− 1.0	66	− 6	1.21	−0.83	6.15	0.32	3.9	5	14	5	12
1923....	39.2	+ 8.7	75	3	2.72	+0.68	8.56	0.10	0.6	6	12	7	12
1924....	24.9	− 5.6	68	−25	1.54	−0.50	4.44	0.23	5.7	7	14	5	12
1925....	29.7	− 0.8	65	−15	1.00	−1.04	3.31	0.03	4.7	4	15	7	9
1926....	32.7	+ 2.2	70	−20	1.90	−0.14	5.55	0.41	4.2	6	11	7	13
1927....	30.8	+ 0.3	73	−24	3.05	+1.01	9.99	0.22	3.6	6	13	6	12
1928....	33.3	+ 2.8	77	−18	0.87	−1.17	2.75	T.	0.5	3	16	7	8
1929....	25.1	− 5.4	72	−13	3.47	+1.43	8.64	0.70	6.8	8	11	6	14
1930....	20.8	− 9.7	73	−31	4.51	+2.47	13.58	0.71	13.0	10	12	5	14
1931....	36.0	+ 5.5	76	− 5	0.69	−1.35	2.12	0.07	2.0	4	16	6	9
1932....	36.4	+ 5.9	73	− 7	3.32	+1.28	9.92	0.29	1.0	9	10	7	14
1933....	41.4	+10.9	72	8	2.43	+0.39	7.87	0.32	0.5	6	14	8	9
Period.	30.5	.....	83	−36	2.04	.....	15.65	0.00	4.5	6	13	6	12

Climatological Data for January, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Charlton	652	52	42.0	+15.3	67	26	16	12	39	1.37	−0.21	0.95	0.5	5	18	7	6	sw.	O. K. Benecke
Clifton Hill	Randolph	731	34	38.1	+10.0	62	22	13	12†	31	1.33	−0.25	1.02	T.	6	16	8	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	42.1	+12.9	65	21	18	12	32	1.87	−0.05	0.97	T.	8	12	12	7	sw.	U. S. Weather Bureau
Downing	Schuyler	876	12	37.7	+12.3	60	15†	10	14	35	1.92	+0.49	1.63	T.	6	12	9	10	s.	James Taylor
Elsberry	Lincoln	449	2	41.4	.....	65	16†	11	12	45	2.92	.....	0.92	0	6	4	7	20	s.	Ray E. Mills
Fayette	Howard	661	53	39.8	+12.8	65	21†	14	12	40	1.57	−0.29	0.56	0	4	..	..	..	.....	J. D Settle
Fulton	Callaway	818	45	40.2	+10.7	66	21	14	12	37	3.45	+1.22	1.60	T.	7	16	10	5	sw.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	1.72	+0.24	1.52	0.5	4	11	8	12	sw.	J W. Pulliam
Hannibal	Marion	534	41	40.8	+13.7	64	21	18	11	31	1.96	+0.24	0.93	0.2	8	9	13	9	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	41.7	+11.9	68	21	16	13	41	3.14	+1.01	1.66	0	5	17	8	6	w.	Mrs. Frank Kliegel
Kirksville	Adair	969	44	38.9	+14.1	60	21	9	14	32	2.47	+1.02	2.10	0.5	3	21	2	8	w.	Prof. J S. Stokes
Louisiana	Pike	469	39	39.1	+11.0	60	16†	13	1	35	2.15	+0.18	0.80	0	5	19	6	6	w.	Stark Bros. Nurseries
Macon	Macon	875	34	38.5	+11.0	63	21	13	1	36	1.64	+0.07	1.34	T.	4	14	9	8	w.	W. C. Brown
Mexico	Audrain	800	44	38.8	+10.8	64	16†	13	1	38	2.12	+0.11	0.86	T.	7	15	9	7	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	1.53	−0.50	0.77	0	3	11	10	10	ne.	J. S. Conway
St. Charles	St. Charles	456	45	42.4	+11.4	64	16†	15	1	34	2.13	−0.06	0.65	0	6	9	12	10	s.	L. C. Saeger
St. Louis	St. Louis City	568	60	43.6	+12.5	65	21	20	1	28	2.18	−0.16	0.86	T.	9	11	10	10	sw.	U. S. Weather Bureau
St. Louis University	St. Louis City	578	21	43.0	+12.8	65	21	20	1	29	1.92	−0.59	0.80	T.	7	16	5	10	s.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	2.69	+1.10	1.67	0	6	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	35	39.2	+11.8	61	21	12	14	33	2.17	+0.12	1.45	1.5	7	17	5	9	s.	Frank Hall
Unionville	Putnam	1,062	40	37.6	+14.4	65	22	8	14	37	1.75	−0.01	1.25	1.5	5	16	4	11	sw.	Geo. W. Davis
Warrenton	Warren	816	51	43.2	+14.0	66	21	14	1	37	3.15	+0.85	1.35	0	6	9	13	9	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	39.4	+14.5	61	21	14	14	29	1.87	+0.31	1.11	0.6	9	10	10	11	sw.	U. S. Weather Bureau
Division means and	extremes	.....	..	40.4	+12.5	68	21	8	14	45	2.13	+0.22	2.10	0.2	6	14	8	9	sw.	
Southeast Lowlands																				
Campbell	Dunklin	314	7	42.8	.....	66	21	15	1	31	3.69	.....	1.30	0	8	15	8	13	s.	Jeff. King
Caruthersville	Pemiscot	265	37	47.4	+ 8.3	67	22	20	1	34	5.47	+0.63	2.46	0	10	..	..	..	.....	Sam Smith
Doniphan	Ripley	341	29	43.6	+ 7.8	69	22	12	1	36	3.56	−0.84	1.02	0	8	15	3	13	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	41.2	+ 7.4	65	22	11	1	34	4.63	+0.85	2.28	0	6	10	6	15	s.	John G. Putz
Marble Hill	Bollinger	470	38	43.8	+ 9.2	72	18	11	1†	34	7.87	+4.20	2.16	0	7	9	6	16	s.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	4.49	−0.36	1.23	0	10	13	8	10	sw	John A. Spence
Poplar Bluff	Butler	339	28	43.4	+ 7.4	68	23	13	1	40	3.05	−1.17	0.98	0	8	15	6	10	w.	J. H. Wolpers
Sikeston	Scott	318	26	46.6	+ 9.6	67	22	20	1	20	4.23	−0.21	0.91	0	9	..	..	..	.....	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	61	45.8	+10.9	65	18	20	1	24	3.78	+0.02	1.03	T.	11	8	9	14	s.	U. S. Weather Bureau
Division means and	extremes	....	..	44.3	+ 8.7	72	18	11	1†	40	4.53	+0.39	2.46	0	9	12	6	13	s.	
Ozark Plateau																				
Arcadia	Iron	926	52	40.0	+ 8.1	65	22	12	1†	38	2.65	−0.39	0.89	0	7	13	6	12	s.	Arcadia College
Aurora	Lawrence	1,370	32	....	.....	..	..	..	..	..	....	.....	....	....	..	..	..	..	.....	W. T. Troughton
Birchtree (near)	Shannon	1,000	38	44.2	+ 9.7	65	21	18	12	37	3.77	+0.58	1.42	0	7	19	5	7	s.	V. H. Kirkendall
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	2.54	.....	1.32	0	6	16	10	5	s.	Ozark Utilities Co.
Dean II	McDonald	1,000	29	44.6	+ 8.7	69	21†	11	11	49	0.96	−1.38	0.42	0	4	10	10	11	sw.	H. E. Dean
Eldon	Miller	934	38	40.4	+ 9.3	66	21	16	12†	39	3.86	+2.23	1.25	0	5	12	14	5	s.	E. H. Shepherd
Farmington	St. Francois	918	22	43.2	+10.6	64	21†	12	12	33	2.15	−0.37	0.57	T.	7	13	11	7	sw.	Robert Forsyth
Goodland	Iron	1,000	40	42.0	+ 9.4	65	21†	8	12	41	2.76	+0.08	0.85	0	6	14	8	9	s.	F. M. Adams
Greenville	Wayne	381	24	41.4	+ 6.4	67	22	12	1†	40	3.65	+0.59	2.37	0	4	15	7	9	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	2.80	+0.07	1.00	0	4	9	11	11	se.	A. W. Madison
Koshkonong	Oregon	958	32	44.6	+ 8.1	68	21	15	13	34	3.36	−0.30	0.80	0	11	13	3	15	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	40.6	+ 8.1	69	17	11	11	36	2.55	+0.02	0.82	T.	6	15	7	9	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	45.0	+11.7	69	21	18	12	33	2.62	+0.88	0.85	T.	8	20	5	6	sw.	Hubert A. Nieman
Mountain Grove (near)	Wright	1,463	32	41.2	+ 8.4	63	19†	14	12	35	2.98	+0.16	1.15	T.	5	16	10	5	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	45.0	+ 9.9	69	21	13	12	39	3.30	+0.80	1.36	0	7	16	10	5	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	43.8	+11.9	67	21	15	12	31	2.00	−0.44	0.69	0	5	5	12	14	se.	F. H. Lane
Salem	Dent	1,173	29	42.8	+10.2	65	21	13	12	35	1.80	−0.99	0.62	0	6	12	4	15	s.	E. E. Martin
Seligman	Barry	1,542	32	46.0[e]	+10.9	68	21	16	12	32	4.04	+1.16	1.35	0	10	17	5	9	s.	Floyd E. Fawver
Seymour (near)	Webster	1,642	27	42.6	+ 8.6	64	21	14	12	34	3.46	+0.91	0.79	T.	7	12	9	10	se.	A. L. Halley
Springfield	Greene	1,324	45	44.3	+10.8	66	18	19	12	26	2.68	+0.34	0.74	T.	6	14	7	10	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	43.8	.....	66	21	14	12	37	2.96	.....	1.31	T.	8	13	10	8	sw.	I. M. Wilson
Division means and	extremes	.....	..	43.1	+ 9.5	69	17†	8	12	49	2.84	+0.22	2.37	T.	6	14	8	9	s.	
Southwest Plain																				
Appleton City	St. Clair	853	38	43.2	+11.9	66	21	16	12	33	2.56	+0.72	1.12	T.	7	11	16	4	sw.	W. G. Bigelow
Clinton	Henry	765	40	42.0	+10.3	67	21	16	12	35	3.12	+1.13	1.40	T.	8	6	20	5	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	39.2	+11.9	65	21	14	12	39	1.11	−0.44	0.62	1.0	6	17	8	6	sw.	John H. Patterson
Lamar	Barton	980	45	42.5	+10.4	68	21	17	12	36	2.97	+1.21	0.95	0	6	19	6	6	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	41.2	+12.3	65	21†	15	12	34	1.69	−0.29	0.95	1.0	6	15	2	14	sw.	J. E. Wheeler
Marshall	Saline	779	46	42.5	+14.6	66	21†	19	11†	36	0.94	−0.77	0.80	0	3	19	8	4	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	43.3	+11.4	66	21	17	12	33	2.18	+0.15	1.03	0	5	14	9	8	s.	George A. Kaupp
Warrensburg	Johnson	878	46	41.6	+12.9	65	21	17	11†	47	1.46	−0.31	1.12	0.8	3	21	3	7	sw.	E. A. Markey
Warsaw	Benton	687	32	44.1	+11.2	68	21	13	12	37	3.59	+1.31	1.50	T.	9	14	9	8	s.	Everett Martin
Division means and	extremes	.....	..	42.2	+11.9	68	21	13	12	47	2.18	+0.30	1.50	0.3	6	15	9	7	sw.	
Northwest Plateau																				
Bethany	Harrison	916	38	37.8	+13.0	64	21	11	14	36	1.30	+0.04	1.05	1.8	5	15	8	8	nw.	A. S. Cumming
Chillicothe	Livingston	779	24	37.4	+10.6	66	21	12	1	46	1.93	+0.40	0.91	2.5	4	20	8	3	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	44	37.4	+12.7	62	21	10	28	36	0.53	−0.38	0.31	2.5	3	15	11	5	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	36.2[d]	+ 9.3	60	21†	13	28	39	0.76	−0.30	0.39	3.0	6	21	2	8	n.	Fred L. Stiff
Grant City	Worth	1,134	29	35.8	+11.0	61	21	10	14	35	0.51	−0.41	0.29	1.4	5	16	7	8	sw.	Howard Rybolt
Kansas City	Jackson	963	44	42.4	+14.2	67	21	19	11	30	1.20	+0.01	0.65	2.5	7	14	14	3	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	37.2	+11.2	65	21	14	1	40	0.69	−0.90	0.52	2.0	3	11	10	10	s.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	0.70	−0.62	0.38	2.5	5	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	41.0	+13.2	66	21	17	1	38	1.01	−0.61	0.77	2.5	4	20	7	4	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	37.6	+14.7	65	21	13	14	37	0.66	−0.36	0.31	2.2	5	15	9	7	s.	J. R. Brink
Oregon	Holt	1,048	77	40.2	+16.1	65	21	11	17	31	0.59	−0.84	0.28	2.0	3	22	8	1	sw.	Mina Wright
St. Joseph	Buchanan	987	23	40.1	+13.1	68	21	16	11	34	0.37	−0.65	0.22	1.0	4	15	11	5	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	30	36.2	+13.3	60	21†	13	17	31	0.32	−0.42	0.18	1.5	3	17	5	9	sw.	Albert Volker
Trenton	Grundy	822	37	38.8	+12.5	65	21	10	14	37	0.99	−0.36	0.65	1.9	5	14	13	4	s.	W. H. Estes
Division means and	extremes	.....	..	38.3	+12.7	68	21	10	14†	46	0.82	−0.38	1.05	2.1	4	16	9	6	sw.	
State means and	extremes	.....	..	41.4	+10.9	72	18	8	12†	49	2.43	+0.39	2.46	0.5	6	14	8	9	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for January, 1933

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi														.10				.40	.73		.11	.23					.18		.03			1.73
Boonville	Missouri																		.50	.50		.04	.52			.02				T.			1.58
Bowling Green	Mississippi														.02				.36	.65		.05		.35		.24		.06					1.73
Brunswick	Grand																		.27	.95		.06						.02		.07			1.87
Canton	Mississippi																		.61	.71		.17	.31					.33				.04	2.17
Clifton Hill	Chariton																			1.02	.02		.02	.19				.04		T.		.04	1.33
Columbia***	Missouri													T				.17	.85		.12	.42			.15		.02		.01		.13	1.87
Downing	Mississippi									.05				.05					1.63			.07	.07					.05		T.		T.	1.92
Edina	....do								T.						.10				.38	.87		.25	.06					.07		T.	T.	T.	1.73
Elsberry	....do																		.59	.83		.17	.92			.34		.07				T.	2.92
Farber	....do																		.91	.29				.46		.22							1.88
Fayette	Missouri																		.50	.50		.01	.56										1.57
Fulton	....do														T.				.56	.72		.30	1.60			.20		.06		.01			3.45
Gorin	Mississippi								T.					.04					1.52			.12					.04						1.72
Hannibal***	....do								T.					.08				.27	.71			.47	.17		T.		.12	T.		.01		.13	1.96
Hermann	Missouri														.02				.41	1.70		.47	1.02			.30		.06					3.98
Jefferson City	....do																		.46	1.20		.20	1.03			.25							3.14
Kahoka	Mississippi														.06				.26	1.18								.16					1.66
Kirksville	....do													.05					2.10										.32	T.			2.47
LaBelle	....do														.05				.45	.95		.05	.05						.06				1.61
Linneus	Grand													.01				.30	1.53		.05	.03				T.		T.		T.	T.	1.92
Louisiana	Mississippi																		.80			.50			.30	.30						.25	2.15
Lucerne	Grand														.11				.09	.41		.12							.05				0.78
Macon	Chariton																		.30	1.04		.08	.22						T.				1.64
Memphis	Mississippi														T.				.33	1.81		T.						T.		T.		T.	2.14
Mexico	....do				T.														.42	.86		.07	.38			.19		.10		.10		T.	2.12
Milan	Grand														.65			.82	.47				.35				.12			.35		.14	2.90
Monroe City	Mississippi													T.					.77			.08	.68										1.53
New London	....do									.03					.04				.39	.44			.56			.07	.04	.02		.03			1.62
Pacific	Meramec																		.42	.08		.38	.61			.24		T.					1.76
Palmyra	Mississippi														.04				.20	.40		.04	.87					.20		.02		.02	1.79
Paris	....do																		.34	.21			.47					.05					1.07
Perry	....do				T.														.31	.45	T.	T.	.44			.05	T.			T.			1.25
Philadelphia	....do														.10				.12	1.89		.09	.29					T.		.06		.05	2.60
St. Charles	Missouri				T														.40	.38		.55	.51			.24		.05				T.	2.13
St. Louis ***	Mississippi				T.				T.					T.				.08	.70		.22	.85	.01		.27	.01	.03	.01	T.	T.		T.	2.18
St. Louis University*	....do								T.									.06	.57		.18	.80			.24		.06					.01	1.92
Shelbina	....do														.04				.32	1.67		.20	.42									.04	2.69
Steffenville	....do													.05	.05				1.45			.15	.20					.22		.05		T.	2.17
Troy	....do																		.44	1.06		.26	1.19			.29							3.18
Union	Meramec																		.32	.41		1.01	.86			.28		.06					2.94
Unionville	Chariton													.20					1.25			.10								.10			1.75
Valley Park	Meramec																		.45	.14		.27	.76			.28		.04				T.	1.94
Warrenton	Mississippi																		.40	1.35	T.	.36	.65			.31		T.				.08	3.15
West Ely	....do													.06				.20	.18		.04	.62				.08			.06			.03	1.17
Winfield	....do																		.63	1.32		.23	1.10			.29							3.57
Keokuk, Ia.***	....do								.01					.10				.22	.89			.30	.12				.17	.02		T.		.04	1.87
Southeast Lowlands																																	
Bragg City	St. Francis						.11		.28		.04							.33				.38			.25				.08		.06	1.53
Campbell	....do									.41								.34	.09		.33	1.30	.53			.67						.02	3.69
Cape Girardeau	Mississippi									.03								.20	.80	.36		.12	1.24			.27							3.02
Caruthersville	....do							.15		.25								.22	.98	.48	2.46	1.18			.26					.06		.03	5.47
Dexter	St. Francis						.05										T.	.43		.66		.81	.94			.47							3.36
Doniphan	Black																	.42	.39	.60	.38	.55	1.02			.15						.05	3.56
Fisk	St. Francis							.06		T.							T.	.23	1.29	.26		.19	1.18			.23		.06					3.50
Jackson	Mississippi																.34	1.31	.42		.08	2.28				.20							4.63
Marble Hill	....do																	2.11	2.12	.32	.14	.32	2.16			.70							7.87
Morehouse	....do							.04		.02							.08	.74	.54	.25	.19	1.23	.95			.45				T.		T.	4.49
New Madrid	....do							.06		.21		.01						.37	.29	.19		1.30	.88			.69					.04	.02	4.06
Parma	St. Francis									.30								.39	.25	.10		1.13	1.11			.75							4.03
Poplar Bluff	Black							.15		.05								.61	.51	.45		.15	.98			.15							3.05
Sikeston	Mississippi						.05		.05								.65	.75	.20		.91	.87			.71						.04	4.23
Cairo, Ill.***	....do						.01		.02			T.					.09	.84	.30	.13	.52	1.03	T.		.46	.37	T.	T.		T.	.01	T.	3.78
Ozark Plateau																																	
Arcadia	St. Francis			T.														.15	.64	.60		.28	.89			.06	T.	.03		T.		T.	2.65
Aurora	Neosho																	.37	1.42	.40	.05	.60	.78			.15							3.77
Birchtree (near)	Black																	.09	.53		.22	1.10			.42						.18	2.54
Caplinger Mills	Osage																	.78	.78	.31		.32	1.23			.22		.01					3.93
Chaonia	St. Francis							.07		.21								T.	.28		.14	T.			.12					T.	T.	.42	0.96
Dean	Neosho						T.	T.	T.										.61	1.25		.51	1.16			.33							3.86
Eldon	Missouri																	.08	.57	.33	.16	.50	.43			.08							2.15
Farmington	St. Francis				T.			T.										.34	.63	.67		.57	1.10			.12	.10						3.58
Fredericktown	....do																		.97	.15		.76	.59			.49							2.96
Galena	White																		.65	.74		.85	.80			.12		.10					2.76
Goodland	Black																	.39	.72		.17		2.37										3.65
Greenville	St. Francis																		.50	.50		1.00			.80								2.80
Hailey	White																	.80	.50	.28	.06	.78	.58			.17						.06	3.86
Koshkonong	Black						.01		.06	.06									.60	1.42		.40	.84			.37						.01	3.64
Lakeside	Osage															.25			.82	.33		.64				.29	T.		T.			.28	2.55
Lebanon	....do				T.													.63	.69	.41		.24	2.23			T.						T.	4.10
Leeper	Black																		.85		.36	.29	.36		.15	.42				.04	T.	.15	2.62
Lockwood	Osage																	T.	1.15	.60		.40	.51			.32				T.		T.	2.98
Mountain Grove	White				T.		T.		T.										1.36	.08	.17	.22	.60	.66					T	T.	T.	.21	3.80
Neosho	Neosho				T.		T.													.76		.34	.51			.33							1.99
Owensville	Gasconade																	.08	1.13	.70		1.41	.54			.44							4.30
Ozark Beach	White																		.69	.11		.30	.27			.63							2.00
Rolla	Meramec																		.51	.99		.60	1.37			.35							3.82
St. Thomas (near)	Osage																		.62	.20	.04	.62	.12			.20		T				T.	1.80
Salem	Meramec																		1.35	.59	.33	.63	.44		.04	.41		.02		.03		.15	4.04
Seligman	Neosho																		.65	.60	.04	.61	.79			.73				T.		.04	3.46
Seymour (near)	White																	.20	.43		.24	.73		.79					T.	T.	T.	.29	2.63
Springfield	....do																		.65	.48		.76	.46			.40		T.				T.	2.75
Steelville	Meramec																		.54	.72		.25	1.53			.21							3.26
Stover	Missouri																		1.31		.08	.24	.85		.03	.28				.01		.16	2.96
Versailles	Osage									.11								.68	.66	.30		.13	1.90			.14		.09					3.95
Williamsville	Black											.02						.18	1.03	.51		.25	1.31			.14						.02	3.46
Willow Sprgs. (near)	White																																

Continued on next page

Daily Precipitation for January, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage				T.														1.12	T.	.10	.26	.33		.58					.12		.05	2.56
Clinton	do																		1.40	.05	.20	.55	.50		.25					.10		.07	3.12
Concordia‖‖	Missouri																	.34		.76			.11							.12		.06	1.39
Harrisonville‖‖	Osage																		.23	.62		.01	.14							.09		.02	1.11
Joplin‖‖	Neosho																	.10	1.22		.31	.62			.55							.77	3.57
Lamar‖‖	do																		.18	.95		.45	.93			.41				T.		.05	2.97
Lamonte	Missouri																	T.	.95	T.	.01	.40	.20							.10		.03	1.69
Marshall	do																	T.	.80			.05			T.		T.				T.	.09	0.94
Nevada	Osage																		1.03		.15	.36	.32		.32								2.18
Osceola‖‖	do																		.03	1.02		.13	.46			.31				.06		.04	2.05
Warrensburg	Missouri																	T.	1.12		T.	.28								.06		T.	1.46
Warsaw	Osage																		1.50	.10	.15	1.30	.08		.05	.30				.06		.05	3.59
Waverly‖‖	Missouri																		.19	1.04										.14		T.	1.37
Northwest Plateau																																	
Bethany	Grand								T.					.05				T.	1.05				.07					T.	.05	.08			1.30
Chillicothe‖‖	do														T.				.12	.91		T.	.49							.41		T.	1.93
Conception	Missouri								T.	T.				.07				T.	.31								T.			.15			0.53
Edgerton	do													T.				**	.39		T.	T.	.04				.02		T.	.29		.02	0.76
Gallatin‖‖	Grand														.22				.20	.16										.15			0.73
Grant City	do								T.	T.				.05				T.	.29			.09	.02				T.			.06		T.	0.51
Kansas City***	Missouri													T.				.09	.56			.04					.01		.22	.08		.20	1.20
Kidder‖‖	Grand														T.				.02	.52		T.	T.					T.		.15		T	0.69
King City	Missouri								T.					.03				.06	.38							.01				.22		T.	0.70
Lexington‖‖	do																		.15	.62			.03				T.			.20		.04	1.01
Maryville‖‖	do								T.					.10				.10	.31				.03							.12			0.66
Oregon	do								T.					T.				T.	.28				.03						T.	.19			0.50
St. Joseph***	do								T.					T.				.09	.06			T.					T.		.18	.04		T.	0.37
Tarkio	do													.05					.18											.09			0.32
Trenton	Grand								T.					.11				T.	.65			.02								.14		.07	0.99

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. *** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for January, 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation					.054	.055	.094	.030	.047	.082	.159					.176	.086	.003	.207	.077	.040	.160	.089	.046	.037	.068	.150	.045	.053	.044	.066	2.51
	Mean temperature	34	40	48	45	40	40	40	38	40	45	29	30	34	36	40	54	36	48	48	44	48	54	44	48	45	46	34	30	38	46	49	41.
	Wind movement	78	89	80	95	41	61	88	41	57	90	140	84	52	80	67	138	108	60	127	52	57	123	80	39	67	55	150	77	102	91	61	2,53

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

Continued from Page 1

TORNADOES

Severe local storms, evidently tornadoes of slight or moderate intensity, occurred at several places in the southern half of the State in January. There were two such storms on the 18th and two on the 21st. Their paths were narrow and rather short. They all moved from southwest to northeast. The first of the four occurred about 8.50 p. m., January 18, near Salem, Dent County. It touched the south part of the city; its path was about 300 yards wide; about a dozen out-houses were destroyed, 15 dwellings damaged, and 50 trees destroyed; total damage estimated at about $5,000; but no injury to persons, although one family was left on the floor of their home after the upper portion of the house had been blown away. The second storm occurred between 11 p. m. and midnight of the 18th, at Dudley, Stoddard County, its path approximately 500 feet wide; total property loss, about $1,000; one person injured. The third storm occurred about 5.30 p. m., January 21, near Avery, on the border line between Benton and Hickory counties; width of path, about one-quarter mile; storm apparently touched the ground only at intervals in its northeastward course; property damage, about $7,000; 3 persons injured. The fourth storm occurred the night of the 21st, in Polk County, striking the farm of Mr. J. J. Carter, destroying or badly damaging out houses; total loss, about $500.

AN UNUSUAL DEPOSIT OF DUST

The Observer at Maryville, Mr. J. R. Brink, reports that "Between 7 o'clock p. m. of January 21 and 7 a. m. of the 22d, an unusual and peculiar windstorm came from the west and distributed a heavy blanket of dust over Maryville, not only over the outside of houses but inside also, and this dust was not sand, but very fine reddish-brown dust." At St. Joseph, Mo., there was a similar occurrence, the dust being observed the morning of the 22d. Evidently, the dust originated somewhere west of St. Joseph and was carried as far northeastward as Chicago, as the air at Chicago was reported full of dust in the forenoon of the 22d, and a light rain just before noon cleared the air and left a deposit of dirt on all exposed objects.

Daily Temperatures for January, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	47	49	52	48	53	58	54	55	54	59	58	42	45	48	61	64	38	63	62	59	65	66	54	65	59	67	55	34	46	53	58	54.5
	Minimum ...	22	29	33	29	24	29	32	31	25	40	19	16	23	18	38	31	23	30	35	30	49	44	28	35	33	31	25	21	30	28	38	29.6
Columbia.	Maximum...	48	48	58	48	55	60	48	52	50	61	42	42	48	49	60	62	35	62	57	58	65	59	53	62	53	61	36	35	46	52	55	52.3
	Minimum ...	21	32	35	28	25	38	33	33	30	41	19	18	27	24	41	30	29	34	34	32	51	40	30	38	36	35	24	24	31	35	42	31.9
Fayette	Maximum...	49	50	55	49	55	60	54	54	50	62	31	42	48	49	62	62	38	61	51	60	65	60	56	65	57	62	39	37	47	57	55	53.0
	Minimum ...	15	24	29	27	22	24	31	27	28	29	18	14	17	19	22	41	24	26	38	25	32	48	26	28	33	26	26	22	25	31	32	26.7
Hannibal	Maximum...	45	46	55	46	52	58	50	49	47	60	43	40	44	41	61	62	34	62	58	53	64	58	51	60	50	51	38	30	39	50	53	50.0
	Minimum ...	22	33	38	27	26	35	36	34	30	41	18	19	27	20	40	31	28	33	30	28	47	43	34	35	32	30	27	28	30	37	37	31.5
Jefferson City §§	Maximum...	45	49	60	60	60	61	47	50	51	64	64	43	50	50	62	64	39	65	52	60	68	57	56	62	55	63	37	35	47	55	56	54.4
	Minimum ...	17	24	25	34	26	26	36	30	30	28	28	17	16	22	21	44	28	29	38	30	30	49	32	31	36	31	27	23	24	33	34	29.0
Kirksville.	Maximum...	45	45	45	45	48	55	54	54	46	55	47	40	38	40	59	56	33	55	54	50	60	59	50	55	51	50	50	50	49	50	55	49.8
	Minimum ...	18	30	30	29	25	30	32	33	27	38	15	17	21	9	36	31	20	28	32	26	44	43	29	30	31	28	23	23	27	30	34	28.0
Louisiana	Maximum...	48	50	53	45	55	58	57	47	48	58	31	40	38	41	58	60	41	60	60	53	50	58	50	55	45	45	38	35	37	48	52	48.7
	Minimum ...	13	30	40	31	20	33	31	33	30	30	20	16	26	30	27	40	30	32	43	27	33	30	27	27	37	35	30	27	25	33	30	29.5
Macon§§	Maximum...	47	39	53	46	50	58	51	55	49	58	28	40	43	50	61	60	35	57	43	53	63	54	50	60	51	54	32	34	40	44	55	48.8
	Minimum ...	13	32	32	30	28	33	33	33	26	29	16	17	24	14	25	43	23	24	34	27	34	47	28	31	32	28	24	23	26	30	34	28.2
Mexico §§	Maximum...	45	47	56	46	52	59	49	50	49	60	29	40	48	45	60	64	38	60	50	56	64	56	51	61	52	58	33	33	40	52	54	50.2
	Minimum ...	13	20	29	30	23	29	34	29	27	27	18	17	18	20	22	37	26	26	37	27	30	47	28	28	34	30	25	24	25	30	35	27.3
St. Louis	Maximum...	38	47	55	52	54	59	52	45	47	59	53	41	48	44	62	62	49	63	60	54	65	62	52	60	48	56	42	35	40	54	53	52.0
	Minimum ...	20	30	35	36	32	40	40	35	33	38	25	21	30	29	36	49	33	38	42	36	45	49	39	38	37	34	28	28	32	40	41	35.1
Unionville	Maximum...	45	45	45	43	50	55	50	57	50	55	45	44	40	45	60	52	32	52	53	56	60	65	62	57	53	46	42	30	47	52	52	49.7
	Minimum ...	18	26	27	30	25	30	30	32	25	30	14	16	17	8	30	30	18	25	30	24	40	45	26	30	30	27	20	20	26	28	32	26.1
Warrenton	Maximum...	41	49	58	50	56	60	57	53	50	61	57	42	49	46	62	62	61	62	62	56	66	64	53	61	58	59	57	35	39	50	54	54.5
	Minimum ...	14	28	33	38	28	32	37	30	29	36	20	16	25	21	35	47	29	34	43	32	44	50	32	33	37	32	26	25	28	35	37	31.8
Southeast Lowlands																																	
Campbell	Maximum...	39	45	55	55	55	54	38	43	50	57	53	40	46	49	58	54	54	65	65	55	66	65	63	60	57	61	55	40	43	53	53	53.1
	Minimum ...	15	20	27	45	29	26	31	30	34	27	27	17	18	25	27	43	41	41	42	32	47	53	36	37	41	32	32	24	29	39	43	32.6
Caruthersville	Maximum...	54	40	47	57	61	63	62	57	57	51	58	55	50	49	48	60	60	58	58	59	65	67	65	65	68	60	58	46	46	48	55	56.2
	Minimum ...	20	27	35	44	37	34	50	39	35	35	47	26	22	30	35	45	50	46	45	45	59	40	45	45	38	36	30	33	36	46	46	38.7
Doniphan	Maximum...	40	49	50	58	58	58	54	45	56	58	55	42	52	53	62	58	54	64	64	58	65	69	65	59	62	62	62	50	42	58	50	55.9
	Minimum ...	12	18	30	45	26	23	30	28	33	28	35	14	16	20	32	44	44	42	30	29	48	54	32	34	31	28	29	21	32	38	42	31.2
Jackson	Maximum...	36	42	51	55	55	56	52	46	50	55	51	43	46	47	59	58	53	61	62	58	64	65	61	59	57	58	55	47	43	58	53	53.3
	Minimum ...	11	20	27	38	23	22	37	21	29	25	26	12	18	21	27	40	33	35	48	26	44	51	30	29	39	28	28	24	25	36	38	29.2
Poplar Bluff	Maximum...	39	48	56	59	57	56	55	47	56	59	53	42	50	45	61	55	58	66	66	56	65	64	68	61	64	63	49	40	43	59	52	55.2
	Minimum ...	13	25	25	36	27	24	29	31	34	25	27	15	17	23	21	46	50	40	35	31	48	54	35	34	42	31	28	21	31	38	45	31.6
Sikeston	Maximum...	40	44	54	56	56	56	57	50	55	58	58	47	47	53	64	62	56	63	64	64	65	67	64	61	62	59	58	41	46	55	55	56.0
	Minimum ...	20	28	33	44	33	34	40	38	36	36	30	24	22	30	34	47	45	44	48	38	50	58	42	40	44	35	37	29	30	42	45	37.3
Cairo, Ill	Maximum...	37	46	55	57	52	59	54	46	50	57	51	40	47	47	59	53	53	65	65	60	65	65	62	62	58	58	49	36	44	51	57	53.5
	Minimum ...	20	29	36	44	34	38	41	37	38	38	27	25	29	32	37	46	42	43	45	41	59	51	44	44	44	38	33	30	32	43	45	38.2
Ozark Plateau																																	
Arcadia §§	Maximum...	39	46	50	60	55	58	50	47	52	55	38	40	50	48	60	60	47	61	57	56	64	65	61	63	58	60	35	37	40	59	52	52.4
	Minimum ...	12	16	25	31	23	23	32	22	22	28	37	12	12	24	26	31	42	37	37	25	26	52	30	29	30	27	30	25	25	30	31	27.5
Aurora	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Birchtree	Maximum...	40	48	54	58	59	57	51	49	53	57	52	44	50	49	61	59	54	61	63	56	65	64	63	60	58	61	55	59	54	59	54	55.7
	Minimum ...	14	23	32	21	25	28	41	28	32	37	32	13	22	23	31	47	41	43	44	32	45	48	33	38	38	30	38	27	33	29	43	32.6
Eldon §§	Maximum...	47	46	60	42	57	59	50	50	53	55	26	43	52	50	59	62	39	64	63	61	66	58	60	62	55	51	36	35	49	57	56	52.4
	Minimum ...	17	21	21	35	27	26	35	30	30	28	26	16	16	23	24	38	29	28	39	31	31	41	34	35	35	32	27	23	24	24	39	28.5
Farmington	Maximum...	40	48	51	59	58	56	50	48	54	56	50	41	52	50	62	61	53	60	57	58	64	63	58	64	57	61	54	38	41	58	51	54.0
	Minimum ...	22	26	31	42	25	32	40	26	31	31	27	12	25	25	31	46	37	37	42	28	45	51	31	33	40	31	28	25	25	36	40	32.3
Koshkonong	Maximum...	41	49	52	60	57	55	51	48	54	53	63	42	49	49	59	58	53	62	63	56	68	65	64	58	58	62	55	40	40	58	49	54.5
	Minimum..	17	24	30	46	30	35	38	35	34	36	29	18	15	26	33	41	47	45	45	37	47	48	40	39	39	35	32	23	31	35	43	34.6
Lebanon	Maximum...	38	42	60	47	52	52	53	42	59	48	39	45	40	55	60	58	69	65	66	55	62	59	56	56	49	42	39	45	48	60	58	52.2
	Minimum ...	16	26	30	34	23	32	39	28	31	19	11	25	19	19	36	37	42	35	45	27	29	36	30	33	22	29	12	27	31	35	42	29.0
Mountain Grove §§	Maximum...	40	46	52	58	55	51	50	47	51	54	34	38	48	47	57	60	55	61	63	57	63	61	61	61	55	59	40	42	41	56	52	52.1
	Minimum ...	17	25	25	33	25	27	35	31	29	29	31	14	16	22	22	42	39	37	41	37	38	45	35	37	34	34	27	20	21	33	36	30.2
Neosho	Maximum...	47	51	61	57	57	57	53	49	51	59	58	40	58	52	57	61	61	65	58	61	69	68	65	59	57	63	54	44	53	48	52	56.3
	Minimum ...	20	30	41	46	23	31	36	28	22	40	19	13	25	28	38	51	36	45	36	30	54	45	30	36	31	35	30	32	36	37	38	33.6
Rolla	Maximum...	42	49	56	56	55	59	53	48	46	59	53	40	50	47	59	62	57	64	63	59	67	63	57	62	58	61	57	36	44	52	53	54.4
	Minimum ...	16	29	34	43	26	36	39	31	30	36	25	15	28	24	36	48	32	37	43	30	46	49	32	36	36	30	27	23	32	34	42	33.1
Springfield	Maximum...	46	49	59	55	56	53	50	46	51	58	46	40	50	49	56	62	51	66	54	56	66	59	60	62	52	60	39	41	45	51	55	53.0
	Minimum ...	23	30	37	38	32	38	40	36	32	39	22	19	30	29	38	43	34	51	41	41	51	47	41	42	34	34	28	24	31	38	40	35.6
Southwest Plain																																	
Appleton City	Maximum...	46	48	58	52	56	56	53	54	49	60	53	43	50	50	58	62	49	64	59	62	66	59	55	64	54	56	45	39	54	53	57	54.3
	Minimum ...	24	30	32	38	25	33	35	30	29	40	20	16	23	22	37	49	26	31	37	35	47	42	33	37	31	36	27	22	33	32	44	32.2
Clinton	Maximum...	40	50	55	53	52	54	52	52	42	60	53	40	45	40	60	62	47	60	58	60	67	58	50	65	47	45	46	55	50	52	55	52.4
	Minimum ...	25	32	32	38	30	32	34	27	28	38	20	16	24	21	34	47	26	33	38	30	48	45	34	34	31	32	26	20	32	31	38	31.5
Harrisonville §§	Maximum...	41	49	56	52	58	57	54	57	52	60	31	39	51	53	58	63	42	60	52	60	65	56	55	64	57	55	42	34	55	51	54	52.7
	Minimum ...	15	26	27	29	24	27	30	27	26	26	17	14	15	20	22	41	20	21	35	32	33	41	30	30	27	28	23	17	19	28	29	25.8
Lamar §§	Maximum...	48	51	60	50	55	58	52	52	54	62	34	45	51	50	59	65	58	65	54	63	68	59	59	66	56	63	45	44	57	50	54	55.1
	Minimum ...	19	28	32	36	24	27	36	29	26	27	23	17	18	24	24	44	29	29	37	35	36	45	33	34	32	31	30	24	24	35	38	29.9
Lamonte	Maximum...	47	50	56	47	54	58	51	54	51	61	46	43	49	58	61	63	33	63	57	63	65	58	54	65	54	58	36	33	51	52	55	52.8
	Minimum ...	22	31	34	30	25	32	32	30	26	40	17	15	22	20	38	29	25	31	36	31	48	41	31	36	32	32	25	20	32	28	31	29.7
Marshall	Maximum...	48	50	56	51	54	59	56	55	55	59	53	43	46	47	61	63	44	61	61	62	66	63	63	66	60	58	49	35	52	52	56	54.9
	Minimum ...	23	23	32	32	30	35	33	29	29	41	19	19	26	21	39	39	24	30	38	31	40	30	30	30	32	34	25	22	30	29	38	30.1
Nevada	Maximum...	47	49	58	53	56	55	53	55	53	61	48	44	52	51	59	64	48	65	61	62	66	61	56	64	54	56	46	42	56	54	56	55.0
	Minimum ...	24	30	34	35	24	35	34	30	27	30	20	17	19	23	36	47	26	32	37	34	47	44	32	32	31	39	29	22	34	31	44	31.6
Warrensburg	Maximum...	46	48	56	49	55	57	55	54	50	64	64	42	49	49	59	62	39	62	58	62	65	58	55	63	56	56	46	41	51	53	56	54.2
	Minimum ...	22	28	31	32	26	26	32	29	26	29	17	17	22	21	38	37	22	29	36	31	47	43	28	36	30	31	23	18	28	29	39	29.1
Warsaw	Maximum...	49	51	61	58	58	58	57	52	53	64	57	42	52	51	62	63	57	65	64	65	68	64	57	64	54	61	50	37	54	57	56	56.8
	Minimum ...	19	32	36	39	21	34	35	25	25	41	20	13	22	20	39	49	27	32	40	29	48	47	29	37	32	32	26	20	31	30	44	31.4
Northwest Plateau																																	
Chillicothe §§	Maximum...	49	49	49	48	54	58	54	58	52	56	30	45	48	51	61	57	33	61	46	57	66	54	52	65	54	57	36	31	45	53	60	50.9
	Minimum ...	12	27	28	23	22	28	21	22	24	24	16	15	20	14	15	37	19	19	31	26	31	45	24	24	28	28	24	18	23	27	27	23.9
Grant City	Maximum...	43	44	46	41	48	55	47	50	48	51	47	44	36	45	55	52	27	41	41	52	61	57	48	55	49	45	35	28	38	48	54	46.2
	Minimum ...	22	24	26	27	25	29	28	32	20	40	13	11	20	10	32	23	14	26	29	25	37	41	23	33	24	30	19	15	27	28	35	25.3
Kansas City ..	Maximum...	47	48	51	48	55	59	53	58	58	56	48	45	45	52	58	54	31	57	54	60	67	58	53	62	54	51	37	31	52	50	60	51.7
	Minimum ...	28	34	37	31	34	40	36	38	33	43	19	23	32	29	42	24	19	31	39	39	51	42	36	40	33	30	24	19	31	34	36	33.1
Kidder §§	Maximum...	48	47	47	45	50	57	51	57	50	54	26	44	39	49	59	53	33	55	44	57	65	52	52	60	51	54	34	32	42	48	58	48.8
	Minimum ...	14	28	27	27	26	29	30	29	24	27	17	15	23	18	19	36	18	18	32	29	35	44	27	28	27	28	23	17	22	27	28	25.5
Lexington	Maximum...	47	49	53	51	56	58	55	59	57	58	52	44	43	52	59	57	38	60	51	61	66	57	58	64	56	55	40	34	50	55	60	53.4
	Minimum ...	17	31	30	29	29	34	33	33	28	29	18	18	22	21	24	44	21	22	38	33	36	45	31	32	30	24	24	20	31	30	31	28.6
Maryville	Maximum...	48	48	51	46	54	57	54	53	52	55	45	46	37	50	56	51	28	45	46	52	65	58	55	58	55	45	34	30	40	51	60	49.2
	Minimum ...	23	24	24	28	24	28	28	32	22	40	14	18	20	13	34	24	14	26	29	25	38	40	25	32	26	31	21	16	27	21	37	25.9
Oregon	Maximum...	52	43	49	47	55	60	58	56	54	58	45	47	40	53	60	53	30	58	54	55	65	59	58	59	57	45	37	30	48	52	62	51.6
	Minimum ...	27	29	29	28	31	35	31	35	26	40	15	20	27	22	39	24	11	27	32	33	49	40	31	35	26	29	21	13	28	28	36	28.8
St. Joseph..	Maximum...	50	48	49	46	53	58	54	56	52	56	33	47	40	52	59	55	31	58	48	57	68	57	55	61	54	48	36	30	44	48	61	50.5
	Minimum ...	28	32	33	29	29	37	32	36	28	33	16	22	27	23	40	21	17	31	34	35	50	37	30	36	28	25	22	18	30	25	37	29.7
Trenton	Maximum...	48	47	48	46	51	56	53	57	49	55	45	45	41	47	59	50	32	57	50	55	65	58	50	61	51	50	36	31	41	51	56	49.7
	Minimum ...	21	27	28	35	26	28	32	34	24	35	16	17	22	10	35	30	19	29	32	26	48	40	25	32	30	30	24	23	29	24	36	28.0

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 2-16-33—915.

551.05
UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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VOL. XXXVII ST. LOUIS, MO., FEBRUARY, 1933 No. 2

GENERAL SUMMARY

During a severe cold spell from the 4th to the 11th, the lowest temperatures since January, 1930, occurred. Zero weather prevailed on the 7-9th, with as low as 10° below zero at many stations and an extreme of 22° below zero at Macon, in the north-central area. However, exceptionally mild days at the beginning of the month and from the 19th to 25th brought the average temperature up to near normal.

This was the third severe cold period of the fall and winter, the first having occurred in the middle of November and the second about December 8-18th. But, for the winter as a whole, the extreme mildness of January and mild spells in December and February overbalanced the cold and gave a winter average temperature considerably above normal.

Precipitation for the month averaged considerably less than normal. It was very light in the northwestern counties. It was mostly in the form of snow over the northern half of the State. In the southeastern counties the rainfall was more than normal at most stations.

River stages in the St. Louis district were rather low. There was much freezing and heavy ice during the 8th to 12th in the Missouri and Mississippi, and the Illinois was mostly frozen from about the 8th to the 23d. Some blocking and gorging occurred in all three rivers, but without serious effects.

At the end of the month, wheat, alfalfa, and pastures were in fair to good condition. Wheat apparently suffered no extensive winter killing. Peaches were reported mostly killed by the sub-zero cold of February 4-11th, but other fruits were thought to be not seriously hurt. Plowing and disking had begun. Some oats had been sown in southwestern counties.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 32.2°, or 0.8° below normal. The highest monthly mean was 40.6° at Caruthersville and the lowest monthly mean was 26.0° at Macon and Kidder. The highest temperature recorded was 78° at Dean and Neosho on the 23d, and the lowest was —22° at Macon on the 8th and 9th. The greatest daily range was 53° at Chillicothe on the 6th.

PRECIPITATION

The average precipitation for the State, 122 stations reporting, was 1.35 inches, or 0.68 inch less than normal. The greatest local monthly amount was 4.05 inches at Sikeston, and the least local monthly amount was 0.21 inch at Oregon. The greatest amount in any twenty-four hours was 2.14 inches at Marble Hill on the 25th. The average number of days with 0.01 inch or more of precipitation was 5. The snowfall averaged 4.2 inches for the State, or 1.0 inch less than normal. The greatest monthly total was 13.5 inches at Brunswick.

MISCELLANEOUS PHENOMENA

Auroras.—None.
Dust.—Duststorm at Tarkio on the 21st and 22d.
Floods.—None.
Fogs, dense.—13th, 14th, and 22d.
Hail.—Light on 1st and moderate on 22d at Grant City; no damage.
Halos, solar.—1st, 4th, 7th, 8th, 9th, 16th, 25th, and 27th.
Halos, lunar.—5th, 6th, 7th, and 12th.
Sleet.—1st, 6th, 7th, 8th, 13th, 14th, 15th, and 17th.
Thunderstorms.—Local on 1st, 22d, 24th, 25th, and 26th.
Winds.—No damaging winds reported.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.13	30.78	9	29.64	1	9.1	27	s.	22	76	53	56	71
Hannibal.....	30.12	30.78	9	29.57	1	9.8	32	sw.	22	72	54	..	..
Kansas City ...	30.13	30.76	9	29.58	5	10.5	32	w.	4	61	45	49	77
St. Joseph	30.11	30.71	9	29.61	6	9.9	31	w.	22	72	48	53	73
St. Louis	30.12	30.79	9	29.62	7	13.0	47	sw.	12	69	50	58	57
Springfield	30.07	30.73	9	29.68	6	11.1	31	w.	4	76	62	65	54
Cairo, Ill.....	30.14	30.80	9	29.48	7	9.9	31	s.	22	77	59	61	59
Keokuk, Iowa.	30.13	30.77	9	29.54	1	9.4	27	sw.	22	72	50	59	71

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	33.0	0.0	73	−17	2.04	+0.01	3.16	0.61	....	7	..	..	..
1889....	29.3	− 3.7	78	− 9	2.57	+0.54	5.97	0.54	....	7	..	..	..
1890....	35.5	+ 2.5	81	− 8	2.24	+0.21	7.00	0.30	....	7	..	..	..
1891....	32.7	− 0.3	78	−13	2.28	+0.25	4.26	1.02	2.4	6	..	..	..
1892....	37.7	+ 4.7	71	2	4.15	+2.12	8.83	1.00	....	9	7	6	16
1893....	27.9	− 5.1	65	−20	1.98	−0.05	5.36	0.20	4.6	6	10	7	11
1894....	30.8	− 2.2	72	−12	2.52	+0.49	7.72	0.65	11.2	6	10	8	10
1895....	23.6	− 9.4	77	−26	0.55	−1.48	1.80	T.	3.8	5	10	10	8
1896....	35.6	+ 2.6	81	−10	1.61	−0.42	4.00	0.22	4.1	5	12	8	9
1897....	34.8	+ 1.8	74	−15	2.30	+0.27	7.88	0.54	8.2	7	7	7	14
1898....	35.4	+ 2.4	78	− 9	1.62	−0.41	3.53	0.21	0.8	5	13	6	9
1899....	20.4	−12.6	72	−32	2.17	+0.14	6.84	0.71	5.3	6	12	8	8
1900....	26.2	− 6.8	70	−16	3.92	+1.89	7.13	1.10	16.6	10	10	6	12
1901....	28.1	− 4.9	76	−19	1.63	−0.40	5.04	0.50	7.6	6	13	7	8
1902....	24.0	− 9.0	72	−17	1.50	−0.53	3.17	0.14	5.5	5	11	8	9
1903....	29.8	− 3.2	74	−25	2.92	+0.89	7.31	0.53	5.8	7	11	6	11
1904....	30.0	− 3.0	82	−18	0.91	−1.12	3.80	T.	1.5	5	11	8	10
1905....	21.5	−11.5	69	−40	1.64	−0.39	3.16	0.47	13.2	8	11	6	11
1906....	33.7	+ 0.7	73	−13	2.28	+0.25	4.40	0.85	4.8	7	15	6	7
1907....	34.8	+ 1.8	77	−15	1.65	−0.38	5.37	0.05	4.5	6	12	5	11
1908....	35.6	+ 2.6	78	− 7	4.32	+2.29	9.35	0.73	4.1	9	13	6	10
1909....	38.8	+ 5.8	71	− 4	3.38	+1.35	8.87	0.45	3.1	9	13	5	10
1910....	28.3	− 4.7	72	−24	1.98	−0.05	6.40	0.07	10.2	6	13	5	10
1911....	38.1	+ 5.1	87	0	3.64	+1.61	7.45	0.85	6.7	8	12	5	11
1912....	28.3	− 4.7	72	−12	2.45	+0.42	4.58	0.64	14.5	6	10	7	12
1913....	29.8	− 3.2	78	− 9	2.21	+0.18	4.78	0.55	8.5	7	12	5	11
1914....	28.3	− 4.7	75	−11	2.71	+0.68	5.23	0.80	14.0	7	12	6	10
1915....	39.4	+ 6.4	72	7	3.18	+1.15	4.94	0.85	4.1	8	9	5	14
1916....	31.4	− 1.6	78	−12	0.98	−1.05	3.00	0.21	5.0	5	13	6	10
1917....	30.5	− 2.5	83	−22	0.41	−1.62	2.76	T.	1.4	2	14	7	7
1918....	34.9	+ 1.9	85	−25	1.11	−0.92	2.15	0.00	0.6	4	15	6	7
1919....	35.3	+ 2.3	71	−10	1.98	−0.05	3.70	0.67	6.4	7	13	4	11
1920....	34.5	+ 1.5	78	− 5	0.57	−1.46	2.94	T.	1.2	4	11	6	12
1921....	40.1	+ 7.1	86	5	0.94	−1.09	5.52	0.02	1.8	4	14	6	8
1922....	35.4	+ 2.4	80	− 5	1.79	−0.24	4.28	0.84	1.9	5	14	6	8
1923....	30.2	− 2.8	75	− 9	1.37	−0.68	4.80	0.10	1.4	5	13	5	10
1924....	33.8	+ 0.8	79	− 5	1.84	−0.19	3.38	0.60	8.1	7	14	4	11
1925....	38.7	+ 5.7	78	1	1.85	−0.18	5.11	0.45	1.7	6	12	6	10
1926....	39.4	+ 6.4	76	+ 4	2.08	+0.05	4.39	0.53	2.9	6	11	6	11
1927....	41.3	+ 8.3	78	1	1.08	−0.95	3.26	0.22	2.3	5	10	8	10
1928....	37.0	+ 4.0	73	− 2	2.28	+0.25	4.10	1.08	1.8	7	12	6	11
1929....	25.0	− 8.0	64	−23	1.92	−0.11	5.90	0.53	9.4	7	10	5	13
1930....	44.5	+11.5	89	− 5	1.71	−0.32	4.42	0.39	1.3	4	13	8	7
1931....	40.9	+ 7.9	75	5	2.40	+0.37	5.07	0.45	0.3	6	12	6	10
1932....	42.4	+ 9.4	83	− 3	1.41	−0.62	5.25	0.23	2.0	6	12	7	10
1933....	32.2	− 0.8	78	−22	1.35	−0.68	4.05	0.21	4.2	5	14	7	7
Period.	33.0	.....	89	−40	2.03	.....	9.35	0.00	5.2	6	12	6	10

Climatological Data for February, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	30.7	+ 0.9	71	25	−12	8	35	1.32	−0.47	0.45	13.5	8	16	5	7	nw.	O. K. Benecke
Clifton Hill	Randolph	731	34	26.4	− 3.8	77	23	−19	9	45	1.22	−0.21	0.60	12.0	6	14	7	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	31.6	− 0.1	73	23	−10	8	33	0.97	−1.07	0.47	4.5	6	13	8	7	w.	U. S. Weather Bureau
Downing	Schuyler	876	12	27.5	− 4.8	68	23	−19	9	36	0.24	−1.08	0.24	3.0	1	15	9	4	sw.	James Taylor
Elsberry	Lincoln	449	2	31.9	.....	71	23	− 9	8	43	1.28	.....	0.41	2.5	6	13	7	8	nw.	Ray E. Mills
Fayette	Howard	661	53	28.8	− 1.8	75	23	−11	8†	45	1.26	−0.54	0.34	6.0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	30.7	− 2.4	73	23	−11	7	38	1.11	−0.65	0.52	1.8	7	16	4	8	w.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	....	..	..	0.64	−0.80	0.60	6.0	2	14	6	8	sw.	J. W. Pulliam
Hannibal	Marion	534	41	30.4	+ 0.7	70	23	−11	9	33	0.44	−1.42	0.29	3.3	6	15	5	8	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	31.0	− 1.1	75	23	−10	8†	40	1.55	−0.37	1.00	2.0	4	13	9	6	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	44	28.1	+ 1.0	68	23	−16	9	35	0.62	−1.08	0.60	6.2	2	14	7	7	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	39	29.4	− 1.5	65	23	−10	8†	34	0.37	−1.91	0.27	1.2	2	21	5	2	w.	Stark Bro's Nurseries
Macon	Macon	875	34	26.0	− 3.6	64	24	−22	8†	41	0.85	−0.97	0.62	9.3	4	15	8	5	sw.	W. C. Brown
Mexico	Audrain	800	44	29.2	− 0.9	71	23	−10	9†	39	1.37	−0.73	0.50	5.8	7	15	8	5	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	....	..	..	0.72	−0.77	0.46	5.0	2	9	11	8	se.	J. S. Conway
St. Charles	St. Charles	456	45	34.4	+ 1.1	72	23	− 7	8	33	0.94	−1.55	0.41	2.2	6	12	8	8	nw.	L. C. Saeger
St. Louis	**St. Louis City**	568	60	35.1	+ 0.3	71	23	− 5	8	41	0.96	−1.60	0.48	1.5	5	11	9	8	nw.	**Section Center**
St. Louis University	St. Louis City	578	21	34.7	+ 2.5	72	23	− 6	8	40	1.34	−0.60	0.45	5.2	7	13	5	10	w.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	....	..	..	0.80	−1.13	0.50	6.0	3	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	35	28.2	− 1.5	65	23	−15	9	42	0.67	−1.12	0.50	6.5	4	14	8	6	s.	Frank Hall
Unionville	Putnam	1,062	40	27.6	+ 0.9	65	23†	−18	8	40	0.70	−1.07	0.70	7.0	1	16	8	4	sw.	Geo. W. Davis
Warrenton	Warren	816	51	33.4	+ 2.5	72	23	−10	8	39	1.59	−0.46	0.84	4.0	5	12	9	7	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	28.0	− 0.3	65	23	−16	9	34	0.65	−0.90	0.50	5.8	2	14	8	6	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**30.2**	**− 0.6**	**77**	**23**	**−22**	**8†**	**45**	**0.88**	**−0.88**	**1.00**	**5.2**	**4**	**14**	**7**	**7**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	36.8	.....	69	24	1	8†	36	2.93	.....	1.12	4.0	11	13	6	9	n.	Jeff. King
Caruthersville	Pemiscot	265	37	40.6	+ 0.3	72	24	5	8†	32	1.88	−1.74	0.45	3.5	9	..	..	..	.....	Sam Smith
Doniphan	Ripley	344	29	37.3	− 2.0	71	23	− 7	11	43	3.35	+0.30	1.26	4.2	12	15	3	10	n.	W. W. Martin
Jackson	Cape Girardeau	428	42	35.8	− 0.7	69	23	− 1	9	34	3.26	+0.42	1.05	2.5	10	11	3	14	n.	John G. Putz
Marble Hill	Bollinger	470	38	36.4	− 0.2	72	23†	− 1	8	36	3.17	−0.08	2.14	2.0	6	10	9	9	n.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	....	..	..	3.32	+0.38	1.28	3.0	12	13	5	10	sw.	John A. Spence
Poplar Bluff	Butler	339	28	36.8	− 1.3	71	23	−3	11	41	3.19	+0.28	1.00	4.0	7	15	4	9	w.	J. H. Wolpers
Sikeston	Scott	318	26	37.8	+ 0.6	70	24	2	9†	31	4.05	+0.99	0.80	4.9	10	..	..	..	.....	John A. LaFont
Cairo, Ill	Alexander, Ill	358	61	37.8	− 0.7	70	24	1	9	38	3.77	+0.64	1.53	3.8	12	8	7	13	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**37.4**	**− 0.6**	**72**	**23†**	**− 7**	**11**	**43**	**3.17**	**+0.26**	**2.14**	**3.5**	**10**	**12**	**5**	**11**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	52	32.9	− 1.2	71	23	− 6	9	36	2.10	−0.84	1.00	1.5	8	15	4	9	s.	Arcadia College
Aurora	Lawrence	1,370	32	....	.....	..	..	....	..	..	....	.....	.....	.....	..	..	..	..	.....	.....
Birchtree (near)	Shannon	1,000	38	36.1	− 0.2	70	23	− 4	8	36	2.22	−0.26	0.76	3.5	7	18	2	8	s.	V. H. Kirkendall
Caplinger Mills	Cedar	750	7	....	.....	..	..	....	..	..	0.47	.....	0.23	2.0	3	12	8	8	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	29	34.4	− 1.3	78	23	−12	8†	52	1.70	−0.08	1.08	3.0	5	14	6	8	nw	H. E. Dean
Eldon	Miller	934	38	31.8[a]	− 1.3	74	23	− 9	8†	40	1.04	−0.76	0.55	2.0	5	8	17	3	sw.	E. H. Shepherd
Farmington	St. Francois	918	22	34.7	− 2.2	71	23	− 6	8†	32	1.28	−1.68	0.43	2.9	11	13	8	7	sw.	Robert Forsyth
Goodland	Iron	1,000	40	33.6	− 0.7	72	23	− 8	11	44	1.15	−1.17	0.40	3.5	9	14	6	8	n.	F. M. Adams
Greenville	Wayne	381	24	34.2	− 1.6	71	23	−10	11	46	2.24	−0.76	0.91	3.0	5	15	4	9	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	....	..	..	2.14	+0.30	1.03	3.2	5	11	9	8	se.	A. W. Madison
Koshkonong	Oregon	958	32	37.0[a]	− 2.1	74	21†	− 6	8	40	2.69	−0.06	1.05	4.0	9	15	4	9	nw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	34.0	− 0.4	76	23	−15	8	50	1.00	−1.29	0.60	2.5	4	17	4	7	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	36.2	− 0.8	76	23	−11	8	50	1.11	−0.66	0.45	2.0	6	19	6	3	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	31.2	− 3.9	70	23	−11	8	36	1.72	−0.50	0.99	3.2	6	15	5	8	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	36.6	− 1.0	78	23	−11	8	51	0.68	−1.56	0.30	1.5	4	17	5	6	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	34.6	− 1.7	72	23	− 8	8	39	0.71	−1.44	0.27	0.5	7	7	9	12	se.	F. H. Lane
Salem	Dent	1,173	29	33.8	− 2.0	70	23	− 8	8	42	1.79	−0.48	0.92	1.2	6	15	2	11	s.	E. E. Martin
Seligman	Barry	1,542	32	37.0[a]	− 0.5	70	24	−11	8	47	2.70	+0.81	0.98	3.0	7	17	6	5	w.	Floyd E. Fawver
Seymour (near)	Webster	1,642	27	34.1	− 0.9	71	23	−11	8	42	1.54	−0.63	0.93	2.5	6	13	7	8	se.	A. L. Hailey
Springfield	Greene	1,324	45	34.5	− 0.7	74	23	−13	8	37	1.09	−1.26	0.69	1.8	6	13	4	11	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	34.0	.....	75	23†	−11	8	46	0.97	.....	0.35	1.5	6	14	7	7	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**34.5**	**− 1.3**	**78**	**23**	**−15**	**8**	**52**	**1.63**	**−0.59**	**1.08**	**2.4**	**6**	**14**	**6**	**8**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	33.8	− 0.1	72	23	−13	8	49	1.16	−0.62	0.58	2.7	6	15	10	3	sw.	W. G. Bigelow
Clinton	Henry	765	40	32.7	− 0.9	75	24	−12	8†	44	1.59	−0.38	0.70	5.5	6	9	14	5	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	29.0	− 1.7	72	23	−15	8†	43	1.24	−0.62	0.68	5.0	5	14	3	11	nw.	John H. Patterson
Lamar	Barton	980	45	33.0	− 2.3	76	23	−11	8	40	0.74	−1.35	0.35	1.0	3	15	8	5	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	31.3	− 1.9	74	23	−12	8†	50	1.66	−0.23	0.70	4.9	5	15	2	11	nw.	J. E. Wheeler
Marshall	Saline	779	46	31.8	+ 0.9	73	23	−13	8	46	1.73	−0.01	0.90	12.0	5	19	7	2	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	34.6	+ 0.7	74	23†	−13	8	45	0.35	−1.42	0.30	3.5	2	14	6	8	sw.	George A. Kaupp
Warrensburg	Johnson	878	46	31.6	− 0.9	73	23	−15	8	39	1.03	−1.00	0.50	8.3	7	17	5	6	sw.	E. A. Markey
Warsaw	Benton	687	32	34.2	− 1.4	75	23	−11	8	49	0.90	−1.43	0.38	2.0	5	13	7	8	s.	Everett Martin
Division means	**and extremes**	.....	..	**32.4**	**− 0.8**	**76**	**23**	**−15**	**8†**	**50**	**1.18**	**−0.70**	**0.90**	**5.0**	**5**	**15**	**7**	**6**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	28.3	+ 0.8	70	23	−16	8	39	0.25	−1.20	0.15	2.5	2	19	3	6	nw.	A. S. Cumming
Chillicothe	Livingston	779	24	26.8	− 5.2	72	23†	−17	9	53	1.51	−0.35	0.89	8.5	4	17	6	5	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	44	28.2	0.0	68	23	−20	8	35	0.37	−0.82	0.15	4.0	4	16	6	6	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	28.5	− 5.8	73	24	−16	8	39	0.29	−1.07	0.15	3.1	5	16	6	6	n.	Fred L. Stiff
Grant City	Worth	1,134	29	26.8	− 1.8	66	24	−18	8	33	0.26	−0.87	0.19	4.5	3	13	8	7	sw.	Howard Rybolt
Kansas City	Jackson	963	44	32.1	+ 0.9	73	23	−13	8	48	0.93	−0.82	0.81	6.6	5	14	9	5	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	26.0	− 2.4	70	24	−16	8†	50	0.53	−0.98	0.30	5.5	4	14	5	9	nw.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	....	..	..	0.33	−1.00	0.16	4.5	4	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	30.5	− 0.5	75	23	−13	8	37	1.00	−0.98	0.85	12.0	4	18	6	4	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	29.2	+ 3.4	69	23†	−19	8	38	0.40	−0.99	0.30	4.5	2	17	4	7	nw.	J. R. Brink
Oregon	Holt	1,048	77	31.2	+ 2.4	72	23	−17	8	38	0.21	−1.39	0.14	3.0	2	18	5	5	sw.	Mina Wright
St. Joseph	Buchanan	967	23	29.8	− 2.6	72	24	−15	8	47	0.31	−1.11	0.24	2.7	4	16	6	6	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	30	27.3	− 1.7	67	24	−18	8	39	0.30	−0.79	0.12	4.2	5	17	4	7	sw.	Albert Volker
Trenton	Grundy	822	37	28.7	− 0.7	68	23	−15	8	33	0.53	−1.00	0 40	4.0	2	12	11	5	s.	W. H. Estes
Division means	**and extremes**	.....	..	**28.7**	**− 1.0**	**75**	**23**	**−20**	**8**	**53**	**0.53**	**−0.95**	**0.89**	**5.0**	**4**	**16**	**6**	**6**	**nw.**	
State means	**and extremes**	.....	..	**32.2**	**− 0.8**	**78**	**23**	**−22**	**8†**	**53**	**1.35**	**−0.68**	**2.14**	**4.2**	**5**	**14**	**7**	**7**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for February, 1933

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Northeast Plain																																	
Bethel	Mississippi	.10				.03		.46	.32																								0.88
Boonville	Missouri	.17			.02	.03		.33	T.		.01	T.														.18							0.74
Bowling Green	Mississippi	.11				.05		.82	.10																	.37							0.95
Brunswick	Grand	.28			.03	.07		.45	.30		.06				.03											.10							1.32
Canton	Mississippi						**	.57																									0.57
Clifton Hill	Chariton	.15			.20		.06	.60			.20			T.												.01							1.22
Columbia***	Missouri				.06		.15	.22		.02	.05			T.	T.										.47								0.97
Downing	Mississippi				T.		T.	.24																									0.24
Edina	do	.05			T.	T.		.80	T.						T.									T.									0.85
Elsberry	do	.26			.05	.10	.34	.12																		.41							1.28
Farber	do	.06			T.	T.		.50	.09																	.31							0.96
Fayette	Missouri	.18			.10		.20	.34			.10															.34							1.26
Fulton	do	.07			.02	.07		.39	.03		T.	.01														.52							1.11
Gorin	Mississippi	.04			T.			.60																									0.64
Hannibal***	do	.03		T.	.03		.16	.19			.02			T.											.01								0.44
Hermann	Missouri	.25			.03	.08		.28	.13																	.23							1.00
Jefferson City	do	.24			T.	.05			.26																	1.00							1.55
Kahoka	Mississippi							.34	.14																								0.48
Kirksville	do				.02			.60																									0 62
LaBelle	do					.01		.60	.08						.01																		0.70
Linneus	Grand			T.	.30		.50		T.					T.																		0.80
Louisiana	Mississippi						.10	.27																									0.37
Lucerne	Grand							.40	T.	.05																							0.45
Macon	Chariton	.15				.03	T.	.62	.05																								0.85
Memphis	Mississippi				T.	T.		.32	.10			T.			T.																		0.42
Mexico	do	.15			.05	.07		.50	.05			.05														.50							1.37
Milan	Grand				.05		.15	.65																									0.85
Monroe City	Mississippi	.26			T.			.46																T.									0.72
New London	do	.24			.03	.02		.27	.05			T.		.01												.11							0.73
Pacific	Meramec	.11			T.	.10		.60	.02			T.														.37							1.20
Palmyra	Mississippi							.09	.25						.05																		0.39
Paris	do	.07				.05		.25	.10		.30															.30							1.07
Perry	do	.10			.05	.05		.48			T.			T.												.10							0.78
Philadelphia	do					T.		.21	.30					T.																			0.51
St. Charles	Missouri	.09			.02	.10	.10	.22																	T.	.41							0.94
St. Louis***	Mississippi	.06			.09	T.	.32	.18	T.	T.	T.			T.	T.					T.					.31	T.							0.96
St. Louis University*	do	.03			.11		.39	.45	.01		.01			T	T.					T.					.34								1.84
Shelbina	do	.13						.50																		.17							0.80
Steffenville	do	.05			.02		.10	.50			T.			T.																			0.67
Troy	do	.22			T.	.08		.31	.17																	.26							1.04
Union	Meramec	.08			T.	.13		.38	.20																	.37							1.16
Unionville	Chariton				T.			.70																									0.70
Valley Park	Meramec	T.			T.	.20		.67	T.																	.56							1.43
Warrenton	Mississippi	.20			T.	.20	.15	.20																		.84							1.59
West Ely	do			.03	T.		.38	.12		.03	T.			T.																			0.56
Winfield	do	.28					.60		.15																	.42							1.45
Keokuk, Ia.***	do				T.		.27	.38			T			T.																			0.65
Southeast Lowlands																																	
Bragg City	St. Francis						.15	.90	.06		.36				.06					.03				.06									1.62
Campbell	do	.11	.01				.18	1.12			.30			.08	.46	.17		.33	.07	.10													2.93
Cape Girardeau	Mississippi	.07						.89	.53			.25			.13	.11			.11		.11					.84	T.						3.04
Caruthersville	do						.45	.04	.05		.32			.30				.34		.15				.15	.08							1.88
Dexter	St. Francis							1.22	T.			.44			.37				.40							.86							3.29
Doniphan	Black	.12					.16	1.10			.10	.25		.20	.25	.08		.08	.09	.07					T.	.85							3.35
Fisk	St. Francis	.04						1.17	.24			.49		T.	.07	.63		T.	.36							.23	.19						3.42
Jackson	Mississippi	.28				.05	.20	1.05	T.		.20			.07	.15			.18		.08						1.00							3.26
Marble Hill	do							.32	.06			.36				.13		.16								2.14							3.17
Morehouse	do	.04	T.			T.	.16	1.28			.03	.21		.02	.17	.07		.30	.12	.11	T.					.81							3.32
New Madrid	do	.04	.01	.01				.65	.98	T.		.35			.21	.44			.28		.14					.34	.20						3.65
Parma	St. Francis							1.07	.42			.28			.14	.40			.47		.10					.65	.12						3.65
Poplar Bluff	Black							1.00	.28			.25		T.	.03	.35			.40							.88							3.19
Sikeston	Mississippi				.04		.80	.75	.05		.40			.35	.22			.57							.75		.12						4.05
Cairo, Ill.***	do	.02	T.		T.	T.	.37	1.16	.04		.28			.10	.27			.20	.06	.20				T.	.04	1.03							3.77
Ozark Plateau																																	
Arcadia	St. Francis		T.		T.	.03	T.	.64	.11	T.	T.	.10		T.	.01	.06			.15	T.						1.00							2.10
Aurora	Neosho																																
Birchtree (near)	Black	.20					.14	.60			.18					.10			.24							.76							2.22
Caplinger Mills	Osage	.14						.23			T.															.10							0.47
Chaonia	St. Francis	.22						.98	.36			.38			.16	.21			.13		.12					.79	.05						3.40
Dean	Neosho						T.	.10	.10		.20								.22							1.08			T				1.70
Eldon	Missouri	.30				.01		.11	.07																	.55							1 04
Farmington	St. Francis	.05			.03	.06	.11	.38	.03		.09			.03				.05	T.	.02						.43							1.28
Fredericktown	do							.70	.06			.11				.08			.22							.70							1.87
Galena	White	.25																.10	.18							1.20							1.73
Goodland	Black		.05		.15	.08	.20		.02		.10	.40			.03				.12														1.15
Greenville	St. Francis						.21	.80				.23				.09		T.		T.						.91							2.24
Hailey	White							.81			.20							.05		T.				.05	1.03			T.				2.14
Koshkonong	Black	.09					.21	.50			.40				.20	.03		.05		.16						1.05							2.09
Lakeside	Osage	.30			T.	.02		.20	.25			.05				.02					.03					.56							1.43
Lebanon	do				T.			.10				.11			.19			T.							T.	.60							1.00
Leeper	Black	.49						.86	.14			.20			T.				.09							.83							2.61
Lockwood	Osage	.15					T.	.20			.09				T.			.10							.12	.45							1.11
Mountain Grove	White	.10			T.			.20	.02			.30			T.	T.			.11							.99							1.72
Neosho	Neosho	.17						.19			T.				T.			.30	.02						T.								0.68
Owensville	Gasconade					.26		.11	.11			.26																					0.74
Ozark Beach	White	.14						.15				.10							.30							1.17							1.86
Rolla	Meramec	.08	T.		T.	.02	T.	.25	.04			.03				.02			T.							.27							0.71
St. Thomas (near)	Osage	.30			T.	T.		.26																		1.00							1.56
Salem	Meramec		T.		T.		.35	.32			.05			T.	T.			.10							.05	.92							1.79
Seligman	Neosho	.18						.40			.25				T.			.32	T.						.53	.98		.04					2.70
Seymour (near)	White	.08					T.	.11			.20				T.			.14							.08	.93							1.54
Springfield***	do				T.		.17	.08	T.		.06			T.	T.			.09		T.					.29	.40							1.09
Steelville	Meramec	.14	T.		.05	.06		.36	.08			T.				T.			T.							.29							0.98
Stover	Missouri	.14				T.		.32	T.			T.														.36							0.82
Versailles	Osage	.11			.05		.08	.35			T.														.03	.35							0.97
Williamsville	Black	.25						.86	.25			.11			.06	.17			.09	.01	.05					.68	.06						2.59
Willow Sprgs. (near)	White	.13			.06			.46				.14			.02	.09			.18							1.01							2.09

Continued on next page

Daily Precipitation for February, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Southwest Plain																																
Appleton City	Osage	.07			.02		.06	.58			.02														T.	.41						1.16
Clinton	do	.10			.20		.06	.70			.08															.45						1.59
Concordia‖	Missouri	.28		T.		1.41					.11															.02						1.82
Harrisonville‖	Osage	.43			T.	.03			.68		.08															.02						1.24
Joplin ‖	Neosho						.03												.59						.24	.12						0.98
Lamar ‖	do	.35						.24																		.15						0.74
Lamonte	Missouri	.28			.14		.39	.15			.70														T.							1.66
Marshall	do	.18			.20		.05	.90																		.40						1.73
Nevada	Osage							.30			.05																					0.35
Osceola‖	do	.12						.33																		.38						0.83
Warrensburg	Missouri	.23			.06		.06	.50	.03		.10														T.	.05						1.03
Warsaw	Osage	.13			.03		.09	.27																	T.	.38						0.90
Waverly ‖	Misouri	.05			.07			1.04			T.	.05														.05						1.26
Northwest Plateau																																
Bethany	Grand			T.	.15		T.	.10						T.	T.																	0.25
Chillicothe ‖	do	.21			.08	T.	.33	.89			T.			T	T.																	1.51
Conception	Missouri			.05	.15		.05	.12						T.									T.									0.37
Edgerton	do	T.			.10	.01	.02	.15			.01			T.	T.										T.							0.29
Gallatin ‖	Grand	.01			.02	.10		.60	T.																							0.73
Grant City	do	T.		T.	.06	T.	T	.19	T.	T				T.	T.					T.			.01									0.26
Kansas City***	Missouri				.07		.43	.38		.03	.02			T.	T.										T.							0.93
Kidder ‖	Grand	T.			.08	.07		.30	.08						T.																	0.53
King City	Missouri				.16		.03	.12						.02																		0.33
Lexington ‖	do				.05			.85	.07		.03																					1.00
Maryville‖	do			T.	.10		.30							T.																		0.40
Oregon	do			T.	.07		T.	.14						T.																		0.21
St. Joseph***	do			T.	.06		.09	.15		T.	T.			.01	T.																	0.31
Tarkio	do			.03	.09		.03	.12							.03																	0.30
Trenton	Grand			T.	.13		T.	.40	T.	T.				T.																		0.53

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for February, 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Lakeside (Osage Dam)	Evaporation	.051	.090	.066	.057																					.086	.099	.094	.069	..	..	..	.....
	Mean temperature	44	36	34	28	22	25	4	0	3	10	24	28	38	25	30	35	36	38	38	38	44	46	53	52	44	41	40	42	..	..	..	32.2
	Wind movement	124	82	52	64	143	108	164	179	141	62	129	84	111	79	87	52	88	46	93	59	100	102	111	41	99	66	89	68	..	..	..	2,573

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

ERRATA

January, 1932, page 2. Temperature departure for Seligman should be + 6.1. Mean temperature for the Ozark Plateau section should be + 6.6.

May, 1932, page 22. Mean temperature for Seligman should be 65.9[1]; and departure should be + 1.4. Mean temperature for the Ozark Plateau section should be 65.7; and the departure for the section should be + 0.6.

July, 1932, page 32. Mean temperature for Lamonte should be 80.1; and departure should be + 1.0; highest temperature and date should be blank. Mean temperature for the Southwest Plain section should be 80.2, and the departure should be + 1.8. On page 35, the daily maximum and mean maximum temperature for Lamonte should be blank.

August, 1932, page 37. Mean temperature for Lamonte should be 77.8 and the departure should be + 0.7; highest temperature and date should be blank. Page 40, the daily maximum and the mean maximum temperature for Lamonte should be blank.

September, 1932, page 42. Mean temperature for Lamonte should be 68.2 and the departure should be −2.0; highest temperature and date should be blank. Mean temperature for the Southwest Plain section should be 68.6, and the departure should be − 1.4. Page 45, the daily maximum and mean maximum temperature for Lamonte should be blank.

January, 1933, page 1, Comparative Data table, the lowest temperature for 1897 should be −16; and the least monthly precipitation for 1906 should be 0.60. Page 2. Greatest precipitation in twenty-four hours at Springfield should be 0.79. Page 5. Maximum temperature on the 22d at Springfield should be 60.

Daily Temperatures for February, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	58	45	39	39	21	54	24	0	5	18	25	37	39	25	36	43	41	53	49	51	59	63	70	68	71	55	51	59	..	..	..	42.8
	Minimum ...	31	21	24	6	− 2	19	− 5	−12	−11	− 4	11	21	17	4	27	28	21	35	26	29	45	36	39	37	26	30	27	..	..	..	18.6
Columbia.	Maximum...	46	42	39	28	25	40	14	1	6	22	26	44	43	24	41	49	41	49	51	50	64	64	73	67	51	50	50	55	..	..	..	41.2
	Minimum ...	33	25	24	12	1	14	− 5	−10	− 7	6	5	22	24	20	15	30	28	23	34	31	32	44	40	44	38	30	31	30	..	..	..	21.9
Fayette	Maximum...	48	45	44	20	38	40	3	5	9	19	30	42	38	25	41	48	44	52	52	52	64	65	75	63	54	56	53	60	..	..	..	42.3
	Minimum ...	31	23	20	12	− 1	1	− 3	−11	−11	−11	− 4	− 3	20	17	7	8	26	19	21	27	29	31	33	34	36	24	26	24	..	..	..	15.2
Hannibal	Maximum...	50	40	40	27	23	40	18	− 1	3	20	21	40	37	23	37	49	39	47	52	49	54	64	70	65	52	49	49	55	..	..	..	39.7
	Minimum ...	34	24	24	13	2	18	− 5	−10	−11	3	4	17	22	19	13	29	30	24	36	31	28	42	37	41	38	29	29	30	..	..	..	21.1
Jefferson City §§	Maximum...	54	45	43	27	35	33	6	2	10	5	33	45	44	24	41	54	42	51	54	51	65	65	75	68	54	53	52	57	..	..	..	42.4
	Minimum ...	36	26	24	22	2	3	6	−10	−10	− 7	0	5	26	21	15	15	27	24	24	30	29	33	41	41	42	28	28	29	..	..	..	19.6
Kirksville.	Maximum...	50	51	35	31	18	42	15	− 1	2	15	20	37	33	23	36	39	43	46	47	49	57	60	68	67	66	52	54	58	..	..	..	39.8
	Minimum ...	28	20	28	4	− 2	12	− 8	−15	−16	− 4	2	8	13	13	8	25	24	21	32	27	22	40	34	35	34	27	22	26	..	..	..	16.4
Louisiana	Maximum...	43	43	37	26	19	38	14	0	10	23	20	40	43	26	40	50	53	50	50	45	48	60	65	63	57	56	47	52	..	..	..	39.9
	Minimum ...	36	25	20	18	2	12	4	−10	−10	− 5	− 2	13	19	20	10	26	26	26	36	33	26	38	31	30	26	30	23	22	..	..	..	18.8
Macon§§	Maximum...	45	41	39	18	34	40	− 2	− 2	5	20	30	38	28	25	36	42	40	47	43	30	52	62	46	64	53	53	49	58	..	..	..	36.9
	Minimum ...	30	20	22	7	− 5	4	− 4	−22	−22	−13	− 3	− 3	19	15	9	10	25	23	33	28	25	30	37	38	35	28	29	27	..	..	..	15.1
Mexico §§	Maximum...	46	43	42	23	33	39	3	3	9	25	29	42	41	24	41	50	42	50	53	50	62	56	71	64	53	52	52	56	..	..	..	41.2
	Minimum ...	32	23	22	20	− 3	3	1	− 9	−10	−10	3	3	21	18	13	13	27	21	21	29	28	28	37	36	37	28	28	25	..	..	..	17.3
St. Louis	Maximum...	51	43	46	34	21	39	41	7	12	24	30	41	43	37	37	52	40	49	52	51	56	65	71	69	59	49	50	54	..	..	..	43.7
	Minimum ...	39	32	32	19	6	21	0	− 5	− 3	12	12	21	31	24	21	26	33	32	38	35	35	43	46	53	40	34	31	35	..	..	..	26.5
Unionville	Maximum...	55	48	36	33	20	45	25	− 4	5	15	22	38	35	25	36	45	45	47	47	50	55	60	65	65	58	55	50	56	..	..	..	40.4
	Minimum ...	25	18	18	2	− 4	12	−15	−18	−17	−10	0	5	12	10	8	20	22	17	32	30	20	40	30	35	32	33	28	26	..	..	..	14.7
Warrenton	Maximum...	51	45	43	39	23	37	39	3	9	28	29	42	42	41	39	52	50	49	54	49	61	65	72	65	64	50	50	54	..	..	..	44.5
	Minimum ...	35	25	26	20	− 1	13	0	−10	− 8	6	8	20	26	21	14	26	29	27	35	30	30	41	40	44	40	30	28	28	..	..	..	22.2
Southeast Lowlands																																	
Campbell	Maximum...	58	51	47	42	43	42	43	20	21	29	35	42	42	42	37	49	47	53	50	55	66	65	67	69	64	50	50	56	..	..	..	47.7
	Minimum ...	38	30	25	30	17	21	14	1	1	8	17	6	27	34	23	22	35	31	31	28	35	37	35	43	38	30	28	36	..	..	..	25.8
Caruthersville	Maximum...	57	55	50	47	44	43	50	20	22	29	30	42	45	45	40	53	51	55	59	56	63	63	69	72	68	51	50	54	..	..	..	49.4
	Minimum ...	42	35	35	21	24	27	19	5	12	5	8	29	41	27	28	35	44	40	33	34	45	45	49	53	36	35	42	38	..	..	..	31.7
Doniphan	Maximum...	58	56	52	45	42	40	41	19	20	26	36	40	40	42	40	51	48	52	48	57	66	68	71	70	68	55	62	58	..	..	..	49.0
	Minimum ...	34	29	23	28	18	25	13	2	0	7	− 7	12	29	36	24	19	40	34	34	22	24	41	33	48	46	27	38	38	..	..	..	25.6
Jackson	Maximum...	56	51	49	45	31	39	41	14	17	31	31	40	39	40	35	47	47	52	49	55	61	64	69	67	65	61	52	55	..	..	..	46.5
	Minimum ...	39	31	24	29	11	20	11	0	− 1	9	1	14	25	31	22	24	36	31	34	28	30	40	35	47	45	31	31	29	..	..	..	25.2
Poplar Bluff	Maximum...	58	58	53	45	42	43	43	18	21	29	31	42	42	43	40	52	46	54	49	58	66	67	71	70	65	68	58	60	..	..	..	49.7
	Minimum ...	31	28	24	31	16	24	18	2	0	7	− 3	10	27	27	23	18	36	32	30	24	25	41	34	38	40	27	29	33	..	..	..	24.0
Sikeston	Maximum...	56	56	50	48	41	40	43	20	18	29	33	38	39	41	39	48	49	52	52	56	60	64	67	70	69	51	51	55	..	..	..	47.7
	Minimum ...	42	35	29	32	15	21	20	3	2	11	2	8	31	37	25	25	38	34	38	32	33	40	41	44	45	34	36	36	..	..	..	28.0
Cairo, Ill	Maximum...	54	50	46	42	27	41	45	10	17	29	27	41	44	44	36	51	48	51	54	56	62	63	66	70	66	50	50	52	..	..	..	46.1
	Minimum ...	42	38	33	27	14	24	7	3	1	13	14	18	34	29	25	29	37	35	41	35	37	46	45	50	43	35	33	38	..	..	..	29.5
Ozark Plateau																																	
Arcadia §§	Maximum...	55	51	49	37	30	41	33	10	19	24	36	38	41	36	36	51	38	50	46	53	64	65	71	68	49	54	48	57	..	..	..	44.6
	Minimum ...	38	29	20	20	8	8	25	− 4	− 6	− 4	5	6	20	30	19	20	25	25	25	27	28	36	37	40	44	28	23	23	..	..	..	21.2
Aurora	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Birchtree	Maximum...	54	54	53	47	42	37	42	10	20	22	35	42	41	41	37	52	47	52	49	53	64	65	70	67	65	55	54	57	..	..	..	47.4
	Minimum ...	34	36	27	30	19	22	6	− 4	− 3	9	8	19	30	28	20	23	35	18	30	25	32	44	34	45	43	25	29	31	..	..	..	24.8
Eldon §§	Maximum...	49	45	44	34	..	41	4	− 4	8	26	34	45	46	22	36	53	41	52	54	51	63	64	74	70	51	54	52	58	..	..	..	[a]43.2
	Minimum ...	35	27	24	24	5	..	4	− 9	− 9	− 7	4	5	24	22	15	15	26	24	23	34	30	30	40	39	42	29	29	28	..	..	..	[a]20.5
Farmington	Maximum...	51	48	51	40	31	35	34	8	18	27	37	41	40	40	37	52	44	52	48	51	66	65	71	68	62	50	52	54	..	..	..	45.5
	Minimum ...	37	32	22	24	6	20	4	− 6	− 6	12	5	18	28	25	18	20	32	26	33	31	35	41	45	41	44	29	24	28	..	..	..	23 9
Koshkonong	Maximum...	55	52	51	44	45	39	43	10	20	27	35	43	40	40	37	52	48	..	53	55	74	63	71	74	64	54	49	57	..	..	..	[a]48.0
	Minimum..	35	36	29	30	16	25	8	− 6	− 2	9	2	27	32	29	21	23	36	..	29	31	34	47	39	46	40	25	28	31	..	..	..	[a]25.9
Lebanon	Maximum...	51	46	47	41	40	42	43	11	15	22	36	44	48	49	42	55	53	52	58	56	65	66	76	70	64	54	52	58	..	..	..	48.4
	Minimum ...	30	25	21	21	5	23	− 7	−15	−12	4	− 1	18	27	19	10	23	22	21	30	27	35	39	37	44	32	24	27	21	..	..	..	19.6
Mountain Grove §§	Maximum...	50	51	50	40	32	41	9	6	16	21	33	38	40	34	36	52	37	40	50	49	61	62	70	63	47	53	44	58	..	..	..	42.2
	Minimum ...	33	30	24	24	11	11	8	−11	−10	− 6	− 2	4	22	29	16	16	22	24	24	31	31	35	40	39	40	27	27	27	..	..	..	20.2
Neosho	Maximum...	54	48	48	45	44	48	49	4	19	23	35	45	56	54	45	57	55	54	53	54	63	65	78	74	68	56	55	54	..	..	..	50.1
	Minimum ...	30	28	21	25	15	24	− 2	−11	− 3	11	− 5	23	30	23	16	27	32	21	41	23	33	47	31	47	42	25	27	25	..	..	..	23.2
Rolla	Maximum...	51	45	45	42	34	40	39	4	15	23	30	40	43	43	36	52	49	49	52	49	60	63	72	68	63	57	48	53	..	..	..	45.2
	Minimum ...	35	29	24	23	7	24	0	− 8	− 6	9	5	22	28	23	16	27	33	25	37	29	31	43	41	46	42	29	29	28	..	..	..	24.0
Springfield	Maximum...	48	48	48	42	31	45	27	0	16	22	28	41	50	30	37	53	40	48	50	50	61	60	74	70	60	51	44	55	..	..	..	43.9
	Minimum ...	34	32	31	20	12	27	−10	−13	− 6	6	2	20	30	20	17	26	32	29	36	32	39	46	44	51	40	37	34	34	..	..	..	25.1
Southwest Plain																																	
Appleton City	Maximum...	53	46	42	40	35	46	45	2	6	18	31	38	45	30	41	46	43	51	48	54	61	66	72	71	65	52	52	57	..	..	..	44.9
	Minimum ...	31	26	26	20	8	28	− 4	−13	−10	4	− 2	19	26	18	14	29	31	24	39	28	32	46	38	43	40	30	33	31	..	..	..	22.7
Clinton	Maximum...	50	44	40	40	36	40	40	0	6	20	26	40	45	28	35	43	45	50	50	50	60	67	70	75	66	54	48	62	..	..	..	43.9
	Minimum ...	32	26	24	20	6	27	− 4	−12	−12	4	− 4	20	24	18	13	28	28	22	35	28	30	48	38	40	40	28	28	28	..	..	..	21.5
Harrisonville §§	Maximum...	47	46	40	36	40	49	− 3	0	8	17	25	39	41	25	40	45	42	48	50	54	61	65	72	70	55	55	51	60	..	..	..	42.1
	Minimum ...	28	20	20	10	1	6	− 8	−15	−15	−12	− 6	− 2	22	15	8	10	28	23	28	27	28	32	34	37	36	30	30	29	..	..	..	15.9
Lamar §§	Maximum...	51	49	46	45	42	53	5	6	17	22	35	42	52	27	44	50	41	53	53	54	63	65	76	74	51	57	51	58	..	..	..	45.8
	Minimum ...	32	30	25	26	13	13	− 2	−11	− 8	5	2	3	24	22	15	15	30	22	23	27	27	37	36	37	44	27	27	27	..	..	..	20.3
Lamonte	Maximum...	55	43	41	31	27	43	43	0	13	14	30	40	42	24	25	46	41	51	49	56	61	64	74	71	64	54	54	58	..	..	..	43.4
	Minimum ...	31	23	24	12	2	26	− 7	−12	−12	2	− 5	18	19	17	18	8	27	22	36	27	28	44	37	39	33	27	27	27	..	..	..	19.2
Marshall	Maximum...	54	45	42	37	23	44	42	21	10	18	21	39	38	29	39	42	44	48	47	50	62	64	73	70	68	53	54	58	..	..	..	44.1
	Minimum ...	32	24	26	8	0	21	− 4	−13	−10	0	− 2	15	21	16	10	20	28	23	26	30	30	45	39	41	37	29	29	28	..	..	..	19.6
Nevada	Maximum...	54	46	45	43	40	51	40	2	12	18	33	41	50	26	42	49	40	50	51	54	61	64	74	74	65	57	53	57	..	..	..	46.1
	Minimum ...	31	27	25	21	10	31	− 5	−13	−11	4	2	21	25	20	15	29	32	23	38	27	33	47	37	47	39	28	33	28	..	..	..	23.0
Warrensburg	Maximum...	53	43	40	37	34	47	33	1	8	15	29	38	41	27	38	43	40	51	50	53	60	65	73	72	65	56	54	57	..	..	..	43.7
	Minimum ...	29	23	25	9	1	24	− 6	−15	−12	− 1	− 5	15	22	15	10	27	27	23	36	26	28	45	38	39	37	28	30	27	..	..	..	19.5
Warsaw	Maximum...	55	46	44	39	35	47	46	0	10	23	33	44	47	34	41	52	47	52	52	53	63	65	75	74	70	56	54	59	..	..	..	47.0
	Minimum ...	33	24	20	20	6	26	− 3	−11	−10	5	3	22	23	19	13	28	27	18	38	29	29	47	38	38	38	23	30	23	..	..	..	21.3
Northwest Plateau																																	
Chillicothe §§	Maximum...	60	44	37	15	34	46	− 3	0	6	19	26	42	21	26	39	43	47	49	50	52	62	63	72	72	54	59	53	62	..	..	..	41.1
	Minimum ...	27	18	18	1	− 8	− 7	− 7	−16	−17	−12	− 2	4	18	14	4	6	26	18	18	26	26	27	33	35	33	22	23	24	..	..	..	12.6
Grant City	Maximum...	55	43	38	25	18	41	8	− 6	1	16	22	39	38	40	38	43	45	45	41	49	57	59	62	66	59	51	50	57	..	..	..	39.3
	Minimum ...	24	15	15	− 3	−11	8	−12	−18	−11	− 3	− 1	10	14	10	- 9	25	25	19	34	19	24	42	31	40	31	22	21	25	..	..	..	14.4
Kansas City..	Maximum...	44	43	40	37	35	50	2	1	5	15	27	40	34	25	39	45	44	47	48	53	61	64	73	72	53	57	52	60	..	..	..	41.6
	Minimum ...	29	23	26	6	5	2	−10	−13	− 7	3	5	23	16	15	20	32	31	31	37	30	37	48	48	47	38	39	37	36	..	..	..	22.6
Kidder §§	Maximum...	39	40	30	14	34	45	− 4	− 3	5	15	23	39	22	25	35	41	43	46	46	50	59	61	68	70	51	51	51	58	..	..	..	37.6
	Minimum ...	26	18	16	0	− 5	− 5	− 8	−16	−16	−10	0	3	19	15	10	12	26	24	26	26	27	28	35	37	33	27	30	28	..	..	..	14.5
Lexington §§	Maximum...	47	42	43	24	27	47	22	10	7	17	31	41	28	26	39	44	46	51	51	54	62	54	75	71	55	58	55	62	..	..	..	42.5
	Minimum ...	30	21	21	5	1	23	− 5	−13	− 8	− 5	2	4	20	16	12	13	29	24	26	30	30	34	40	40	37	30	32	30	..	..	..	18.5
Maryville	Maximum...	55	44	37	27	24	46	8	0	7	20	25	46	40	28	42	46	47	49	49	54	64	60	69	69	57	60	59	63	..	..	..	42.7
	Minimum ...	25	15	15	− 4	− 6	8	−10	−19	−14	− 3	0	12	15	12	10	29	26	20	34	25	27	41	31	39	31	23	31	25	..	..	..	15.6
Oregon	Maximum...	49	46	38	28	29	45	9	3	6	19	27	49	42	30	42	49	49	51	52	55	64	64	72	71	55	62	60	66	..	..	..	44.0
	Minimum ...	25	18	18	− 2	− 2	8	−11	−17	−11	0	6	11	16	13	15	31	28	26	33	27	29	43	39	42	32	30	33	33	..	..	..	18.3
St. Joseph..	Maximum...	39	44	32	22	32	45	− 2	1	5	17	23	44	27	28	41	45	47	48	48	53	62	62	69	72	53	58	56	62	..	..	..	40.5
	Minimum ...	27	21	20	2	− 1	− 2	−11	−15	− 8	1	6	19	17	15	14	31	30	24	34	27	31	43	39	43	34	28	35	30	..	..	..	19.1
Trenton	Maximum...	53	42	35	27	20	43	11	0	− 4	16	22	40	32	27	35	42	46	46	48	51	59	61	68	65	62	56	50	60	..	..	..	39.8
	Minimum ...	26	19	21	2	− 6	11	− 7	−15	−13	− 4	4	15	19	15	10	27	28	20	31	30	27	43	35	40	34	24	30	28	..	..	..	17.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 3-22-33—915.

UNMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

VOL. XXXVII ST. LOUIS, MO., MARCH, 1933 No. 3

GENERAL SUMMARY

The month was rather free from marked abnormalities of temperature. The State average was very slightly above normal. Cold days came on the 9th and 10th and again on the 20th and 21st, but no severe cold was experienced. Very mild temperature prevailed on the 12-14th, with 85° at St. Louis on the 13th, which is the highest temperature of record for so early in the spring. There was no extended mild spell, and vegetation did not advance unseasonably.

Precipitation was quite variable in amount for the different sections. It was more than normal over the northeastern quarter, the more southeastern counties, and the northwestern quarter, and was somewhat less than normal over most of the southwestern quarter. The larger excesses occurred in the Southeast, where there were some very heavy falls. Ground moisture was sufficient in all parts of the State.

Damaging local windstorms occurred on the 14th and 30th (see under "Miscellaneous Phenomena").

River stages were considerably below normal during most of the month in the St. Louis river district, but approached normal during the last week.

At the end of the month, wheat, alfalfa, and pastures were in fair to good condition. Seeding of oats and preparations for corn planting were behindhand, due to frequent rains of the last two weeks. Vegetation, generally speaking, was somewhat backward.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 44.1°, or 0.5° above normal. The highest monthly mean was 50.9° at Caruthersville and the lowest monthly mean was 39.5° at Tarkio. The highest temperature recorded was 87° at Warsaw on the 13th, and the lowest was 5° at Unionville on the 10th. The greatest daily range was 51° at Chillicothe on the 29th.

PRECIPITATION

The average precipitation for the State, 122 stations reporting, was 3.53 inches, or 0.38 inch more than normal. The greatest local monthly amount was 10.39 inches at Caruthersville, and the least local monthly amount was 1.56 inches at Caplinger Mills. The greatest amount in any twenty-four hours was 4.20 inches at Bragg City on the 31st. The average number of days with 0.01 inch or more of precipitation was 10. The snowfall averaged 2.0 inches for the State, or 1.2 inches less than normal. The greatest monthly snowfall was 12.0 inches at Maryville.

MISCELLANEOUS PHENOMENA

Earth tremors.—On the 5th, seven and one-half miles west of Fulton. No damage reported.

Fog, dense.—12th, 18th, 19th, 31st.

Frosts.—Killing frosts or freezing temperatures at all stations as late as 26th to 28th, except 21st to 24th in extreme south portion.

Hail.—14th, 15th, 17th, 18th, 22d, 23d, 24th, 29th, 30th, 31st. Some minor damage to roofs and window lights at Greenville on the 14th. No other damage reported.

Halos, solar.—4th, 5th, 8th, 14th, 17th, 23d, 26th, 29th.

Halos, lunar.—4th, 8th, 16th.

Sleet.—5th, 14th, 19th, 20th, 22d, 23d, 24th, 25th, 31st.

Thunderstorms, local.—6th, 12th, 13th, 14th, 17th, 19th, 22d, 23d, 25th, 27th, 29th. General.—18th, 24th, 30th, 31st.

Windstorms.—A severe straight-line wind occurred in Dunklin and Pemiscot counties on the 14th. In the vicinity of Kennett some slight damage occurred. In Caruthersville and near by considerable destruction to property occurred along a path about one-half mile wide; total damage estimated at $200,000. No lives were lost and no serious personal injury sustained. Near Richmond, in Ray County, a storm on March 30th damaged farm property and slightly injured several persons.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.01	30.56	10	29.34	13	9.7	27	n.	14	81	58	59	50
Hannibal.....	30.02	30.56	10	29.27	13	9.4	29	w.	13	78	57	..	..
Kansas City...	30.01	30.53	10	29.31	13	11.9	36	sw.	30	74	57	59	60
St. Joseph	30.00	30.52	10	29.27	13	10.7	32	nw.	25	77	56	59	56
St. Louis....	30.02	30.56	10	29.33	13	12.5	36	w.	13	78	55	60	52
Springfield	29.98	30.47	10	29.46	7	12.1	31	se.	24	78	62	64	46
Cairo, Ill.....	30.03	30.53	10	29.46	7	10.6	33	n.	14	80	65	68	54
Keokuk, Iowa.	30.04	30.60	10	29.28	13	8.9	28	nw.	8	78	55	58	56

COMPARATIVE DATA FOR MARCH

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	38.5	− 5.1	90	1	4.02	+0.87	7.67	1.76	....	10	..	..	..
1889....	44.3	+ 0.7	84	13	1.98	−1.17	5.92	0.09	....	5	..	..	..
1890....	37.3	− 6.3	79	−11	2.61	−0.54	14.20	0.77	5.7	8	..	..	..
1891....	36.6	− 7.0	78	−11	3.01	−0.14	5.88	1.00	7.1	10	..	..	..
1892....	38.9	− 4.7	87	5	3.11	−0.04	5.75	1.08	....	8	8	10	13
1893....	40.5	− 3.1	86	0	2.86	−0.29	5.10	1.10	3.2	7	11	10	10
1894....	47.7	+ 4.1	89	2	2.93	−0.22	7.97	0.39	0.2	6	15	9	7
1895....	42.4	− 1.2	98	0	2.14	−1.01	5.47	0.19	4.4	9	14	7	10
1896....	39.2	− 4.4	82	2	2.05	−1.10	8.70	0.52	5.2	8	11	9	11
1897....	44.2	+ 0.6	82	− 5	6.07	+2.92	15.23	1.51	1.0	12	9	9	13
1898....	44.7	+ 1.1	83	9	7.09	+3.94	15.48	1.63	0.6	11	11	7	13
1899....	37.4	− 6.2	78	− 8	2.93	−0.22	7.03	1.09	8.9	10	9	11	11
1900....	40.4	− 3.2	88	− 4	1.48	−1.67	3.41	0.40	0.2	6	15	9	7
1901....	42.7	− 0.9	85	− 1	3.74	+0.59	6.28	1.96	1.8	8	11	8	12
1902....	45.3	+ 1.7	85	1	3.49	+0.34	7.67	0.46	0.8	9	10	10	11
1903....	46.8	+ 3.2	81	9	3.35	+0.20	8.63	0.85	1.1	8	13	7	11
1904....	44.8	+ 1.2	87	8	4.14	+0.99	11.49	1.48	1.2	9	11	9	11
1905....	50.3	+ 6.7	88	10	2.99	−0.16	7.08	0.23	T.	8	11	8	12
1906....	34.6	− 9.0	75	− 5	3.93	+0.78	8.83	1.43	8.6	11	6	7	18
1907....	53.9	+10.3	95	16	2.82	−0.33	5.68	1.15	1.0	7	14	7	10
1908....	50.1	+ 6.5	89	14	2.58	−0.57	6.65	0.34	1.0	7	14	7	10
1909....	44.5	+ 0.9	81	9	3.07	−0.08	6.97	0.60	0.6	6	13	9	9
1910....	55.8	+12.2	96	15	0.66	−2.49	3.17	0.00	0.1	2	20	7	4
1911....	46.8	+ 3.2	91	5	1.85	−1.30	3.37	0.18	1.4	6	16	8	7
1912....	35.2	− 8.4	89	− 4	4.62	+1.47	7.83	0.99	16.5	11	12	6	13
1913....	40.6	− 3.0	84	−12	4.36	+1.21	8.83	1.52	5.0	9	12	8	11
1914....	43.2	− 0.4	87	− 2	2.75	−0.40	5.80	0.91	4.7	8	13	7	11
1915....	36.4	− 7.2	70	6	1.50	−1.65	3.67	0.35	7.9	6	7	8	16
1916....	47.0	+ 3.4	95	− 2	2.58	−0.62	5.45	0.17	3.1	7	14	8	9
1917....	45.2	+ 1.6	86	− 7	2.91	−0.24	6.22	0.76	1.5	7	15	7	9
1918....	50.9	+ 7.3	95	8	0.94	−2.21	3.80	T.	0.1	4	18	6	7
1919....	46.3	+ 2.7	90	− 2	2.40	−0.75	8.67	0.37	0.7	6	15	8	8
1920....	44.6	+ 1.0	86	− 6	5.01	+1.86	9.10	1.35	1.4	8	15	6	10
1921....	51.9	+ 8.3	90	11	4.69	+1.54	11.23	0.65	0.5	10	13	9	9
1922....	45.6	+ 2.0	80	3	6.46	+3.31	13.29	1.45	2.2	12	11	6	14
1923....	40.4	− 3.2	83	−11	4.12	+0.97	8.30	1.57	2.3	8	14	6	11
1924....	38.4	− 5.2	80	8	2.55	−0.60	5.58	1.14	9.4	8	8	8	15
1925....	47.7	+ 4.1	86	− 5	1.95	−1.20	5.16	0.10	0.8	5	17	8	6
1926....	39.6	− 4.0	83	8	2.89	−0.26	5.53	0.74	7.0	8	13	6	12
1927....	45.9	+ 2.3	80	0	5.87	+2.72	11.24	1.69	3.7	11	12	8	11
1928....	46.3	+ 2.7	89	10	1.54	−1.61	3.56	0.11	2.4	5	15	9	7
1929....	48.6	+ 5.0	97	11	3.30	+0.15	6.13	0.47	T.	8	12	8	11
1930....	43.2	− 0.4	80	6	1.37	−1.78	4.50	0.04	1.4	4	18	6	7
1931....	39.5	− 4.1	70	10	3.02	−0.13	6.03	1.23	8.8	8	11	7	13
1932....	38.3	− 5.3	81	− 2	1.89	−1.26	5.09	0.30	2.8	7	12	9	10
1933....	44.1	+ 0.5	87	5	3.53	+0.38	10.39	1.56	2.0	10	11	8	12
Period.	43.6	.....	98	−12	3.15	.....	15.48	0.00	3.2	8	13	8	10

Climatological Data for March, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	44.7	+ 2.8	77	13†	13	10	35	2.96	+0.45	1.12	4.0	9	..	..	..	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	39.8	− 2.4	72	13	8	10	32	2.80	+0.16	0.75	6.5	11	9	5	17	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	44.0	+ 1.4	79	13	15	10	32	3.27	+0.33	1.01	1.1	11	8	9	14	se.	U. S. Weather Bureau
Downing	Schuyler	876	12	39.9	− 1.7	75	13†	6	10	32	2.28	−0.05	0.62	4.0	10	9	12	10	n.	James Taylor
Elsberry	Lincoln	449	2	43.8	.....	84	13	13	10	43	4.46	.....	1.00	T.	9	5	10	16	nw.	Ray E. Mills
Fayette	Howard	661	53	41.9	0.0	79	13	13	10	46	3.67	+0.87	0.85	7.0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	42.1	− 2.0	80	13	14	10	45	4.02	+1.00	1.20	1.5	9	11	9	11	n.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	2.72	+0.30	1.07	4.5	7	6	6	19	nw.	J. W. Pulliam
Hannibal	Marion	534	41	41.8	+ 0.8	77	13	11	10	32	4.05	+1.45	0.86	4.4	13	4	11	16	nw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	42.7	− 0.9	81	13	15	10	46	2.76	−0.34	0.61	1.0	8	..	..	..	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	40.6	+ 0.9	75	13	7	10	43	3.16	+0.44	1.08	5.5	9	9	7	15	nw.	Prof. J. S. Stokes
Louisiana	Pike	469	39	42.0	− 1.5	78	13	12	10	43	5.22	+2.12	1.60	1.5	7	15	10	6	w.	Stark Bro's Nurseries
Macon	Macon	875	34	40.6	− 1.6	75	13†	10	10	38	3.23	+0.61	0.93	5.2	9	10	8	13	e.	W. C. Brown
Mexico	Audrain	800	44	41.0	− 1.0	78	13	11	10	47	3.61	+0.79	0.83	4.0	11	12	5	14	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	3.06	+0.34	0.57	3.0	11	12	6	13	ne.	J. S. Conway
St. Charles	St. Charles	456	45	45.5	+ 1.0	86	13	14	10	35	4.58	+1.54	1.64	0.2	10	7	12	12	s.	L. C. Saeger
St. Louis	**St. Louis City**	568	60	44.8	+ 0.7	85	13	14	10	33	4.91	+1.53	1.30	0.1	15	10	9	12	s.	**Section Center**
St. Louis University	St. Louis City	578	21	44.6	+ 1.0	85	13	15	10	31	5.30	+1.92	1.38	0.3	13	11	8	12	se.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	2.39	−0.43	0.52	5.0	11	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	35	40.9	− 1.3	74	13	9	10	32	3.23	+0.27	0.58	9.0	10	12	6	13	n.	Frank Hall
Unionville	Putnam	1,062	40	40.6	+ 1.7	75	30	5	10	40	2.60	+0.18	1.05	8.0	9	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	44.1	+ 1.6	84	13	12	10	37	5.22	+1.88	1.30	1.3	10	6	12	13	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	40.2	+ 1.3	75	13	9	10	29	2.31	−0.07	1.17	3.1	11	6	8	17	n.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**42.3**	**0.0**	**86**	**13**	**5**	**10**	**47**	**3.29**	**+0.70**	**1.64**	**3.5**	**10**	**9**	**8**	**14**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	47.2	.....	80	13	22	10	40	8.31	.....	2.80	T.	14	15	7	9	s.	Jeff. King
Caruthersville	Pemiscot	265	37	50.9	− 0.5	79	13	27	9	43	10.39	+5.88	3.70	T.	11	13	7	11	.....	Sam Smith
Doniphan	Ripley	344	29	46.6	− 2.4	82	13	22	4	39	4.32	+0.21	1.19	T.	10	12	4	15	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	47.2	0.0	79	13	20	10	35	6.15	+1.85	1.88	T.	9	3	10	18	s.	John G. Putz
Marble Hill	Bollinger	470	38	47.1	− 0.5	82	13	19	10	39	6.05	+1.64	1.48	0.6	12	10	9	12	n.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	6.64	+2.08	1.63	T.	13	9	7	15	nw.	John A. Spence
Poplar Bluff	Butler	339	28	47.8	− 0.8	81	13	20	10	43	4.76	+0.20	0.98	T.	9	13	4	14	sw.	J. H. Wolpers
Sikeston	Scott	318	26	49.0	+ 0.4	78	13†	23	10	34	6.78	+2.35	1.60	0	12	13	4	14	.....	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	61	47.6	+ 0.4	78	13	22	10	32	6.39	+2.64	1.76	T.	14	6	8	17	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**47.9**	**− 0.5**	**82**	**13**	**19**	**10**	**43**	**6.61**	**+2.03**	**3.70**	**0.1**	**12**	**10**	**7**	**14**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	43.7	− 0.9	85	13	17	10	48	2.90	−0.90	0.85	T.	8	14	8	9	e.	Arcadia College
Birchtree (near)	Shannon	1,000	38	46.6	− 0.7	82	13	20	10	33	3.30	−0.85	0.82	T.	10	14	4	13	n.	V. H. Kirkendall
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	1.56	.....	0.72	T.	7	7	11	13	se.	Ozark Utilities Co.
Dean II	McDonald	1,000	29	47.6	− 1.2	82	13	12	21	42	2.30	−1.22	1.06	0.5	9	14	4	13	nw.	H. E. Dean
Eldon	Miller	934	38	42.9	− 0.7	80	13	17	10†	44	2.56	−0.53	0.73	1.0	9	11	13	7	nw.	E. H. Shepherd
Farmington	St. Francois	918	22	44.7	− 1.8	85	13	16	10	34	2.54	−0.87	0.52	T.	13	13	8	10	sw.	Robert Forsyth
Goodland	Iron	1,000	40	44.4	− 0.6	85	13	15	10†	42	3.12	−1.01	0.85	T.	8	14	7	10	n.	F. M. Adams
Greenville	Wayne	381	24	44.8	− 2.9	84	13	19	5	43	3.74	−0.76	1.13	T.	8	16	5	10	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	3.36	+0.19	1.46	0	7	10	12	9	..	A. W. Madison
Koshkonong	Oregon	958	32	47.4[b]	− 2.0	83	13	21	10	34	4.72	+0.79	1.86	0	12	12	4	15	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	46.0	+ 1.0	86	13	11	21	41	5.76	+2.22	1.94	1.0	9	12	6	13	.....	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	47.3	0.0	80	13	18	21	35	2.67	−0.16	0.98	0.7	10	15	9	7	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	43.4	− 2.0	81	13	17	10	45	3.21	−0.91	1.00	T	11	15	5	11	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	48.4	+ 0.3	79	13	18	21	43	2.36	−1.12	0.64	T.	11	17	6	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	45.8	+ 0.3	83	13	17	10	36	2.75	−0.97	0.95	T.	7	9	9	13	se.	F. H. Lane
Salem	Dent	1,173	29	44.7	− 1.7	83	13	16	10	38	2.53	−1.09	0.78	T.	8	9	9	13	s.	E. E. Martin
Seligman	Barry	1,542	32	48.6[b]	+ 2.0	80	13	21	10†	40	2.85	−0.67	1.12	0.5	10	14	5	12	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	27	45.0	− 0.4	78	13	17	10	33	4.12	+0.25	1.28	1.0	10	12	6	13	se.	A. L. Hailey
Springfield	Greene	1,324	45	46.2	+ 1.0	79	13	18	21	33	2 40	−0.99	0.98	0.9	12	11	7	13	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	45.8	.....	80	13	15	10	37	2.60	.....	0.88	0.9	11	12	4	15	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**45.7**	**− 0.6**	**86**	**13**	**11**	**21**	**48**	**3.11**	**−0.36**	**1.94**	**0.3**	**10**	**13**	**7**	**11**	**nw.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	46.5	+ 1.4	81	13	16	10	36	2.71	−0.47	0.92	0.5	9	9	13	9	se.	W. G. Bigelow
Clinton	Henry	765	40	45.6	+ 0.6	80	13	15	10	36	3.08	−0.03	1.20	0.5	11	6	14	11	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	42.2	+ 0.9	81	13	13	10	43	2.55	−0.13	0.75	T.	8	10	5	16	nw.	John H. Patterson
Lamar	Barton	980	45	45.6	− 0.4	80	13	18	21	41	1.69	−1.31	0.72	T.	5	10	8	13	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	44.4	+ 0.4	79	13	15	10	37	3.45	+0.55	1.10	0.5	11	12	7	12	nw.	J. E. Wheeler
Marshall	Saline	779	46	45.0	+ 2.0	77	13†	14	10	32	3.36	+0.57	0.90	3.5	8	13	8	10	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	47.2	+ 2.3	81	13	16	21	34	1.87	−1.08	0.60	T.	5	11	9	11	s.	George A. Kaupp
Warrensburg	Johnson	878	46	43.9	− 0.1	80	13	13	10	36	2.73	+0.06	1.08	T.	10	13	8	10	ne.	E. A. Markey
Warsaw	Benton	687	32	46.6	− 0.4	87	13	16	10	48	2.52	−1.06	0.90	0.5	9	13	5	13	w.	Everett Martin
Division means	**and extremes**	.....	..	**45.2**	**+ 0.7**	**87**	**13**	**13**	**10**	**48**	**2.58**	**−0.39**	**1.20**	**0.6**	**8**	**11**	**8**	**12**	**nw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	41.0	+ 0.7	77	13	8	10	35	2.05	−0.25	0.65	4.1	7	12	11	8	nw.	A. S. Cumming
Chillicothe	Livingston	779	24	39.6	− 1.5	78	30	8	10	51	2.79	+0.31	0.98	1.5	9	15	7	9	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	40.6	+ 0.8	75	13†	6	10	36	3.78	+2.06	0.79	9.0	11	9	11	11	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	44.2[b]	+ 1.0	77	13†	11	10	38	2.97	+0.80	0.83	4.1	11	13	4	14	s.	Fred L. Stiff
Grant City	Worth	1,134	29	39.9	− 1.4	77	30	6	10	37	2.75	+0.70	0 75	4.8	10	5	14	12	se.	Howard Rybolt
Kansas City	Jackson	963	44	44.2	+ 1.5	78	30	13	10	30	4.25	+1.72	1.31	2.6	11	8	11	12	se.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	39.6	− 1.2	78	30	9	10	44	1.99	−0.20	0.82	2.7	9	11	5	15	se.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	3.31	+1.40	1.01	3.0	10	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	43.1	− 0.3	79	30	12	10	47	3.11	+0.57	1.34	2.0	11	13	10	8	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	41.6	+ 3.7	78	13	8	10	37	3.44	+1.60	0.78	12.0	9	14	4	13	se.	J. R. Brink
Oregon	Holt	1,048	77	43.6	+ 4.0	81	30	10	10	38	3.09	+1.01	1.04	3.0	12	12	8	11	ne.	Mina Wright
St. Joseph	Buchanan	967	23	42.6	+ 0.4	80	30	12	10	37	2.81	+0.53	1.22	1.4	10	9	11	11	se.	U. S. Weather Bureau
Tarkio	Atchison	916	30	39.5	− 0.6	76	13†	8	10	44	3.12	+1.40	0.76	8.0	10	11	10	10	se.	Albert Volker
Trenton	Grundy	822	37	42.2	+ 1.1	78	30	9	10	32	2.23	−0.19	0.92	2.5	8	8	13	10	n.	W. H. Estes
Division means	**and extremes**	.....	..	**41.7**	**+ 0.6**	**81**	**30**	**6**	**10**	**51**	**2.93**	**+0.77**	**1.34**	**4.3**	**10**	**11**	**9**	**11**	**se.**	
State means	**and extremes**	.....	..	**44.1**	**+ 0.5**	**87**	**13**	**5**	**10**	**51**	**3.53**	**+0.38**	**4.20**	**2.0**	**10**	**11**	**8**	**12**	**se.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for March, 1933

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi							.80											.06	.16	.03			.04		.84					.29	.18	2.40
Boonville	Missouri						.42	.67	.03												T	.02		.48		.37					.70	.01	2.70
Bowling Green	Mississippi						.25	.50											.02		.21	.10		.21		.48					.71	.13	2.61
Brunswick	Grand						.42	.37		.03											.04	.05		.27		1.12					.28	.38	2.96
Canton	Mississippi							.16											.22	.03	.06				1.03						.46	.14	2.10
Clifton Hill	Chariton						.43	.29		.01										.02	.15			.50	.45	.04				.01	.15	.75	2.80
Columbia***	Missouri					.04	.81	.12		T.								T	T.	.01	.03		.14	.06	.60					.16	.93	.37	3.27
Downing	Mississippi						.18	.10											.50	.12	T.	.02			.62	.05				.03	.48	.18	2.28
Edina	do						.19	.16						T.	T.			T.	.19	.05	T.					1.02					.32	.04	1.97
Elsberry	do						1.00	.52		T.									.39	.03	T.	T.		.30	.15	.43					.93	.71	4.46
Farber	do						.32	.48			T.								T.	.06	.12	.02		.29		.61					.82	.18	2.90
Fayette	Missouri						.41	.50												.08		.10		.55	.41	.47					.85	.30	3.67
Fulton	do						.60	.52	.02										T.	1.20	T.	03		.15		.25					.97	.28	4.02
Gorin	Mississippi						.24												.38	.04	.02				1.07					.28	.69		2.72
Hannibal***	do						.49	.17		T.				.01				.04	.81	.06	.06	T.	.18	.14	.74					.07	.58	.70	4.05
Hermann	Missouri						.34	.82											.21	.53		.01		.28		.44					.60		3.23
Jefferson City	do						.50	.61	.05											.36				.15		.39					.55	.15	2.76
Kahoka	Mississippi						.05	.10											.65							.62					.35	.26	2.03
Kirksville	do						.30	.10											.30	.32	.05	T.			**	1.08				.08	.70	.23	3.16
LaBelle	do						.15	.25											.25	.10	.01				1.10						.35	.15	2.36
Linneus	Grand					T.	.41	.13		T.				T.				.03		T.	T.		.06		1.03				T.	.68	.45	**	2.79
Louisiana	Mississippi						.70	.60		T.										.40	T		.12		1.60						.70	1.10	5.22
Lucerne	Grand						.46	.06											.12		.07			T.		.31					.26	1.37	2 65
Macon	Chariton						.40	.25			T.									.63	.02	.02		.05		.93					.31	.62	3.23
Memphis	Mississippi						.10	.09	T.										.90	.05	T.	T.				.97					.32	.29	2.72
Mexico	do						.46	.65	.05	T.				.05					.17	.07		.10		.35		.65					.83	.23	3.61
Milan	Grand						.34	.15						T.					.35	.15	.46				.23	.78			.13	.47		.14	3.20
Monroe City	Mississippi						.43	.27		.03				.03					.29	.06				.22	.52	.28				T.	.57	.36	3.06
New London	do						.19	.47	.09	.03									.17	.41	.04	.06		.45		.63					.55	.23	3.32
Pacific	Meramec						.05	1.44	.05					.02		T.			.62	.72	.02	T.	T.	.12	T.	.48					.76	.06	4.34
Palmyra	Mississippi						.30	.52	.03										T.	.29	.07	.03		.04		.70					.38	.25	2.61
Paris	do						.40	.60			.02										.15	.04		.40		.71					.51	.14	2.97
Perry	do						.42	.48	.01	T.				T.					T.	.81	.02	.05		.30		.59					.39	.30	3.37
Philadelphia	do						.23	.28	.05										.04	.48	.05	.04				.50					.35	.10	2.12
St. Charles	Missouri						.74	.30		T.				T.	.17				1.64		T.	.02	T	.46	.14	.30					.67	.14	4.58
St. Louis**	Mississippi						1.05	.27		T.				.15	.15			.90	.06	T.	.01	.01	.20	.11	.57	.01				.06	.77	.59	4.91
St. Louis University*	do						1.01	.37		T.				.18	.11			1.21	.14		.01		.25	.07	.70					.21	.57	.47	5.30
Shelbina	do						.34	.40	.03					.03			.16			.13	.06			.20	.52						.30	.22	2.39
Steffenville	do						.35	.15		T.				T.					.55	.30	.10	T		.10	.45	.30				T.	.35	.58	3.23
Troy	do						.28	1.34			T.								.20	.30	.01	.01		.17		.25					.47	.04	3.07
Union	Meramec						.25	1.25	.05							.09			.73	2.22		T.		.36		.77					.87		6.59
Unionville	Chariton						.45	.20											.15	.10	.10				1.00	.05					.35	.20	2.60
Valley Park	Meramec						.03	1.30	.02		T.			.13		.03			.68	.29	T.	.02		.24		.52					.78	.17	4.21
Warrenton	Mississippi						1.25	.35		T					T.				.75		T.	.03	.04	.14	.27	.39					.70	1.30	5.22
West Ely	do					.27	.24	T.		.04			T.					T.	.24	.03	.10		.24		.43					.38	.06	.41	2.44
Winfield	do						.23	1.70			.10								.23	.40		.04				.76					.68	.10	4.24
Keokuk, Ia.***	do						.08	.01						T.				.47	.03	.06	.01	T.			1.16	.01				.11	.18	.19	2.31
Southeast Lowlands																																	
Bragg City	St. Francis							1.05						.20				.30	.10	2.95	.05					.43					.01	4.20	9.29
Campbell	do						.66	.32		.03					.32	.18		.38	2.80	.20	.03			.42	.09	.19					1.40	1.29	8.31
Cape Girardeau	Mississippi							.72						T.	T	22			.30	1.26	.11	.02		.43		.43					.05	1.55	5.09
Caruthersville	do						1.00			.30					.12			.14	3.70	.12	T.		.17		.17					12	3.65	.90	10.39
Dexter	St. Francis							1.03								T.			.42	1.33		T.		.20		.26					.07	1.59	4.90
Douiphan	Black						.65	.26		T.					T.	.08		.63	.92	.07	T.			.11	.11						.30	1.19	4.32
Fisk	St. Francis							.74						T.		.14			.57	1.19	T.			.14		.27					.07	1.56	4.68
Jackson	Mississippi						.50								.72				1.44		.03		.28	.04	.25					1.01	1.88	6.15
Marble Hill	do						.62	.56							.48			.12	1.12	.34	.06		.21		.06	.28					.72	1.48	6.05
Morehouse	do						.71	.31					T.	.05		.12		.42	1.21	.49	.08	T.		.33	.10	.25					.94	1.63	6.64
New Madrid	do							.95	.01		.02					.31			.30	2.15	.12	.10		.45		.36					.04	2.29	7.10
Parma	St. Francis							1.03								.42			.36	3.00		.05		.24		.34						2.92	8.36
Poplar Bluff	Black							.86	.04		T.					.15			.80	.88		T.		.15		.32					.58	.98	4.76
Sikeston	Mississippi						1.00	.02					.03		.15			.48	1.60	.08			.30			.32				.05	1.55	1.20	6.78
Cairo, Ill.***	do						1.09	.06		T.			T.	.01	.31			.46	1.37	.01	.31	T.	.25	.02	.31	.04				T.	1.59	.56	6.39
Ozark Plateau																																	
Arcadia	St. Francis						T.	.85	.03		T.			T.		.48			.07	.46	T.	T.		.17		.17					.67	T.	2.90
Birchtree (near)	Black						.50	.39							.05			.15	.57		T.			.26	.10	.06					.40	.82	3.30
Caplinger Mills	Osage					.26	.72	.14											.02	T.	T.		.14		.22					.06	T.	T.	1.56
Chaonia	St. Francis						T.	.87	.03							.09			.39	.91	T.	.01		.41		.40					.09	.51	3.71
Dean	Neosho				T.	1.06	.12	.26							.18			T.	.22	T.	.05									.12	.22	.07	2.30
Eldon	Missouri						.41	.73	.06											.03			.11	.04		.38					.62	.18	2.56
Farmington	St. Francis						.52	.31							.17			.13	.27	.04	.01		.08	.24	.05	.20					.28	.29	2.54
Fredericktown	do							.77	.40							.42			.34	.48				.46		.34						.31	3.52
Galena	White						.63	.50	.50										.12	.37						.15					.76		3.03
Goodland	Black						.85	.30											.30		T.	T.		.20	.17	.40					.76	.14	3.12
Greenville	St. Francis							.68							.13			.09	.96		T.		.13		.30					.32	1.13	3.74
Hailey	White					T.	1.46	.21		.04					.05															20	1.30	.10		3.36
Koshkonong	Black						1.86	.22		.03								.20	.80				.03	.10	.16	.12				.15	.18	.87	4.72
Lakeside	Osage						.45	.73	.03							T.			.08	.11		.08		.30		.25				T	.43	.08	2.54
Lebanon	do					.60	.60	1.04						T.				.63	1.94	T.	.06				.28					T.	.55	.06	5.76
Leeper	Black						T.	.94	T.							T.			.21	1.02	T			.14		.26					.16	.29	3.02
Lockwood	Osage					.23	.98	.50							.03			.01	.19		.07		T	.16						.26	T.	.24	2.67
Mountain Grove	White						.70	1.00	.02					T.		.02		T.	.10	.45	.03	T.		.04		.13					.68	.04	3.21
Neosho	Neosho					.40	.61	.23							.05			T.	.25		.02				.10	.03				.02	.57	.05	2.36
Owensville	Gasconade						.60	1.15	T.										.87	.95				T.		.54					.66		4.77
Ozark Beach	White						.93	.71											.15	.54											.26	.10	2.69
Rolla	Meramec					.55	.95									T.			T.	.39	T.	.04		.10		.17					.55		2.75
St. Thomas (near)	Osage						.53	.60	.03										.11	.76				.45		.32					.60		3.40
Salem	Meramec						.78	.22							.35				.23		T.		.04		.38	T.					.46	.07	2.53
Seligman	Neosho					.21	1.12	.12										.04	.41		.10				.05					.16	.41	.23	2.85
Seymour (near)	White						1.28	.44							.14			.12	1.18		.10		T.		.20		T.			.02	.55	.09	4.12
Springfield***	do					.12	.96	.06						T.	.05			.08	.37	.01	.06		T.	T.	.02					.61	.01	.05	2.40
Steelville	Meramec						.36	.91	T.						T.	.06			.14		T.	.04									.70		2.21
Stover	Missouri						.40	.76													.01	.02				.60					.46		2.25
Versailles	Osage						.88	.34											.01	T.	.04	.02		.03	.22	.25				.10	.51	.20	2.60
Williamsville	Black							1.02								.06			.18	.88		.02			.53	.34					.18	.18	3.39
Willow Sprgs. (near)	White						.32	1.12								.21			.24	.61		T.		.16		.10					.69	.82	3.77

Continued on next page

Daily Precipitation for March, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain																																	
Appleton City	Osage					.12	.92	.41					T.							T.	.01	T.			.46	.20				.15	.35	.09	2.71
Clinton	do					.07	1.20	.30												.03	.03			.02	.30	.30				.06	.46	.31	3.08
Concordia‖	Missouri						.56	.80													T.	.02		.56		.78					.16	.04	2.92
Harrisonville‖	Osage					.03	.75	.72												.01	T.	T.		.24		.68					.11	.01	2.55
Joplin‖	Neosho					.82	.44	.15							T.				.18	T.	T.				.02					.10	T.	T.	1.71
Lamar‖	do					T.	.69	.72												.10	T.	T.				.10					.08		1.69
Lamonte	Missouri					.25	1.10		.02											.02	.08		.15	.10	.70	T.				.15	.83	.05	3.45
Marshall	do						.60	.35		T.									T.	T.	T.		T.	.35	.90	.10				.09	.45	.52	3.36
Nevada	Osage					.60	.55	.31													T.				.38					T.	.03	T.	1.87
Osceola‖	do						.55	.84											.03	T.	T.	T.				.51					.21		2.14
Warrensburg	Missouri					.03	1.08	.30					T.	T.						T.	.20		.25	.17	.15	.15				.03	.37		2.73
Warsaw	Osage					T.	.90	.32													.07		.02		.38	.22				.05	.20	.36	2.52
Waverly ‖	Misouri						.54	.60												T.	T.	.06		.25		.94					.27	.11	2.77
Northwest Plateau																																	
Bethany	Grand					T.	.35			T.										T.	.03		.08	.20	.64					.65	.10	2.05
Chillicothe‖	do						.31	.14						.04					.16		.06	T.		.13		.98					.39	.58	2.79
Conception	Missouri					.26	.56			.10				T.						.31	.10		.20	.10	.74					.11	.51	.79	3.78
Edgerton	do					.68	.18	.10		T.				T.				T.	T.	T.	.05		.10	.25	.83	.01				.16	.21	.40	2.97
Gallatin ‖	Grand						.35	.07						.02					.20		.10	.05		.10		1.00						.43	2.32
Grant City	do					.19	.68	.01		T.								T.	T.	.16	.07	T.	T.	.07	.61	T.				.05	.75	.16	2.75
Kansas City***	Missouri					1.07	.66	.02					T.	T.			T.	T.		.09	.05		.18	.03	1.31					.03	.30	.51	4.25
Kidder‖	Grand					T.	.46	.13						T.					.03	T.	.05	.02		.20		.82					.11	.17	1.99
King City	Missouri					.55	.35	.04		.07										.13	.05		.04	.10	1.01							.97	3.31
Lexington ‖	do					.01	.67	.55												.05	T.	.05		.23	.04	1.34				.02	.11	.04	3.11
Maryville‖	do					.38	.35			.05									T.	.18	.20		.36		.78						.54	.60	3.44
Oregon	do					1.04	.27			.02							T.	T.	.19	.20	.12		.11	.11	.88					.03	.02	.10	3.09
St. Joseph***	do					1.07	.34	T.		T.				T.				T.	.07	.05	.01		.05	.02	.98					T.	.06	.16	2.81
Tarkio	do						.76	.30		.07								T.		.10	.20		T.	.15	.73					.05	.50	.26	3.12
Trenton	Grand					T.	.43			.03									.12	T.	.04			.04	.92					T.	.24	.41	2.23

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for March, 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.085	.099	.118	.086	.144	.081		.008	.150			.072	.076	.295	.114	.104	.108	.135	.097	.013			.029	.099	.040	.123	.161	.152	.188	.181	.159		3.478
	Mean temperature	43	40	37	39	41	40	42	44	34	30	40	50	60	49	42	46	51	56	44	27	34	34	43	40	46	46	50	54	61	64	55	44.5
	Wind movement	46	43	63	64	119	115	63	63	111	114	85	56	93	109	119	58	55	103	107	111	145	81	112	62	146	90	77	47	79	111	73	2,720

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

ERRATA

February, 1933, page 6, Springfield mean atmospheric pressure reduced to sea level should be 30.12.

Daily Temperatures for March, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	57	53	49	50	48	51	47	50	45	31	58	55	77	70	51	68	69	74	64	43	40	42	49	41	49	59	59	64	73	77	63	55.7
	Minimum	28	35	26	25	32	36	38	34	24	13	27	38	54	43	24	33	39	55	35	22	21	21	30	33	35	27	36	31	46	55	48	33.7
Columbia	Maximum	55	48	43	49	49	40	45	51	32	31	58	62	79	58	48	58	68	77	57	30	39	41	46	40	49	61	61	62	75	75	58	53.1
	Minimum	29	33	27	27	32	37	40	32	24	15	30	39	58	37	28	35	45	57	30	23	23	23	31	36	35	29	42	34	46	57	46	34.8
Fayette	Maximum	60	51	51	52	58	40	45	52	34	32	60	60	79	54	52	58	70	75	45	27	40	43	49	41	52	60	62	66	75	77	56	54.1
	Minimum	26	35	19	24	26	33	35	33	26	13	14	28	36	45	24	25	34	39	42	23	21	21	24	29	35	25	27	30	33	46	49	29.7
Hannibal	Maximum	52	43	39	48	47	42	45	48	33	27	55	60	77	62	46	52	66	76	44	30	32	40	46	40	45	55	57	58	68	72	61	50.5
	Minimum	28	29	27	26	28	36	40	32	20	11	27	36	58	35	25	31	37	44	30	24	24	26	30	33	37	30	41	33	44	53	47	33.0
Jefferson City §§	Maximum	59	51	47	51	53	41	45	54	37	35	60	63	81	50	51	58	66	77	45	28	43	43	50	43	52	63	64	65	76	72	61	54.3
	Minimum	28	33	26	25	24	34	35	35	28	15	16	30	40	47	27	27	30	31	42	25	22	22	22	31	35	29	36	35	35	46	54	31.1
Kirksville	Maximum	55	52	48	46	44	42	47	45	38	30	50	56	75	70	48	55	67	60	40	30	31	35	50	49	50	51	56	60	70	73	67	51.3
	Minimum	26	25	24	23	37	34	35	32	20	7	22	34	51	27	20	32	36	40	30	19	22	20	28	31	31	25	34	26	40	52	45	29.9
Louisiana	Maximum	55	50	48	52	49	50	50	55	47	37	39	70	78	61	55	52	55	52	47	40	32	42	42	40	45	55	56	55	65	74	60	51.9
	Minimum	22	26	20	25	29	35	40	38	26	12	20	27	55	49	25	26	32	40	40	25	22	24	30	26	33	39	42	26	40	50	50	32.1
Macon §§	Maximum	54	47	45	47	46	40	47	48	34	41	56	63	75	53	49	54	68	75	37	26	32	39	50	38	46	56	58	60	70	60	54	50.6
	Minimum	26	28	23	22	28	33	36	35	21	10	18	37	45	40	22	32	36	52	35	20	21	21	27	27	32	26	35	27	42	44	50	30.7
Mexico §§	Maximum	56	47	40	49	48	40	44	52	33	29	59	62	78	51	49	57	68	77	48	26	35	42	48	41	50	60	60	62	74	74	62	52.3
	Minimum	26	28	23	23	24	30	34	35	26	11	12	29	38	43	23	26	30	40	43	23	21	21	28	30	33	26	33	30	35	43	51	29.6
St. Louis	Maximum	55	46	37	46	47	44	48	55	38	29	57	66	85	70	46	52	63	73	67	39	38	45	47	45	50	56	64	58	67	66	66	53.7
	Minimum	37	32	31	32	30	38	42	38	25	14	29	37	55	37	29	34	41	52	39	25	24	29	33	34	39	34	44	38	42	53	48	36.0
Unionville	Maximum	55	45	50	50	45	44	50	45	37	25	55	54	74	70	50	55	70	60	45	36	34	40	55	47	45	50	52	65	72	75	67	52.2
	Minimum	30	23	20	22	27	33	35	32	20	5	20	30	40	43	30	31	35	36	36	15	18	20	24	32	32	20	32	25	40	50	45	29.1
Warrenton	Maximum	54	50	45	47	49	46	44	52	47	28	58	67	84	78	47	54	66	75	57	45	35	42	46	45	48	58	61	60	70	69	67	54.6
	Minimum	31	33	24	25	27	34	39	35	26	12	26	34	54	41	24	30	38	52	40	25	22	25	30	32	35	29	44	33	39	52	51	33.6
Southeast Lowlands																																	
Campbell	Maximum	56	52	41	48	52	45	47	65	57	42	47	59	80	79	58	61	55	66	70	57	47	65	63	51	62	59	75	62	67	67	70	58.9
	Minimum	32	31	25	23	25	38	36	37	33	22	23	28	53	44	30	27	32	52	49	29	26	26	39	32	42	42	35	48	38	54	54	35.6
Caruthersville	Maximum	56	54	48	46	52	51	47	63	58	47	49	63	79	78	53	60	55	68	68	62	46	69	66	52	63	59	73	69	72	68	67	60.0
	Minimum	40	32	32	34	45	38	43	41	27	30	35	46	62	35	35	42	53	55	40	29	34	42	38	47	40	44	49	48	55	57	49	41.8
Doniphan	Maximum	60	56	46	48	50	46	47	65	59	50	46	56	82	78	54	58	52	62	65	50	45	57	51	47	58	54	73	67	71	70	66	57.7
	Minimum	26	29	24	22	30	42	39	34	36	28	26	29	51	47	30	28	34	52	49	31	26	27	30	31	32	30	34	45	40	59	58	35.5
Jackson	Maximum	56	52	55	47	52	50	46	64	54	39	46	61	79	77	48	59	64	66	69	60	48	54	53	53	55	58	72	70	72	67	69	58.5
	Minimum	32	37	26	23	27	40	41	41	38	20	28	28	55	45	30	29	32	52	56	31	27	26	37	32	41	32	40	35	37	35	57	35.8
Poplar Bluff	Maximum	63	57	46	51	53	48	51	68	56	43	46	63	81	73	56	61	59	65	69	55	48	60	54	52	62	59	77	67	74	67	70	59.8
	Minimum	30	31	25	22	26	41	39	38	36	20	24	28	45	50	30	28	34	52	53	32	27	27	40	32	40	29	34	44	38	58	54	35.7
Sikeston	Maximum	56	56	50	47	51	50	46	63	63	40	46	58	78	78	58	58	60	65	66	64	44	59	62	50	58	58	73	73	71	71	68	59.4
	Minimum	35	41	29	25	29	40	39	39	39	23	27	32	54	57	32	30	40	51	56	35	28	30	41	33	43	34	39	45	40	56	57	38.7
Cairo, Ill	Maximum	56	48	37	45	52	48	46	64	46	34	46	61	78	71	47	59	62	66	65	48	43	64	49	49	56	56	71	60	70	64	65	55.7
	Minimum	38	35	31	30	33	44	40	41	29	22	28	36	61	43	33	35	43	57	48	30	28	32	39	36	44	37	47	47	47	57	52	39.5
Ozark Plateau																																	
Arcadia §§	Maximum	58	51	45	48	50	43	45	60	44	38	53	64	85	63	52	58	60	69	66	32	45	51	52	46	54	59	70	67	70	66	74	56.1
	Minimum	25	29	21	18	20	32	39	37	32	17	18	29	37	56	27	24	26	35	55	31	23	24	26	27	31	30	36	40	35	41	50	31.3
Birchtree	Maximum	58	57	54	49	51	46	44	60	53	44	51	58	82	77	57	59	54	70	58	52	44	54	52	49	58	59	72	68	72	69	65	57.9
	Minimum	32	35	25	24	31	37	39	35	33	20	26	28	55	46	32	27	39	52	42	27	24	27	28	34	37	29	39	45	43	56	49	35.4
Eldon §§	Maximum	58	52	48	51	52	39	39	54	30	34	61	64	80	57	50	60	67	75	49	26	44	42	51	44	51	64	64	68	76	75	54	54.2
	Minimum	28	30	25	22	22	32	37	36	30	17	17	30	37	57	26	26	32	39	49	25	21	20	27	32	34	27	30	36	36	47	53	31.6
Farmington	Maximum	56	48	40	48	52	43	42	59	49	34	58	58	85	71	49	60	59	65	62	47	44	53	48	44	53	62	68	66	69	68	66	55.7
	Minimum	32	37	24	20	24	37	37	36	30	16	26	31	53	38	26	30	37	50	47	25	23	23	33	29	37	28	34	39	41	53	50	33 7
Koshkonong	Maximum	59	57	52	50	52	47	47	62	54	47	46	60	83	75	52	60	54	68	58	41	45	58	58	46	59	63	74	..	75	68	67	[a]57.9
	Minimum	38	39	28	26	31	41	38	37	35	21	28	37	49	44	32	..	45	43	40	27	24	32	36	34	38	33	42	..	43	56	50	[b]36.8
Lebanon	Maximum	62	67	50	50	52	50	42	59	50	41	56	66	86	73	53	62	63	76	61	41	43	56	56	52	54	66	70	72	75	76	75	59.8
	Minimum	24	32	19	22	31	35	34	32	26	13	29	43	55	38	24	30	39	49	34	20	11	25	28	32	34	25	39	35	45	54	44	32.3
Mountain Grove §§	Maximum	59	57	51	48	48	41	41	57	45	40	47	62	81	58	52	57	59	69	48	26	42	52	52	47	55	59	70	68	70	67	60	54.5
	Minimum	29	34	24	24	25	36	37	34	31	17	18	30	36	53	27	28	31	42	47	24	20	20	30	30	33	27	32	40	42	44	53	32.2
Neosho	Maximum	59	64	58	56	56	44	44	54	55	55	51	63	79	78	55	64	66	70	65	35	43	70	69	64	61	68	75	73	73	76	71	61.7
	Minimum	28	28	31	31	38	39	31	32	34	21	32	35	36	45	26	35	39	40	35	22	18	27	31	37	39	38	39	43	51	58	50	35.1
Rolla	Maximum	54	53	47	49	51	51	51	54	48	36	54	61	83	77	47	56	61	77	58	37	41	49	49	47	51	61	66	65	73	68	69	56.3
	Minimum	33	38	25	24	30	37	39	36	30	17	30	34	53	41	28	31	39	53	36	24	22	27	32	34	38	28	44	40	44	57	49	35.3
Springfield	Maximum	57	55	49	50	47	43	42	53	41	41	53	64	79	67	49	59	58	70	57	28	41	66	50	52	53	63	67	68	72	73	60	55.7
	Minimum	38	36	30	29	36	35	34	37	26	18	33	39	59	38	31	36	48	54	28	22	18	33	31	38	38	32	46	45	50	56	47	36.8
Southwest Plain																																	
Appleton City	Maximum	58	53	48	54	49	42	45	55	46	39	61	63	81	72	50	62	64	67	63	32	46	45	54	52	54	66	64	69	75	76	66	57.1
	Minimum	34	36	27	27	38	37	32	33	29	16	32	39	61	45	27	37	42	56	32	22	18	27	31	35	37	30	42	36	52	57	47	35.9
Clinton	Maximum	65	55	50	50	45	45	45	48	43	35	60	64	80	74	45	55	68	68	58	40	43	40	52	48	45	63	65	70	70	75	68	55.9
	Minimum	33	35	28	25	38	35	35	33	29	15	30	38	61	38	27	32	40	58	38	22	18	26	32	35	38	28	40	37	48	58	47	35.4
Harrisonville §§	Maximum	50	52	50	52	40	39	47	54	37	37	58	65	81	54	52	61	69	71	38	27	45	39	51	43	53	65	64	66	73	78	51	53.9
	Minimum	32	32	23	25	27	30	31	33	26	13	15	32	45	43	23	28	35	44	35	20	15	17	27	29	34	27	36	32	36	53	47	30.5
Lamar §§	Maximum	62	58	51	56	43	42	45	56	41	44	58	68	80	52	55	65	67	71	42	28	45	60	52	62	58	69	68	74	75	77	60	57.5
	Minimum	27	31	30	30	31	39	32	34	32	20	20	37	46	48	27	27	37	50	38	24	18	19	32	32	35	32	34	41	42	53	51	33.8
Lamonte	Maximum	59	51	48	52	50	48	47	51	37	39	60	60	79	61	51	61	67	73	54	31	43	40	49	49	50	64	60	66	77	77	60	55.3
	Minimum	30	33	24	27	27	34	34	33	28	15	30	39	59	39	25	33	42	53	30	22	18	23	30	30	34	27	39	34	48	57	46	33.6
Marshall	Maximum	58	57	50	49	48	48	45	55	49	36	57	57	77	65	52	59	68	73	63	43	41	42	47	47	49	62	60	63	75	77	64	56.0
	Minimum	29	35	25	27	28	33	37	35	25	14	28	38	58	43	26	33	42	55	35	22	20	22	29	34	36	30	38	32	47	56	46	34.1
Nevada	Maximum	61	56	50	55	48	42	46	54	41	40	61	64	81	71	53	64	66	71	60	31	47	55	53	57	60	65	65	71	77	76	64	58.2
	Minimum	33	40	27	29	38	34	31	33	29	18	33	39	61	43	28	37	44	57	30	22	16	29	30	36	37	31	40	37	51	57	48	36.1
Warrensburg	Maximum	59	51	48	52	46	43	45	51	40	38	59	60	80	70	53	60	69	72	58	30	40	35	49	50	50	63	59	68	75	76	63	55.2
	Minimum	31	30	25	21	33	31	31	33	26	13	27	39	58	40	24	33	44	55	28	20	16	14	18	39	34	27	37	33	50	55	45	32.6
Warsaw	Maximum	59	56	50	54	49	49	45	55	57	40	62	65	87	74	53	62	68	74	64	37	46	46	54	51	53	66	65	70	79	76	71	59.3
	Minimum	26	36	22	26	36	36	36	34	28	16	32	37	39	43	19	34	40	55	32	22	19	24	30	35	37	26	42	38	51	58	46	34.0
Northwest Plateau																																	
Chillicothe §§	Maximum	58	51	52	51	47	40	51	47	36	32	61	60	77	50	54	60	71	57	33	22	39	39	52	40	47	60	61	65	77	78	51	52.2
	Minimum	24	25	21	21	24	30	34	32	22	8	11	26	37	41	18	20	34	40	31	20	17	18	23	27	34	25	27	26	26	47	47	27.0
Grant City	Maximum	53	49	49	44	44	39	48	47	35	28	54	62	73	72	50	59	67	61	39	24	34	33	47	44	39	54	52	60	70	77	63	50.6
	Minimum	25	29	22	24	31	32	35	31	20	6	23	31	54	35	17	33	35	38	24	17	14	18	21	31	33	25	32	27	45	53	44	29.2
Kansas City	Maximum	57	48	48	50	40	38	48	47	31	36	59	62	77	58	53	61	69	74	50	24	41	37	48	43	48	64	58	65	72	78	54	52.8
	Minimum	39	35	29	30	36	36	37	31	18	13	32	42	58	38	31	41	48	50	22	20	19	27	31	37	38	34	41	38	54	54	45	35.6
Kidder §§	Maximum	54	47	46	47	47	39	49	44	31	31	54	58	75	49	54	58	68	73	35	34	37	37	47	39	45	59	56	60	74	78	51	50.8
	Minimum	28	30	22	22	27	32	35	33	22	9	11	26	40	41	22	24	34	42	34	19	16	16	25	26	33	27	28	29	30	47	46	28.3
Lexington §§	Maximum	60	54	53	52	47	39	49	51	36	39	61	63	78	53	54	61	72	74	38	25	45	40	51	42	51	64	64	68	74	79	51	54.5
	Minimum	30	32	25	27	29	34	35	35	26	12	14	33	43	45	25	28	38	42	38	22	19	20	28	32	36	29	33	33	40	51	50	31.7
Maryville	Maximum	58	52	50	48	45	39	51	45	35	32	56	66	78	71	55	64	70	65	40	25	36	34	45	44	42	60	58	65	75	76	59	52.9
	Minimum	28	30	21	26	31	31	34	32	21	8	24	38	55	34	23	33	37	40	25	18	12	19	21	30	34	25	31	30	47	54	45	30.2
Oregon	Maximum	60	57	55	53	45	39	51	45	35	36	61	61	79	72	57	61	72	75	44	25	39	34	49	42	46	63	62	68	74	81	59	54.8
	Minimum	34	31	23	27	32	32	34	34	20	10	28	43	55	34	24	36	47	43	24	18	13	22	28	34	36	30	32	32	50	54	45	32.4
St. Joseph	Maximum	56	51	50	49	41	40	50	43	30	35	57	61	77	52	54	60	69	75	38	23	38	36	47	43	45	63	60	64	74	80	59	52.3
	Minimum	36	33	24	29	34	34	36	29	16	12	29	44	51	35	27	37	46	38	22	19	16	24	30	36	33	32	35	34	51	51	46	32.9
Trenton	Maximum	53	47	49	49	44	42	52	47	35	30	57	58	77	68	52	60	69	71	43	27	38	43	50	42	44	57	59	60	75	78	67	53.0
	Minimum	27	30	22	27	31	35	35	33	21	9	26	35	52	42	21	33	37	43	27	21	20	19	28	32	33	26	33	28	45	57	47	31.5

[a], [b], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-24-33—900.

S 51.05
U N M S

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

VOL. XXXVII ST. LOUIS, MO., APRIL, 1933 No. 4

GENERAL SUMMARY

Excepting the unusual warmth of the 8th and 9th and the low temperatures of the 7th, 14th, and 15th, there were no very marked features of temperature in April. The month averaged slightly cooler than normal over most of the State, except the Northwest Plateau, where it was slightly warmer than normal.

Precipitation also averaged not far from normal for the State as a whole, but it was unevenly distributed, with considerably more than normal in the Southeast Lowlands and the Ozark Plateau, and decidedly less than normal over the northern half of the State and the west-central section. It was rather dry in several of the far northwestern counties.

Heavy, wet snow fell to a depth of several inches on the 13th or 14th, principally in the counties of Platte, Caldwell, Linn, Adair, Greene, and Barry.

The month was unusually free from severe storms, although some damaging winds occurred in the northern half of the State on the 29th. (See under "Miscellaneous Phenomena").

Winter grains and pastures made fair to very good progress during the month, but the frequency of rain in the last two weeks of March and the first half of April seriously delayed plowing and preparation for planting of oats and corn over most of the State. These adverse conditions prevailed in much less degree in the northwestern and extreme western counties than in the eastern half. Showers interfered again about the 20th to 25th. Considerable field work was done the last few days of April, but the month closed with corn planting decidedly behindhand over the eastern half of the State. There was no serious injury to vegetation from frost or freezing during the month. Apples, cherries, and plums bloomed heavily. Peaches made a fair showing in the southeastern quarter, but had been mostly winter killed elsewhere.

River stages were generally below normal on streams in or touching Missouri. At St. Louis the average stage was only slightly below normal. However, there were some high stages. A minor flood occurred in the Mississippi at Grafton, Ill., on the 12-14th, causing slight overflow on the Missouri side. A strong flood occurred in the Black River at Leeper and Poplar Bluff on the 16-17th, and a moderate flood in the Meramec on the 16-18th. Flood damage was slight, except at and below Poplar Bluff, where the damage to roads, bridges, and fences, was estimated at about $5,000 and to crops about $3,000.

TEMPERATURE

The monthly mean temperature for the State, 66 stations reporting, was 54.9°, or 0.3° below normal. The highest monthly mean was 61.1° at Caruthersville and the lowest monthly mean was 50.7° at Macon. The highest temperature recorded was 90° at Louisiana on the 28th, and the lowest was 22° at Goodland on the 7th. The greatest daily range was 51° at Conception on the 8th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 3.53 inches, or 0.39 inch less than normal. The greatest local monthly amount was 7.85 inches at Greenville and Williamsville, and the least local monthly amount was 0.71 inch at Grant City. The greatest amount in any twenty-four hours was 3.53 inches at Springfield on the 14-15th. The average number of days with 0.01 inch or more of precipitation was 10. The snowfall averaged 0.7 inch for the State, or 0.1 inch more than normal. The greatest monthly snowfall was 11.0 inches at Seligman.

MISCELLANEOUS PHENOMENA

Duststorms.—12th, 29th, 30th.
Floods.—12-14th, 16th, 17th, 18th.
Fog, dense.—Local, on 5th.
Frost.—Light, 1st, 2d, 3d, 4th, 6th, 7th, 11th, 12th, 15th,

(Continued on page 19)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia	28.88	30.23	23	29.38	30	9.7	30	s.	29	77	50	53	57
Hannibal	29.87	30.24	22	29.42	30	10.7	34	s.	30	75	52	..	..
Kansas City	29.87	30.26	22	29.25	30	11.6	30	sw.	30	68	50	52	68
St. Joseph	29.86	30.28	22	29.23	30	10.4	31	se.	19	68	43	48	66
St. Louis	29.87	30.21	23	29.51	30	11.2	44	s.	29	80	60	60	51
Springfield	29.86	30.18	12	29.46	30	11.1	31	s.	4	78	60	60	65
Cairo, Ill.	29.89	30.27	12	29.57	6	9.7	30	sw.	30	85	69	72	66
Keokuk, Iowa	29.90	30.31	22	29.39	30	9.4	25	nw.	2	73	52	56	60

COMPARATIVE DATA FOR APRIL

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	57.9	+ 2.7	94	20	1.83	−2.09	3.91	0.80	....	5	..	..	..
1889	55.7	+ 0.5	90	27	2.52	−1.40	5.40	0.67	....	8	..	..	..
1890	56.2	+ 1.0	93	25	3.17	−0.75	7.00	0.00	....	8	..	..	..
1891	56.8	+ 1.6	93	15	3.90	−0.02	9.50	0.90	T.	9	..	..	..
1892	53.1	− 2.1	90	24	5.66	+1.74	9.14	2.50	0 0	11	9	8	13
1893	53.9	− 1.3	95	19	7.84	+3.92	17.49	1.24	0.0	12	8	9	13
1894	56.1	+ 0.9	95	20	3.17	−0.75	6.84	0.90	T.	8	12	10	8
1895	57.9	+ 2.7	100	24	1.95	−1.97	4.41	0.02	T.	7	14	8	8
1896	61.9	+ 6.7	92	17	3.51	−0.41	7.42	1.11	0.0	9	11	12	7
1897	54.4	− 0.8	88	21	4.55	+0.63	8.21	1.20	T.	10	10	11	9
1898	52.5	− 2.7	90	14	3.65	−0.27	6.65	0.87	T.	10	12	9	9
1899	54.0	− 1.2	96	6	3.70	−0.22	6.88	1.62	3.8	8	12	9	9
1900	56.7	+ 1.5	89	21	3.36	−0.56	6.76	1.34	0.7	9	11	10	9
1901	53.3	− 1.9	94	24	2.85	−1.07	5.41	0.89	1.8	8	14	7	9
1902	53.9	− 1.3	95	19	2.66	−1.26	7.13	0.72	T.	11	13	11	6
1903	55.9	+ 0.7	91	26	3.54	−0.38	7.94	1.32	1.2	9	11	10	9
1904	49.0	− 6.2	84	19	5.75	+1.83	11.03	2.25	2.7	9	15	6	9
1905	54.9	− 0.3	92	20	3.19	−0.73	7.79	0.07	0.3	6	14	8	8
1906	59.5	+ 4.3	93	22	2.24	−1.68	4.31	0.91	0.0	6	17	7	6
1907	48.7	− 6.5	89	16	3.43	−0.49	5.75	1.08	T.	8	11	8	11
1908	56.6	+ 1.4	90	18	5.30	+1.38	12.44	0.37	T.	11	11	8	11
1909	54.8	− 0.4	93	19	4.35	+0.43	8.49	1.31	T.	8	13	9	8
1910	54.8	− 0.4	97	21	3.51	−0.41	6.66	1.30	0.9	11	12	7	11
1911	53.5	− 1.7	91	20	4.99	+1.07	9.30	1.29	T.	10	12	8	10
1912	56.0	+ 0.8	89	24	5.98	+2.06	12.18	1.18	0.7	10	13	7	10
1913	56.2	+ 1.0	94	25	3.33	−0.59	4.98	1.25	T.	7	16	5	9
1914	55.2	0.0	91	18	3.14	−0.78	7.58	0.75	T.	8	12	7	11
1915	61.9	+ 6.7	96	18	2.03	−1.89	4.27	0.90	T.	7	16	8	6
1916	53.5	− 1.7	93	21	3.23	−0.69	5.70	1.20	1.9	10	11	8	11
1917	53.2	− 2.0	89	19	5.97	+2.05	10.82	3.47	1.2	12	12	6	12
1918	50.8	− 4.4	93	19	5.10	+1.18	12.14	1.64	0.9	11	12	6	12
1919	55.3	+ 0.1	94	20	3.01	−0.91	5.72	1.48	T.	9	12	7	11
1920	50.2	− 5.0	89	4	3.95	+0.03	8.19	1.41	4.8	11	11	7	12
1921	56.0	+ 0.8	91	19	5.37	+1.45	8.42	1.86	1.1	10	13	7	10
1922	57.3	+ 2.1	91	24	6.21	+2.29	14.34	1.72	T.	11	13	6	11
1923	54.2	− 1.0	92	14	3.12	−0.80	6.08	1.12	0.4	8	14	8	8
1924	56.6	+ 1.4	95	11	2.07	−1.85	6.32	0.48	T.	6	14	8	8
1925	61.0	+ 5.8	92	24	4.11	+0.19	8.14	1.90	0.0	10	12	9	9
1926	49.9	− 5.3	91	11	2.46	−1.46	4.96	0.50	2.4	8	14	6	10
1927	57.7	+ 2.5	94	18	8.46	+4.54	18.25	3.95	T.	14	10	7	13
1928	51.6	− 3.6	88	16	4.79	+0.87	9.62	1.01	0.2	8	13	7	10
1929	57.4	+ 2.2	96	27	6.15	+2.23	10.58	3.51	0.0	12	11	8	11
1930	59.1	+ 3.9	96	23	2.03	−1.89	7.72	0.22	0.0	8	14	8	8
1931	54.8	− 0.4	90	22	3.07	−0.85	6.23	1.01	T.	9	14	6	10
1932	57.6	+ 2.4	95	22	2.57	−1.35	5.79	1.12	0.0	8	14	8	8
1933	54.9	− 0.3	90	22	3.53	−0.39	7.85	0.71	0.7	10	11	9	10
Period	55.2	.....	100	4	3.92	.....	18.25	0.00	0.6	9	12	8	10

Climatological Data for April, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	55.4	+ 1.2	84	9	30	11	36	1.89	−1.66	0.77	T.	8	..	..	..	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	....	.....	81	9	..	..	39	1.54	−2.32	0.43	T.	13	12	7	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	54.4	− 0.5	87	9	32	7	36	1.72	−2.05	0.44	T.	12	13	6	11	n.	U. S. Weather Bureau
Downing	Schuyler	876	12	52.4	− 0.8	82	28	28	11	36	1.95	−1.81	0.83	4.5	10	9	9	12	e.	James Taylor
Elsberry	Lincoln	449	2	53.9	.....	82	30	27	27	42	3.36	.....	1.08	0	9	6	6	18	ne.	Ray E. Mills
Fayette	Howard	661	53	52.8	− 1.4	88	9	28	11	48	2.57	−1.05	0.62	1.0	12	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	53.6	− 1.0	86	9	31	7†	38	2.23	−1.95	0.38	0	13	15	4	11	nw.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	1.73	−2.10	1.06	3.0	6	7	7	16	nw.	J. W. Pulliam
Hannibal	Marion	534	41	53.3	− 0.1	83	9	33	27	31	2.13	−1.06	0.95	T.	11	8	10	12	e.	U. S. Weather Bureau
Jefferson City	Cole	557	43	53.8	− 2.2	87	9	31	7	44	2.53	−1.32	0.57	0	11	..	..	..	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	52.5	+ 0.6	82	9	29	11	40	1.76	−1.83	1.16	10.0	7	11	6	13	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	39	55.3	+ 1.3	90	28	26	27	44	2.88	−0.56	0.70	0	9	13	9	8	nw.	Stark Bro's Nurseries
Macon	Macon	875	34	50.7	− 2.4	83	9	30	11	43	1.59	−1.77	0.83	T.	6	14	9	7	w.	W. C. Brown
Mexico	Audrain	800	44	53.3	− 0.5	86	9	30	27	42	2.39	−1.27	0.40	T.	12	14	5	11	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	1.79	−1.92	0.72	0	7	11	6	13	n.	J. S. Conway
St. Charles	St. Charles	456	45	55.6	0.0	85	9	34	7	37	3.02	−0.63	0.95	0	10	11	11	8	nw.	L. C. Saeger
St. Louis	**St. Louis City**	568	60	55.5	− 0.6	86	30	36	7	33	3.84	+0.03	1.37	T.	12	8	10	12	s.	**Section Center**
St. Louis University	St. Louis City	578	21	55.2	0.0	86	30	35	7	33	3.35	−0.79	1.29	T.	12	17	9	4	se.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	2.20	−1.38	0.62	T.	11	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	35	52.2	− 0.9	80	9	30	11	34	2.30	−1.39	0.75	T.	8	12	11	7	n.	Frank Hall
Unionville	Putnam	1,062	40	52.6	+ 1.6	82	28	30	7†	37	0.80	−2.92	0.25	T.	4	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	54.8	0.0	83	9	32	7	36	2.97	−1.19	0.97	T.	12	8	13	9	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	52.0	− 0.3	80	28	32	11	34	1.59	−1.40	0.53	T.	9	7	9	14	nw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**53.6**	**− 0.3**	**90**	**28**	**26**	**27**	**48**	**2.37**	**−1.51**	**1.37**	**0.8**	**10**	**11**	**8**	**11**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	56.8	.....	86	30	30	7	43	4.66	.....	1.53	0	15	15	9	6	s.	Jeff. King
Caruthersville	Pemiscot	265	37	61.1	+ 0.9	84	30	41	15	30	4.41	−0.04	1.44	0	13	..	..	..	.....	Sam Smith
Doniphan	Ripley	344	29	58.3	− 0.2	82	9	30	7	44	6.77	+1.39	2.22	0	11	15	5	10	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	57.6	+ 0.5	84	30	29	7	42	6.21	+1.67	1.71	0	11	8	10	12	s.	John G. Putz
Marble Hill	Bollinger	470	38	57.5	+ 0.3	83	30	28	7	45	7.29	+2.57	2.10	0	12	10	11	9	w.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	5.79	+0.71	1.77	0	13	14	8	8	s.	John A. Spence
Poplar Bluff	Butler	339	28	57.8	− 1.7	84	30	30	7	42	5.79	+1.09	1.75	0	15	16	9	5	e.	J. H. Wolpers
Sikeston	Scott.	318	26	58.4	+ 0.3	85	30	33	7	37	5.21	+0.73	1.67	0	13	12	8	10	.....	John A. LaFont
Cairo, Ill.	Alexander, Ill.	358	61	58.5	+ 0.4	84	30	42	7	25	3.68	−0.04	1.27	0	12	8	10	12	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**58.2**	**+ 0.1**	**86**	**30**	**28**	**7**	**45**	**5.63**	**+1.06**	**2.22**	**0**	**13**	**12**	**9**	**9**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	55.1	− 0.2	81	9†	26	7	48	6.55	+1.87	1.70	0	13	13	6	11	e.	Arcadia College
Birchtree (near)	Shannon	1,000	38	56.2	− 0.9	82	9	29	7	46	7.19	+2.39	3.15	0	14	16	5	9	s.	V. H. Kirkendall
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	3.00	.....	1.20	T.	11	8	12	10	s.	Ozark Utilities Co.
Dean †‡	McDonald	1,000	29	56.4	− 0.3	86	9	29	2†	42	5.71	+1.11	1.10	T.	13	13	6	11	e.	H. E. Dean
Eldon	Miller	934	38	52.7[a]	− 2.7	82	9	30	7†	47	2.45	−2.11	0.47	1.0	10	10	12	8	sw.	E. H. Shepherd
Farmington	St. Francois	918	22	....	.....	..	..	..	..	..	....	.....	.....	.....	..	..	..	..	.....	Robert Forsyth
Goodland	Iron	1,000	40	54.4	− 0.6	84	30	22	7	48	6.68	+1.68	2.95	T.	10	11	12	7	n.	F. M. Adams
Greenville	Wayne	381	24	55.5	− 1.1	85	30	26	7	48	7.85	+2.86	2.11	0	9	16	6	8	se.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	6.16	+1.14	1.40	0	9	13	11	6	.....	A. W. Madison
Koshkonong	Oregon	958	32	58.5	0.0	84	9	37	7	39	6.64	+1.37	1.95	0	14	11	5	14	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	54.6	− 0.9	86	9	28	7†	47	4.99	+0.63	1.82	T.	8	14	6	10	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	56.5	0.0	85	9	33	2	37	5.66	+1.35	2.46	2.0	11	17	7	6	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	55.2	+ 0.3	82	9†	32	7	42	4.91	−0.05	2.09	T.	14	12	12	6	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	56.9	− 1.4	85	19	31	14	42	5.73	+1.29	1.78	T.	11	17	8	5	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	56.0	+ 0.1	85	9	28	7	47	3.60	−1.02	1.28	0	11	5	8	17	se.	F. H. Lane
Salem	Dent	1,173	29	55.2	− 0.8	82	9†	27	7	47	4.90	+0.27	2.75	0	12	6	10	14	s.	E. E. Martin
Seligman	Barry	1,542	32	57.6	+ 1.0	85	18	31	15	36	7.58	+3.24	2.10	11.0	11	18	4	8	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	27	54.4	− 1.3	83	9	29	7	44	4.62	+0.33	2.26	T.	10	10	10	10	se.	A. L. Hailey
Springfield	Greene	1,324	45	55.2	− 0.8	86	9	32	15	33	6.61	+2.75	3.53	5.2	12	18	5	7	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	55.3	.....	88	9	29	11	45	3.16	.....	0.75	1.1	12	8	10	12	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**55.6**	**− 0.6**	**88**	**9**	**22**	**7**	**48**	**5.31**	**+0.93**	**3.53**	**1.1**	**11**	**12**	**8**	**10**	**se.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	55.8	− 0.3	84	9	30	11	40	3.15	−1.26	1.23	T.	8	3	23	4	ne.	W. G. Bigelow
Clinton	Henry	765	40	57.0	+ 0.7	88	9	31	11	46	2.68	−1.63	0.62	0	9	5	22	3	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	53.2	− 0.7	84	9	27	11	43	2.06	−1.48	0.60	0	9	3	9	18	n.	John H. Patterson
Lamar	Barton	980	45	55.2	− 1.4	86	9	34	6†	44	4.55	+0.07	1.55	0	7	13	9	8	ne.	Jesse A. Mann
Lamonte	Pettis	867	32	54.3	− 0.9	80	9†	29	6†	46	2.40	−1.51	0.55	T.	9	16	4	10	se.	J. E. Wheeler
Marshall	Saline	779	46	54.4	− 0.4	84	9	31	7	40	1.82	−2.02	0.58	T.	9	14	9	7	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	56.0	+ 0.3	84	9	31	11	37	2.73	−1.47	1.33	0	5	13	5	12	ne.	George A. Kaupp
Warrensburg	Johnson	878	46	54.4	− 1.7	84	9	29	7	42	2.87	−0.48	0.65	T.	9	12	6	12	ne.	E. A. Markey
Warsaw	Benton	687	32	56.2	− 0.5	88	9	27	7	50	2.54	−2.04	0.48	0	13	3	16	11	e.	Everett Martin
Division means	**and extremes**	.....	..	**55.2**	**− 0.5**	**88**	**9**	**27**	**7†**	**50**	**3.06**	**−1.03**	**1.55**	**T**	**9**	**9**	**11**	**10**	**ne.**	
Northwest Plateau																				
Bethany	Harrison	916	38	52.4	+ 0.9	82	28	26	15	42	1.28	−1.99	0.64	T.	3	15	9	6	sw.	A. S. Cumming
Chillicothe	Livingston	779	24	51.6	− 1.5	85	28	28	7†	50	2.48	−1.81	1.72	2.0	8	11	12	7	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	53.2	+ 1.0	82	8†	28	11	51	1.42	−1.43	0.53	T.	4	8	15	7	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	53.2[b]	− 0.6	83	9	24	11	41	1.66	−1.79	0.60	1.8	9	15	3	12	sw.	Fred L. Stiff
Grant City	Worth	1,134	29	51.4	− 0.8	78	28	26	11	37	0.71	−2.31	0.31	T.	5	8	15	7	ne.	Howard Rybolt
Kansas City	Jackson	963	44	55.1	+ 0.3	84	9	31	13	35	1.82	−1.32	0.64	2.0	7	10	10	10	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	52.8	+ 0.6	82	9	28	11	34	1.48	−1.70	0.57	3.0	9	17	8	5	ne.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	1.83	−1.44	1.12	T.	6	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	54.2	− 0.4	85	9	31	7	41	3.22	−0.50	1.03	0	10	12	13	5	e.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	53.6	+ 2.8	85	8	27	7†	39	0.95	−2.10	0.30	T.	9	9	10	11	n.	J. R. Brink
Oregon	Holt	1,048	77	55.0	+ 2.3	85	8	27	11	40	3.81	+0.49	2.14	T.	6	16	8	6	nw.	Mina Wright
St. Joseph	Buchanan	987	23	54.6	+ 0.4	85	8	31	11	35	3.42	+0.23	2.10	T.	8	13	9	8	se.	U. S. Weather Bureau
Tarkio	Atchison	916	30	51.4	− 0.8	84	8	26	15	38	1.00	−2.15	0.70	0	3	5	16	9	se.	Albert Volker
Trenton	Grundy	822	37	54.8[b]	+ 2.1	84	28	30	15†	42	0.95	−2.52	0.43	2.0	5	7	13	10	s.	W. H. Estes
Division means	**and extremes**	.....	..	**53.3**	**+ 0.5**	**85**	**8†**	**24**	**11**	**51**	**1.80**	**−1.55**	**2.14**	**0.8**	**7**	**11**	**11**	**8**	**s.**	
State means	**and extremes**	.....	..	**54.9**	**− 0.3**	**90**	**28**	**22**	**7**	**51**	**3.53**	**−0.39**	**3.53**	**0.7**	**10**	**11**	**9**	**10**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for April, 1933

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi	.13					.23								.73		.10	.58															1.77
Boonville	Missouri	.32	.13	.03		.20	.30	.02							.48		.10	.47				.10	.27	.01						.01	.25		2.69
Bowling Green	Mississippi	.75		.27		.05	.27	.11		.09					.15	.07	.42														.51		2.69
Brunswick	Grand		.05	.15		.32	.17								.77			.03					.15								.25		1.89
Canton	Mississippi	1.23	.13		T.		.19	.01							.62			.63									.01				.13		2.95
Clifton Hill	Chariton			.10	.04	.29	.03	.01						.43	.27		.11	.05				.06	.01							.10	.04		1.54
Columbia***	Missouri	.11	.06		.09	.37	.02		T.		T.			.13	.12	.05	.39				T.	.18	.06							.14			1.72
Downing	Mississippi		.28		.02	.28	.02		T.					.83	.05		.03									.07				.07	.30		1.95
Edina	do	T.	.13	T.		T.	.21	T.	T.						1.08			.13													.14		1.69
Elsberry	do	.16	.23	.04	T.	.52	.25		T.		T.					T.	1.08						.14			T.				.49	.45		3.36
Farber	do	.28	.26	.10		T.	.33	.04		T.					.18	T.	.31	.18				.10	.26								.51		2.55
Fayette	Missouri	.62	.12	.09		.14	.28								.42		.03	.43				.04	.20	T.						.10	.10		2.57
Fulton	do		.15	.02		.14	.29		T.		.08				.03	.28	.38	.10				.19	.19	T.						.21	.17		2.23
Gorin	Mississippi					.28	T.		T.					1.06			.17									.08				.07	.07		1.73
Hannibal***	do	.24	.08		.02	.40	.08		.06					.19	.07	.07	.88	T.								T.				.04			2.13
Hermann	Missouri	.04	.36			.02	.13	T.			.21				.05	.20	.68	.10				T.	.25		T						.40		2.44
Jefferson City	do	.37	.21			.05	.30			.05					.05	.30	.57	.14				.23	.26										2.53
Kahoka	Mississippi						.14								1.00			.30													.31		1.75
Kirksville	do	.03	.14			.30	T.							.45	.71		.03													.10			1.76
LaBelle	do	.32	.10	.05			.20	.02	.01						.52		.01	.64													.28		2.15
Linneus	Grand	.14	.05		.07	.08	.03						.48	.67			.02				.05	T.				T.				.10			1.69
Louisiana	Mississippi	.32	.27		.22	.70			.20					.30			.40					.12								.35			2.88
Lucerne	Grand					.27								.23	.10											T.					.25		0.85
Macon	Chariton	.27		.05			.25	.02							.83			.17															1.59
Memphis	Mississippi		.10			T.	.30	.10	T					T.	1.22			.09												.10			1.91
Mexico	do	.35	.25	.05	T.	T.	.31	.05	T.						.20	.08	.40	.26	T.			.24	.05								.15		2.39
Milan	Grand			.15		.60								.18	.83											T.					.11		1.87
Monroe City	Mississippi		T.		.03	.30	.22							.07	.31		.72													.14			1.79
New London	do	1.22	.18	.06	.07	.09	.39	.05							.15			.93														.03		3.17
Pacific	Meramec	.08	.20			.18	.36					T.			.44	.62	1.12					T.	.18			T.	.12				.22		3.52
Palmyra	Mississippi	.12		.10			.37	.11	.02						.32		.22	.26													.10			1.62
Paris	do	.81	.15	.10			.35	.10							.35		.39	.35																2.60
Perry	do	.55	.34	.09	T.	.08	.36	.10							.14	.02	.57	T.													T.			2.25
Philadelphia	do	.45	.07	.03			.24								.60		.03	.70																2.12
St. Charles	Missouri		.61	.01	.03	.04	T.								.56	.95	.57					T.	.06			T.				.01	.18		3.02
St. Louis*	Mississippi	.10	T.	T.	.05	.14	.04		T.		.82			.02	.67	1.36	.02					.08	.02		T.					.52	T.		3.84
St. Louis University*	do	.06		T	.04	.15	.02				.65			.01	.56	1.29	.02					.09	.02		T.					.44			3.35
Shelbina	do	.32	.08	.04	.01	.26	.04	.02								.57	.08	.62														.16		2.20
Steffenville	do		.10			.35	.05		T.					.60	.30		.75	.05								T.				.10	T.		2.30
Troy	do	1.25	.30	.03		.18	.64	.02		T	.01				.02	.14	1.03	.06				.18	.06		T.						.70		4.62
Union	Meramec	.04	.22	.02	.02	.39	.45	.02		T.		.01			.23	.58	1.01					T.	.24		.01		.09				.46		3.79
Unionville	Chariton	T.				.25								.25																.20	.10		0.80
Valley Park	Meramec	.15	.18		T.	.04	.22	T.		T.		.21			.40	.15	1.16						.12		.02		.28				.33		3.26
Warrenton	Mississippi	.12	.39	T.	.06	.20	.27				.16				.05	.30	.97						.10							.10	.25		2.97
West Ely	do	.09	.02		.02	.17	.04		T.				T.	.36		.46	.36																1.52
Winfield	do	.58	.40	.04		.19	.46	.10			.09					.20	1.12			.18											.65		4.01
Keokuk, Ia.***	do	.22	T.		T.	.18	.01		.03		T.			.31	.07		.53	T.	T.							.02				.22	T.		1.59
Southeast Lowlands																																	
Bragg City	St. Francis	.08					.60					1.08				1.70															.63		4.09
Campbell	do		.03	.25	.05	.15	.33					1.53			.10	1.37	.05					.15		.10	.08	.08	.06				.33		4.66
Cape Girardeau	Mississippi	.97	.09	.05	.03	.02	.33					.88			.38	.72	.82					1.04	.14	.04			.34				.42		6.27
Carruthersville	do	.07	.18	.03	.19	.43					1.44				1.00	.14						.09	.60	.07	.05					.12			4.41
Dexter	St. Francis	.47		.38		.11	.45					1.61			.26	1.25						T.	T.			.17	.21				.58		5.49
Doniphan	Black		T.	.28		.26	.19				.29	.15			.63	2.06					.36	.07		T.		.26				2.22		6.77
Fisk	St. Francis	1.11	T.	.63		T.	.47					1.63			.36	1.54	.33							T.	T.	T.	.04	T.			1.59		7.70
Jackson	Mississippi		.10	.06		.27	.47				.63				.88	1.71						.89	.20			.15				.85		6.21
Marble Hill	do		.28	.04		.36	.52				.32	.34			.83	2.10						.43	.12			.22				1.73		7.29
Morehouse	do	.24	.02	.46		.17	.22				1.61	.39			.33	1.77	T.					.31			.04	T.	.20				.03		5.79
New Madrid	do	.40	.06	.45	.03	.01	.75					2.00			.05	.55	.35						.36		.05	.02	.35				.21		5.64
Parma	St. Francis	.45		.30		.09	.23					2.34				1.21	.41										.40						5.43
Poplar Bluff	Black	.15	.03	.39	.10	.15	.26				T.	.55			.38	1.75	.31					.03	T.		.28	.03	.18				1.20		5.79
Sikeston	Mississippi	.05	.30	.02	.04	.42					1.67			.05	1.40	.78						.34			.03	.06				.05			5.21
Cairo, Ill.***	do		.03	.24		.76	.15			T.	.67	.13			.26	1.06	T.			T.		.06	T.		.06	.16				.10	T.		3.68
Ozark Plateau																																	
Arcadia	St. Francis	.25	.07	.04		.80				.03	.70				.33	1.70	1.54				.06		.03			.15					.85		6.55
Birchtree (near)	Black			.21		.57	.40				.60	.09			.75	3.15	.24				.35	.20		.07	.22					.10	.24		7.19
Caplinger Mills	Osage	.02				1.20								.28	.32	.23	.06			.12	.42	.22				.02			.11				3.00
Chaonia	St. Francis	1.31	.06	.16			.48				.01	1.04			.40	1.53	.64							.16	.01		.04				1.51		7.35
Dean	Neosho					.85					.05			.08	.27	.95	.23			.35	1.10	.82		.05	.43		.48			.05			5.71
Eldon	Missouri	.17	.21				.31				.03				.12	.41	.47	.15					.42								.16		2.45
Farmington	St. Francis																																
Fredericktown	do	.81					.72					.37			.12	1.74	1.15					.12	.29	.10			.12				1.38		6.92
Galena	White			.05		.39	.31								.20	1.15	.30				.25	.29			.10	.10					.10		3.24
Goodland	Black		.10	T.		.54					1.11	.50			.62	2.95	.27					.10	.15								.34		6.68
Greenville	St. Francis			.27		.21	.37				.78				1.80	2.00							.20			.11					2.11		7.85
Hailey	White					1.40									1.23	1.27	1.20				.12	.63		.03	.18				.10				6.16
Koshkonong	Black		.05	.08		.22	.42				.40	.16			.59	1.82	.17				1.95	.06			.30					.05	.37		6.64
Lakeside	Osage	.24	.14	T.		.05	.33	T.	T.						.16	.35	.64	.11				.46	T.	T.	T.		.01				.12		2.61
Lebanon	do		.07		T.	.53	T.				T.			.06	1.32	1.82	.46			.52			T.		T.				.21			4.99
Leeper	Black	.29		.12			1.11				1.04	.40			.36	1.48	1.04							.21							1.34		7.39
Lockwood	Osage			.06		2.46								.20	.38	.97	.30			T.	.36	.57		T.	.25	.07				.04			5.66
Mountain Grove	White	.07	.05	.12		.37	.15		T.		.03				.56	2.09	.15				.58	.12			.10	T.				.39	.13		4.91
Neosho	Neosho					1.78							.03	.03	.33	1.23	.25				1.51	.44	T.	.03	.05	T.				.05			5.73
Owensville	Gasconade					.22	.17	.22								.55	.95	.30					.42					.30						3.13
Ozark Beach	White	.06					.29				.20				.30	1.20	1.65			.25	.28	.78			.31	.05					.17		5.54
Rolla	Meramec	.26		.03			.34				.02				.27	.75	1.28					.01	.11				.08				.45		3.60
St. Thomas (near)	Osage	.18	.19			.07	.37								.06	.28	.80	.10				.29	.12								.08		2.54
Salem	Meramec		T.	.05		.22			T.		.06				.39	2.75	.25				.03	.11			.10	.36				.10	.48		4.90
Seligman	Neosho					1.04					.10				.71	2.10	.52				1.92	.31		.08	.20		.32			.28			7.58
Seymour (near)	White		T.	.21		.27	.08								.40	2.26	.28				.62	.18		T.	.06	T				.26			4.62
Springfield***	do		.24	T.	.01	.37	T							.22	.74	3.02	.04				.86	.51	T.	T.	.37	.01				.22			6.61
Steelville	Meramec		.54				.98								.29	1.20	1.45					.20					.50				.30		5.46
Stover	Missouri	.14	.11				.22	.47							.18	.45	.32	.16					.06	.06									2.17
Versailles	Osage		.15	.01	T.	.75	.04							.04	.33	.41	.61	.02				.54	.14		T.					.12			3.16
Williamsville	Black	.65		.21	.01		.60					.70			.52	1.87	.71					.03	.02	.06	.03	.01	.13				2.30		7.85
Willow Sprgs. (near)	White	.52	.08	.27			.60			T.	.04	.07			.23	1.23	1.36	.02				1.30		.01	.18		.01				.51		6.43

Continued on next page

Daily Precipitation for April, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																	
Appleton City	Osage	T.	.02	T.		1.23	T.				T.			.50	.26	T.					.77	.30	.05			T.				.02			3.15
Clinton	do	.06			.04	.60	.34							.39	.37						.62		.14							.12			2.68
Concordia‖	Missouri			.02		.48									.98							.52	.20							.14	.38		2.72
Harrisonville‖	Osage	.15				.53	.07							.07	.31						.32	.48		.02						.11			2.06
Joplin‖	Neosho					2.58								.22	.36	.51				.85	1.73	.20								.08			6.53
Lamar‖	do					1.55	.65								.83	.20					.55	.60			.17	T.					T.		4.55
Lamonte	Missouri	.17			.06	.55					T.			.47	.27						.18	.38	.10					.22					2.40
Marshall	do		.09		.05	.49	T.				T.			.58	.25		T.				.01	.23								.07	.05		1.82
Nevada	Osage					1.33								.55	.10					T.	.11	.64											2.73
Osceola‖	do	.09		.11			.98								.61	.22	.10	.03			.27	.71									.10		3.22
Warrensburg	Missouri	T.	.08	.03	.04	.62	T.				T.			.57	.19		T.				.65	.16	T.								.53		2.87
Warsaw	Osage	T.	.12	.04		.21	.48							.36	.35	.15		.18				.35		.12	.02		.08				.08		2.54
Waverly ‖	Misouri	.03	T.	.06		.58	.10							T.	.95						.09	.25	.07							.02	.37		2.52
Northwest Plateau																																	
Bethany	Grand					.30	T.							T.												T				.64	.34		1.28
Chillicothe‖	do		.16	.09		.08	.06	T.		T.	T.			.02	1.72							.11								T.	.24		2.48
Conception	Missouri			T.		.31	T.							.08						T.	.53		T		T.		T.			.50			1.42
Edgerton	do	.04	.10		T.	.10	.03							.24						T.	.60	.23	.01							.31			1.66
Gallatin ‖	Grand		.07	.02			.09								.24							.20									.30		0.92
Grant City	do	T.	T.			.31	.01				T.	T.		T.						T.	.03			T.	T.				.18	.18		0.71
Kansas City***	Missouri	T.	.07		.05	.08	T.				T.			.64	T.					T.	.18	.30	T.		T.					.50	T.		1.82
Kidder	Grand	.10	.12		.10								.02	.30					.03	T.	.18	.06							T.	.57			1.48
King City	Missouri					.13	T.						.03	T.							1.12	.01				T.				.35	.19		1.83
Lexington ‖	do			.05		.30	.08							.06	.83						.28	1.03	.14							.05	.40		3.22
Maryville‖	do	.04		.09		.30	T.	.02						T.						.05	.05	.12				.04					.24		0.95
Oregon	do		.14			.20	T.							.31						T.	2.14	.67	T.							.35			3.81
St. Joseph***	do	T.	.09		.03	.18	T.					T.		.05	T.					.41	1.72	.24	T.			T.				.70			3.42
Tarkio	do		.15																		.70									.15			1.00
Trenton	Grand	.07	.04		.12	T.	T.							.43												T.				.29			0.95

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for April, 1933
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.024	.160	.142	.120	.287	.024	.072	.159	.253	.310	.098	.181	.309	.077	[a]	[b]	[c]	.057	.214	.278	.112	.053	.065	.144	.183	.182	.179	.185	.222	.190	....	4.265
	Mean temperature	58	50	48	56	56	43	53	60	70	52	46	52	56	38	42	44	52	58	64	62	57	56	54	60	58	54	54	62	68	72	..	55.2
	Wind movement	86	80	104	90	128	99	95	65	106	89	99	70	118	98	82	96	43	39	91	116	95	49	75	40	49	62	78	44	60	176	..	2,522

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report. [a], −.009; [b], −.003; [c], −.003.

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16th, 23d, 24th, 26th, 27th; heavy, 2d, 3d, 7th, 11th, 27th; killing, 2d, 7th, 8th, 9th, 10th, 11th, 12th, 15th, 16th, 27th.

Hail.—Light, 3d, 4th, 6th, 10th, 13th, 29th; moderate, 4th, 29th, 30th; heavy, 29th at Edgerton and Kansas City, and 30th at Warrensburg. (No damage reported).

Halos, solar.—1st, 2d, 7th, 14th, 26th.

Halos, lunar.—7th, 13th.

Sleet.—6th, 13th, 14th, 15th.

Thunderstorms.—Local, 2d, 5th, 7th, 8th, 13th, 14th, 15th, 21st, 26th; more or less general, 4th, 10th, 19th, 20th, 29th, 30th.

Windstorms.—On the 29th local storms caused some damage at various points in the northern half of the State. Trees, poles, and signs were blown down in Kansas City; small buildings damaged at Edgerton; trees blown down at Lexington, Clifton Hill, Bethany, and Gorin.

ERRATA

March, 1933, page 11, Springfield mean atmospheric pressure reduced to sea level should be 29.99.

Daily Temperatures for April, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	70	61	59	64	64	56	65	78	84	79	51	69	69	50	60	65	63	70	72	70	66	63	67	71	71	69	68	82	77	79	..	67.7
	Minimum ...	39	39	39	47	46	37	31	51	52	43	30	38	33	33	36	43	45	40	50	54	50	47	39	43	50	40	33	49	57	56	..	43.0
Columbia.	Maximum...	68	59	52	68	61	44	68	79	87	71	54	69	60	43	54	46	56	66	70	63	58	61	64	70	68	63	67	80	77	80	..	64.2
	Minimum ...	41	40	40	40	44	36	32	55	62	41	34	42	36	35	40	42	44	41	52	54	49	45	39	50	49	43	34	50	62	62	..	44.5
Fayette	Maximum...	72	63	58	65	56	42	68	79	88	51	58	70	59	47	59	47	59	70	71	62	59	62	66	74	71	64	69	81	77	78	..	64.8
	Minimum ...	36	37	37	37	41	37	29	31	55	48	28	34	40	32	39	41	42	38	43	53	48	44	46	44	46	38	30	37	56	57	..	40.8
Hannibal	Maximum...	67	59	48	60	63	46	64	75	83	71	53	67	60	46	55	45	55	59	68	63	64	60	64	72	61	58	64	80	75	79	..	62.8
	Minimum ...	43	42	38	37	46	38	36	44	59	42	36	41	35	35	40	42	43	51	47	50	50	46	40	41	45	39	33	51	60	63	..	43.8
Jefferson City §§	Maximum...	72	61	51	71	71	44	72	78	87	52	56	69	64	44	50	46	60	70	71	65	57	66	67	71	71	66	70	82	82	82	..	65.6
	Minimum ...	41	38	39	38	41	38	31	34	54	50	33	34	42	34	34	40	43	37	37	53	50	48	40	49	50	44	36	40	53	62	..	42.1
Kirksville.	Maximum...	66	68	48	59	56	56	65	75	82	81	52	67	60	47	57	55	57	60	67	62	64	61	65	74	70	67	65	80	78	72	..	64.5
	Minimum ...	35	35	35	33	45	35	30	44	68	41	29	37	30	32	31	38	42	44	45	49	48	43	30	41	48	37	31	48	55	55	..	40.5
Louisiana	Maximum...	60	63	65	64	62	57	58	70	82	62	58	72	62	52	48	50	58	62	74	68	68	68	75	76	74	65	70	90	83	82	..	66.6
	Minimum ...	45	44	40	33	50	40	35	40	55	55	35	33	48	35	40	44	43	50	45	50	48	48	35	47	52	33	26	54	57	60	..	44.0
Macon§§	Maximum...	50	59	53	61	53	42	49	77	83	50	55	51	51	47	58	47	61	60	68	60	78	63	64	73	66	60	67	80	77	77	..	61.3
	Minimum ...	36	37	36	34	37	37	31	34	48	47	30	32	43	32	33	36	39	43	45	47	48	44	34	41	50	40	34	43	55	56	..	40.1
Mexico §§	Maximum...	70	71	71	65	62	45	68	77	86	76	57	70	66	44	53	46	57	62	69	63	63	63	65	70	72	63	68	83	75	81	..	66.0
	Minimum ...	39	39	37	36	37	38	32	35	53	50	31	34	41	33	33	39	40	42	46	49	47	43	35	39	47	41	30	44	49	59	..	40.6
St. Louis	Maximum...	66	60	54	63	59	46	69	76	81	71	55	66	68	43	48	58	56	61	66	65	65	65	63	71	73	64	65	80	75	86	..	64.6
	Minimum ...	47	43	42	39	45	39	36	53	60	45	40	42	43	39	39	45	46	51	48	50	50	46	40	54	49	46	43	51	60	60	..	46.4
Unionville	Maximum...	67	56	56	58	56	50	64	76	80	75	53	68	63	50	65	60	60	62	70	66	70	66	67	72	68	64	67	82	78	73	..	65.4
	Minimum ...	35	34	34	33	43	34	30	40	55	40	30	35	32	33	30	35	43	40	44	48	50	45	43	40	44	35	30	46	56	55	..	39.7
Warrenton	Maximum...	66	65	57	65	62	51	68	76	83	82	54	69	67	48	47	52	57	63	68	66	62	63	63	69	70	62	64	80	78	82	..	65.3
	Minimum ...	43	39	38	35	51	38	32	49	56	50	34	36	44	35	39	43	43	47	49	49	49	45	36	50	52	44	38	48	60	59	..	44.4
Southeast Lowlands																																	
Campbell	Maximum...	72	63	63	67	61	58	73	71	82	75	64	65	74	65	52	59	67	78	77	66	65	60	67	67	80	71	73	70	81	86	..	69.1
	Minimum ...	41	47	41	34	50	42	30	48	56	51	42	34	39	43	41	37	42	43	53	53	51	42	42	50	42	44	39	42	57	58	..	44.5
Caruthersville	Maximum...	72	68	62	69	64	59	70	73	79	76	68	65	71	69	57	54	66	78	73	69	66	64	68	70	80	78	70	82	83	84	..	70.2
	Minimum ...	49	44	45	53	46	52	52	61	60	46	43	49	57	48	41	43	50	52	57	56	51	49	54	51	50	52	54	62	65	69	..	52.0
Doniphan	Maximum...	79	74	55	70	67	64	74	78	82	78	64	66	70	66	50	55	65	72	75	70	67	66	68	70	76	72	76	78	77	80	..	70.1
	Minimum ...	44	48	41	33	54	48	30	46	48	60	43	32	39	44	40	40	40	62	55	57	55	45	45	50	43	45	44	42	61	60	..	46.5
Jackson	Maximum...	75	70	61	68	66	57	71	74	81	76	62	67	66	72	54	55	68	74	75	74	66	65	69	71	72	70	72	81	81	84	..	69.9
	Minimum ...	45	45	43	35	53	45	29	50	57	60	41	33	32	32	42	41	38	43	48	52	50	51	41	52	44	41	44	42	62	66	..	45.2
Poplar Bluff	Maximum...	70	68	58	69	61	58	72	76	80	72	64	66	71	67	54	60	65	75	74	67	67	68	67	70	78	74	73	80	81	84	..	69.6
	Minimum ...	45	46	40	34	52	43	30	44	55	60	43	34	39	48	41	40	42	45	55	55	55	48	42	50	45	45	43	43	60	58	..	46.0
Sikeston	Maximum...	71	71	60	67	66	58	70	71	79	75	64	63	69	65	54	55	61	75	72	68	65	63	67	68	78	71	71	79	81	85	..	68.7
	Minimum ...	47	48	44	44	53	46	33	48	58	57	45	39	45	45	44	42	42	47	55	54	54	51	43	53	48	45	45	46	62	62	..	48.2
Cairo, Ill	Maximum...	68	63	55	66	61	58	67	71	77	67	58	63	69	64	55	51	63	73	69	68	60	66	66	66	76	66	67	77	79	84	..	66.4
	Minimum ...	49	49	45	46	52	44	42	55	61	58	44	45	50	46	45	44	45	51	55	54	54	54	46	53	51	47	49	52	65	67	..	50.6
Ozark Plateau																																	
Arcadia	Maximum...	74	62	54	68	61	56	74	74	81	72	59	65	69	62	48	57	66	74	71	66	61	57	65	67	74	68	69	80	80	81	..	67.2
	Minimum ...	44	41	40	30	52	40	26	45	54	51	37	31	41	38	38	39	40	39	52	53	50	47	38	49	42	39	34	40	60	59	..	43.0
Birchtree	Maximum...	72	62	60	68	66	56	75	75	82	77	59	65	69	64	49	58	59	79	75	67	59	63	67	70	71	75	71	79	72	81	..	68.2
	Minimum ...	43	42	40	45	53	39	29	53	60	50	38	34	44	38	39	39	40	49	52	44	40	47	44	47	45	44	43	43	47	58	..	44.3
Eldon§§	Maximum...	73	59	54	73	58	44	75	77	82	50	56	69	61	40	48	46	60	71	74	..	57	59	65	71	71	65	70	81	70	81	..	[a]64.1
	Minimum ...	42	39	41	36	41	38	30	30	55	50	32	32	38	34	33	39	42	39	42	52	..	48	39	43	52	44	37	37	58	62	..	[a]41.3
Farmington	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Koshkonong	Maximum...	73	65	55	77	63	58	76	76	84	79	64	67	73	64	48	53	64	80	77	69	64	69	66	68	75	70	73	81	75	82	..	69.6
	Minimum ...	44	43	42	40	54	39	37	51	59	61	40	40	47	40	38	40	43	48	53	51	53	41	45	50	50	58	46	49	61	60	..	47.4
Lebanon	Maximum...	76	67	54	74	70	48	75	81	86	82	59	70	66	39	44	46	64	77	78	60	69	59	67	71	73	69	72	82	79	83	..	68.0
	Minimum ...	37	34	34	39	41	34	28	52	54	43	28	36	46	31	33	33	40	41	44	49	49	43	38	47	46	39	36	46	55	58	..	41.1
Mountain Grove	Maximum...	71	64	53	67	67	47	74	75	82	78	58	64	69	64	41	45	64	78	74	69	69	60	68	66	73	69	70	78	72	82	..	67.0
	Minimum ...	39	36	36	38	45	35	32	50	57	45	34	36	45	34	34	39	40	44	50	49	50	45	41	49	48	45	40	48	59	56	..	43.3
Neosho	Maximum...	78	73	60	76	75	52	75	73	82	78	57	66	66	43	45	54	70	83	85	72	72	71	65	66	75	75	69	78	81	80	..	69.8
	Minimum ...	36	32	38	38	46	34	34	56	56	45	32	36	43	31	34	42	36	48	55	57	44	47	44	51	46	50	42	43	61	63	..	44.0
Rolla	Maximum...	71	68	54	69	67	47	75	78	85	79	55	68	68	57	45	52	60	74	73	71	60	58	65	68	71	68	70	81	78	83	..	67.3
	Minimum ...	41	39	38	36	47	38	28	54	57	49	35	35	46	36	37	43	44	41	51	55	50	49	40	50	49	43	38	49	61	59	..	44.6
Springfield	Maximum...	73	55	53	71	62	48	73	77	86	70	55	66	67	37	43	47	63	78	75	63	69	58	61	64	71	65	68	78	75	79	..	65.0
	Minimum ...	45	38	37	44	40	34	40	56	60	43	35	41	37	32	32	40	43	51	55	51	52	49	46	51	51	50	43	50	58	62	..	45.5
Southwest Plain																																	
Appleton City	Maximum...	73	56	57	75	72	50	72	74	84	81	59	68	63	44	58	55	61	76	79	73	64	59	62	70	71	65	69	80	74	79	..	67.4
	Minimum ...	38	36	37	41	43	34	32	56	57	45	30	38	34	32	39	42	42	44	53	53	52	47	43	52	50	45	42	48	62	62	..	44.3
Clinton	Maximum...	73	65	54	73	68	70	78	78	88	75	64	72	62	45	60	60	64	78	80	70	64	59	68	74	74	70	74	84	75	83	..	70.1
	Minimum ...	38	35	37	38	44	36	32	54	56	45	31	36	35	32	40	40	42	44	52	52	57	47	42	52	48	45	41	48	57	61	..	43.9
Harrisonville§§	Maximum...	73	56	56	72	52	48	72	76	84	58	57	69	45	50	61	63	63	74	78	59	60	58	64	72	72	64	70	82	77	80	..	65.5
	Minimum ...	37	35	34	35	42	33	31	33	56	42	27	36	38	31	33	35	43	42	45	50	49	48	40	45	48	42	40	44	55	57	..	40.9
Lamar§§	Maximum...	80	59	60	82	59	53	74	77	86	54	58	69	54	40	53	56	67	80	60	69	70	62	62	68	75	68	69	79	76	78	..	66.6
	Minimum ...	39	35	36	38	47	34	34	38	59	47	34	34	41	34	34	38	43	45	49	57	50	49	48	50	51	49	43	46	52	62	..	43.9
Lamonte	Maximum...	72	58	53	71	58	58	73	76	80	73	56	70	54	46	59	49	60	71	74	62	57	60	65	70	69	78	80	80	78	74	..	66.1
	Minimum ...	36	36	36	39	43	29	29	55	59	41	30	39	34	33	38	41	45	41	51	54	49	45	40	49	47	36	34	46	61	59	..	42.5
Marshall	Maximum...	69	64	60	67	65	49	67	77	84	58	55	70	67	47	58	57	59	70	71	66	61	62	68	78	69	65	68	80	81	78	..	66.3
	Minimum ...	39	33	38	40	45	37	31	54	44	44	32	39	33	33	38	40	44	42	51	54	49	45	38	48	51	41	35	50	57	52	..	42.6
Nevada	Maximum...	56	54	58	79	70	53	72	75	84	75	58	69	63	44	59	57	63	78	78	67	67	64	62	69	72	64	67	78	78	78	..	67.0
	Minimum ...	39	36	38	45	43	34	35	52	60	43	31	41	34	33	43	42	40	45	54	54	49	47	45	51	52	46	42	51	62	61	..	44.9
Warrensburg	Maximum...	73	55	56	75	68	49	71	75	84	78	56	68	66	45	57	49	64	72	75	63	58	59	66	70	69	68	72	81	80	77	..	66.6
	Minimum ...	39	37	35	38	42	35	29	54	58	41	30	38	32	32	32	39	43	39	51	52	48	44	38	48	49	39	44	50	56	52	..	42.1
Warsaw	Maximum...	76	59	58	76	70	48	77	79	88	82	59	72	67	41	54	53	63	75	79	77	65	61	66	69	71	65	73	83	80	81	..	68.9
	Minimum ...	38	38	37	40	45	36	27	57	59	45	29	38	35	33	32	40	43	40	52	56	52	50	42	50	48	40	40	45	61	59	..	43.6
Northwest Plateau																																	
Chillicothe §§	Maximum...	67	58	54	67	50	40	67	76	84	55	55	69	38	50	61	61	66	70	71	61	62	63	69	72	70	62	72	85	80	75	..	64.3
	Minimum ...	35	34	34	35	42	35	28	33	34	40	28	34	36	30	32	38	42	43	46	50	48	46	41	40	47	36	29	40	52	57	..	38.8
Grant City	Maximum...	62	53	50	64	59	45	62	77	76	56	46	65	62	52	60	64	62	69	69	65	60	61	67	70	65	60	68	78	75	70	..	63.1
	Minimum ...	34	34	35	38	42	34	27	51	42	39	26	31	34	32	28	36	44	40	49	52	50	46	38	39	47	35	31	46	56	51	..	39.6
Kansas City ..	Maximum...	70	53	55	73	53	46	71	78	84	55	57	68	62	49	59	64	63	73	73	60	55	58	63	71	67	59	70	81	78	74	..	64.7
	Minimum ...	45	39	38	46	40	38	36	59	49	42	37	44	31	36	35	39	46	47	52	52	49	48	45	52	54	45	46	56	59	59	..	45.5
Kidder	Maximum...	65	58	52	66	59	46	63	80	82	68	54	68	61	49	60	65	63	70	69	68	58	62	64	70	66	60	69	81	78	72	..	64.9
	Minimum ...	39	34	35	39	43	35	29	51	55	40	28	36	31	31	31	35	43	40	49	52	48	46	38	44	47	38	35	49	52	51	..	40.8
Lexington§§	Maximum...	72	61	57	71	52	44	72	77	85	57	58	70	43	52	63	52	66	74	74	59	58	64	68	72	69	69	71	82	79	78	..	65.6
	Minimum ...	42	38	37	38	41	37	31	37	57	44	32	38	43	32	34	37	43	43	47	53	48	48	40	47	51	42	38	49	57	59	..	42.8
Maryville	Maximum...	63	57	54	74	57	47	65	85	77	56	57	70	65	56	66	69	68	74	73	67	62	63	70	72	70	67	72	83	78	68	..	66.8
	Minimum ...	34	33	34	41	41	33	27	52	49	39	27	32	34	31	27	34	42	42	49	52	50	48	40	40	46	36	36	49	58	57	..	40.4
Oregon	Maximum...	62	56	56	73	58	45	69	85	75	54	58	71	66	57	69	74	72	81	76	65	55	66	71	70	69	66	71	84	79	79	..	67.7
	Minimum ...	40	34	34	42	41	34	31	56	52	39	27	40	34	35	29	35	41	42	51	51	48	48	41	46	47	39	43	51	60	56	..	42.2
St. Joseph..	Maximum...	64	56	55	72	53	44	67	85	81	55	56	69	60	54	63	69	66	74	72	58	55	64	66	70	68	63	71	83	78	70	..	65.4
	Minimum ...	40	38	38	44	39	35	32	59	48	38	31	42	35	37	33	37	46	45	52	52	49	49	43	45	48	43	42	55	61	54	..	43.7
Trenton	Maximum...	64	57	68	62	60	..	..	78	83	83	59	74	70	65	61	64	62	68	66	66	62	62	69	72	68	64	71	84	83	75	..	[b]68.6
	Minimum ...	36	37	37	37	46	..	..	51	57	41	31	32	32	32	30	32	45	40	50	50	41	41	38	37	50	38	30	49	49	58	..	[b]41.0

*, [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 5-23-33—900.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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VOL. XXXVII ST. LOUIS, MO., MAY, 1933 No. 5

GENERAL SUMMARY

Temperature conditions generally were seasonable, the average for the month being somewhat above normal. Unusually cool days occurred about the 2d to 6th and a pronounced warm spell about the 18th to 23d. On several days afternoon temperatures ranged rather low because of cloudiness and showers, which were unusually frequent.

The most marked characteristic of the month over most of the State was the frequency of showers and the prevailing wetness. This, however, was not the case in much of the northwestern quarter of the State, notably, in the counties of Atchison, Nodaway, Worth, Holt, Buchanan, Platte, Gentry, Harrison, and Putnam, where the rainfall was near normal, or less, with large deficiencies in Nodaway and Worth counties. The wettest areas—with monthly totals of 10 to 12 inches—were in Lewis County, Franklin and St. Louis counties, Bollinger and Cape Girardeau counties, Iron County, and Morgan, Miller, and Laclede counties. At many stations it was one of the wettest Mays of record. For the State as a whole, with an average of 7.53 inches, it was the wettest May since 1915, but May 1929 had almost the same average rainfall as the present month.

Thunderstorms were unusually frequent, some attended by damaging winds. Several tornadoes of a minor character occurred. (See special article on storms of the month.)

The wet weather caused much delay in farm work, planting of corn, etc., and necessitated considerable late replanting. Early planted crops in lowlands were damaged more or less by overflows. Wheat was not hurt much except in the wettest places with poor drainage. On the other hand, the excessive rains replenished the subsoil, which was better supplied at the end of May than it had been for the last two or three years. At the close of May, about 25 per cent of the intended corn acreage remained to be planted; some early planted corn was well advanced; wheat was in good to excellent condition, and heading; oats averaged very good. The growth of alfalfa was fine and the first cuttings were being made.

River stages ranged above normal at many stations. Strong floods occurred in the Black River, the St. Francis, and the Meramec. Light floods occurred in the Mississippi at Hannibal, Grafton, Alton, and Chester, and near-flood occurred in the lower Missouri. In some localities roads were damaged by washouts due to downpours in connection with severe local storms.

TEMPERATURE

The monthly mean temperature for the State, 66 stations reporting, was 65.9°, or 1.6° above normal. The highest monthly mean was 72.6° at Caruthersville, and the lowest monthly mean was 61.2° at Tarkio. The highest temperature recorded was 96° at Macon on the 20th, and the lowest was 35° at Harrisonville on the 1st. The greatest daily range was 44° at Dean on the 6th and 8th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 7.53 inches, or 2.73 inches more than normal. The greatest local monthly amount was 12.97 inches at Canton and Pacific, and the least local monthly amount was 2.23 inches at Grant City. The greatest amount in any twenty-four hours was 5.02 inches at Arcadia on the 13th. The average number of days with 0.01 inch or more of precipitation was 13. There was no snow reported from anywhere in the State.

MISCELLANEOUS PHENOMENA

Floods.—Mississippi 15th-20th, Black 14th-18th, Grand 26th, Missouri 14th, Meramec 14th-19th, 26-27th, Bourbeuse 14th-17th, St. Francis 20th-23d.

Frosts.—None.

(Continued on page 24)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.86	30.17	14	29.39	8	8.3	32	sw.	1	86	64	48	62
Hannibal.....	29.86	30.12	14	29.37	8	9.4	40	sw.	1	85	64	..	..
Kansas City...	29.85	30.15	14	29.34	8	9.9	38	sw.	7	76	57	59	60
St. Joseph.....	29.85	30.12	14	29.39	8	8.7	30	s.	17	80	57	60	61
St. Louis....	29.88	30.14	17	29.41	9	12.6	50	s.	1	81	68	75	51
Springfield	29.87	30.19	14	29.39	9	10.2	29	w.	1	82	62	66	64
Cairo, Ill.....	29.90	30.16	18	29.51	7	8.6	40	se.	7	89	74	78	63
Keokuk, Iowa.	29.88	30.15	17	29.42	1	8.0	26	sw.	12	80	62	68	59

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	62.1	− 2.2	93	30	5.35	+0.55	13.40	1.38	....	5	..	..	..
1889....	63.5	− 0.8	100	28	6.56	+1.76	14.35	2.75	....	5	..	..	..
1890....	62.8	− 1.5	97	26	3.47	−1.33	8.09	1.14	....	6	..	..	..
1891....	61.5	− 2.8	97	27	4.26	−0.54	7.68	1.42	0	8	..	..	..
1892....	60.7	− 3.6	91	28	7.80	+3.00	14.88	3.89	0	17	5	9	17
1893....	61.8	− 2.5	94	30	5.89	+1.09	12.10	3.15	0	10	11	11	9
1894....	63.7	− 0.6	96	29	3.99	−0.81	8.78	0.47	0	8	13	11	7
1895....	64.6	+ 0.3	103	28	4.08	−0.72	8.49	0.36	0	9	13	12	6
1896....	70.1	+ 5.8	96	37	9.09	+4.29	18.23	4.08	0	12	12	12	7
1897....	62.4	− 1.9	93	28	2.56	−2.24	5.38	0.70	0	7	16	11	4
1898....	65.2	+ 0.9	97	31	7.90	+3.10	19.22	4.62	0	14	12	10	9
1899....	66.9	+ 2.6	96	34	6.26	+1.46	11.38	3.08	0	2	10	13	8
1900....	66.3	+ 2.0	97	29	3.69	−1.11	7.61	1.01	0	10	14	11	6
1901....	63.8	− 0.5	98	30	1.47	−3.33	3.77	0.19	0	6	15	10	6
1902....	69.4	+ 5.1	98	39	5.03	+0.23	9.93	1.64	0	11	13	11	7
1903....	65.1	+ 0.8	92	23	7.10	+2.30	14.01	2.08	0	15	9	10	12
1904....	63.1	− 1.2	95	32	5.03	+0.23	10.70	1.45	0	12	13	10	8
1905....	64.9	+ 0.6	94	34	4.87	+0.07	12.03	1.74	0	10	12	11	8
1906....	66.3	+ 2.0	98	27	2.16	−2.64	7.85	0.31	0	7	15	10	6
1907....	59.5	− 4.8	91	17	5.56	+0.76	10.89	1.39	0.8	10	14	6	11
1908....	66.1	+ 1.8	96	24	6.92	+2.12	17.07	2.82	0	12	12	10	9
1909....	63.3	− 1.0	96	25	5.34	+0.54	9.02	1.85	T.	9	15	9	7
1910....	60.1	− 4.2	94	32	6.62	+1.82	10.92	2.03	0	13	11	8	12
1911....	68.8	+ 4.5	101	27	1.55	−3.25	5.31	0.10	0	5	19	7	5
1912....	67.6	+ 3.3	97	30	3.86	−0.94	7.81	1.16	0	7	18	8	5
1913....	65.8	+ 1.5	101	33	3.05	−1.75	6.85	0.56	0	8	16	7	8
1914....	66.6	+ 2.3	98	31	1.47	−3.33	4.71	0.16	0	5	17	9	5
1915....	63.7	− 0.6	97	30	7.86	+3.06	15.98	3.04	0	12	12	7	12
1916....	65.6	+ 1.3	96	33	5.61	+0.81	10.58	2.00	0	11	15	8	8
1917....	58.7	− 5.6	91	30	4.33	−0.47	7.12	1.41	0	10	15	7	9
1918....	68.3	+ 4.0	100	28	5.49	+0.69	11.53	2.42	0	10	16	8	7
1919....	62.0	− 2.3	93	35	5.80	+1.00	9.63	1.84	0	13	10	10	11
1920....	63.8	− 0.5	97	32	4.85	+0.05	10.15	1.47	0	12	9	9	13
1921....	66.4	+ 2.1	102	28	3.69	−1.11	7.54	1.28	0	7	17	8	6
1922....	67.2	+ 2.9	97	38	3.17	−1.63	6.86	1.01	0	10	14	10	7
1923....	62.7	− 1.6	97	25	4.59	−0.21	11.31	1.39	T.	12	11	10	10
1924....	58.6	− 5.7	96	31	4.67	−0.13	8.68	1.55	0	10	13	8	10
1925....	61.2	− 3.1	98	24	2.14	−2.66	5.49	0.39	0	7	14	9	8
1926....	67.0	+ 2.7	100	29	2.73	−2.07	7.82	0.40	0	7	16	9	6
1927....	64.6	+ 0.3	94	34	6.98	+2.18	13.62	1.46	0	12	11	10	10
1928....	65.8	+ 1.5	95	29	2.84	−1.96	6.37	0.78	0	8	16	9	6
1929....	61.7	− 2.6	95	28	7.52	+2.72	13.68	1.45	0.3	13	9	10	12
1930....	64.7	+ 0.4	95	33	3.43	−1.37	7.38	0.97	0	9	16	8	7
1931....	61.0	− 3.3	96	29	4.51	−0.29	8.05	1.62	0	10	15	6	10
1932....	66.1	+ 1.8	98	31	1.91	−2.89	5.58	0.32	0	6	18	9	4
1933....	65.9	+ 1.6	96	35	7.53	+2.73	12.97	2.23	0	13	11	9	11
Period.	64.3	.....	103	17	4.80	.....	19.22	0.10	T.	9	14	9	8

Climatological Data for May, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	66.1	+ 1.9	89	19†	44	6	37	6.47	+1.74	2.48	0	14	..	..	..	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	65.6	+ 2.0	89	19	43	6	32	6.83	+2.29	1.64	0	19	11	9	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	65.4	+ 1.1	89	19	42	6	31	7.30	+2.84	2.27	0	14	9	14	8	s.	U. S. Weather Bureau
Downing	Schuyler	876	12	63.2	+ 0.5	87	19	42	4†	32	6.16	+2.43	1.64	0	15	11	12	8	sw.	James Taylor
Elsberry	Lincoln	449	2	65.6	.....	90	20	44	3	31	6.23	.....	2.02	0	13	3	8	20	se.	Ray E. Mills
Fayette	Howard	661	53	64.2	+ 0.4	90	20	39	6	40	7.82	+3.27	1.86	0	17	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	65.3	+ 0.7	89	20	42	6	36	6.95	+2.13	2.00	0	14	12	11	8	s.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	7.19	+2.92	2.68	0	13	4	7	20	sw.	J. W. Pulliam
Hannibal	Marion	534	41	65.3	+ 1.7	88	19	44	4	29	7.08	+2.73	2.38	0	14	6	5	20	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	65.4	+ 0.7	90	20	41	3	39	7.28	+2.76	1.53	0	17	7	15	9	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	63.5	+ 1.2	88	19	41	4	39	6.44	+1.68	1.28	0	11	7	8	16	w.	Prof. J. S. Stokes
Louisiana	Pike	469	39	....	.....	..	..	44	3	..	7.27	+2.79	1.57	0	15	8	16	7	s.	Stark Bro's Nurseries
Macon	Macon	875	34	64.1	+ 0.6	96	20	43	5†	41	5.39	+0.99	1.12	0	13	9	12	10	w.	W. C. Brown
Mexico	Audrain	800	44	64.7	+ 0.7	90	19	43	6	40	8.30	+3.61	1.28	0	16	6	10	15	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	5.70	+2.09	1.73	0	10	10	15	6	ne.	J. S. Conway
St. Charles	St. Charles	456	45	68.0	+ 4.9	92	20	45	3	30	9.07	+4.77	1.54	0	12	7	8	16	s.	L. C. Saeger
St. Louis	**St. Louis City**	568	60	67.2	+ 0.2	93	20	45	3	32	8.59	+4.25	2.14	0	16	8	8	15	s.	**Section Center**
St. Louis University	St. Louis City	578	21	66.7	+ 0.6	92	20	46	3	30	7.76	+3.55	1.44	0	16	..	..	..	w.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	8.25	+3.60	2.46	0	18	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	35	63.8	0.0	86	20	41	4	34	6.77	+2.15	1.75	0	14	8	17	6	s.	Frank Hall
Unionville	Putnam	1,062	40	63.2	+ 1.1	90	19	40	3†	31	5.20	+0.72	1.50	0	10	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	66.4	+ 1.5	91	20	45	3†	29	9.05	+4.41	1.75	0	14	5	11	15	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	63.7	− 0.1	87	20	38	4	30	8.43	+4.50	2.75	0	16	5	7	19	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**65.1**	**+ 1.1**	**96**	**20**	**38**	**4**	**41**	**7.41**	**+3.34**	**4.65**	**0**	**14**	**7**	**11**	**13**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	69.6	.....	91	20†	46	2	36	9.14	.....	2.60	0	16	13	14	4	s.	Jeff. King
Caruthersville	Pemiscot	265	37	72.6	+ 2.8	93	21	51	2	32	5.56	+1.04	2.00	0	12	15	6	10	.....	Sam Smith
Doniphan	Ripley	344	29	70.0	+ 3.5	93	20	46	8	38	5.83	+1.40	1.82	0	10	12	5	14	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	69.7	+ 4.1	92	20	49	5†	31	11.21	+6.77	2.30	0	15	3	6	22	s.	John G. Putz
Marble Hill	Bollinger	470	38	69.0	+ 3.4	92	20	47	8	34	11.27	+6.68	2.38	0	15	6	13	12	w.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	7.92	+3.10	1.63	0	15	11	12	8	sw.	John A. Spence
Poplar Bluff	Butler	339	28	69.0	+ 1.5	90	20	47	2	36	6.70	+1.64	1.40	0	11	17	3	11	s.	J. H. Wolpers
Sikeston	Scott.	318	26	70.7	+ 2.2	92	20	51	6	30	8.25	+3.89	2.18	0	16	10	14	7	.....	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	61	70.3	+ 1.9	88	20	51	3	25	9.02	+5.31	2.81	0	19	5	8	18	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**70.1**	**+ 2.8**	**93**	**20†**	**46**	**2†**	**38**	**8.27**	**+3.86**	**2.81**	**0**	**14**	**10**	**9**	**12**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	65.6	+ 1.5	89	20	46	8	34	11.53	+6.83	5.02	0	15	10	5	16	sw.	Arcadia College
Birchtree (near)	Shannon	1,000	38	67.4	+ 2.4	88	20	45	6†	36	9.80	+5.43	1.85	0	15	13	8	10	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	8.91	.....	1.86	0	16	12	9	10	sw.	C. M. McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	6.30	.....	0.97	0	13	9	9	13	s.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	29	66.6	+ 0.9	90	20	39	2†	44	10.45	+4.62	3.13	0	11	12	5	14	sw.	H. E. Dean
Eldon	Miller	934	38	64.8	+ 0.6	84	20†	45	6	34	6.89	+2.22	1.49	0	18	6	15	10	s.	E. H. Shepherd
Farmington	St. Francois	918	22	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	.....
Goodland	Iron	1,000	40	66.0	+ 2.0	90	20	40	8	42	7.13	+2.29	2.90	0	12	12	8	11	s.	F. M. Adams
Greenville	Wayne	381	24	67.4	+ 1.5	90	20	43	8	39	8.47	+4.28	1.25	0	14	15	6	10	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	7.72	+1.79	4.18	0	6	21	4	6	.....	A. W. Madison
Koshkonong	Oregon	958	32	68.8	+ 2.2	90	20	47	2†	30	9.31	+4.74	2.10	0	13	10	8	13	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	65 6	+ 0.7	92	20	40	6	40	11.51	+6.06	2.92	0	13	15	6	10	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	67.0	+ 2.6	87	19†	42	6	37	8.18	+3.22	1.70	0	13	15	9	7	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	65.4	+ 1.6	87	20	42	6	31	9.53	+4.70	3.09	0	16	10	9	12	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	67.4	+ 1.4	87	19†	40	6	43	11.38	+5.52	5.01	0	13	13	10	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	66.6	+ 2.1	88	20	46	3†	33	8.12	+3.13	1.90	0	18	5	5	21	se.	F. H. Lane
Salem	Dent	1,173	29	66.4	+ 1.9	90	20	45	16	32	9.21	+4.51	3.62	0	14	10	8	13	s.	E. E. Martin
Seligman	Barry	1,542	32	66.3[c]	+ 1.8	86	20	42	2†	31	8.54	+2.90	3.58	0	11	13[d]	8[d]	6[d]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	27	64.8	+ 1.1	85	11†	39	6	35	9.63	+4.38	3.72	0	12	12	11	8	se.	A. L. Hailey
Springfield	Greene	1,324	45	65.8	+ 1.3	87	19	44	2	32	6.79	+1.60	3.57	0	11	15	9	7	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	66.6	.....	90	20	44	6	37	9.61	.....	2.53	0	13	11	6	14	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**66.4**	**+ 1.6**	**92**	**20**	**39**	**2†**	**44**	**8.86**	**+3.88**	**5.02**	**0**	**13**	**12**	**8**	**11**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	66.6	+ 1.6	88	19	41	6	37	6.18	+1.00	1.80	0	13	6	19	6	sw.	W. G. Bigelow
Clinton	Henry	765	40	67.2	+ 1.7	91	20	40	6	41	6.08	+0.75	1.00	0	13	10	12	9	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	63.8	0.0	89	20	35	1	39	7.68	+3.15	1.17	0	15	5	5	21	sw.	John H. Patterson
Lamar	Barton	980	45	66.0	+ 0.4	87	19†	42	6†	38	7.34	+1.97	1.50	0	13	15	7	9	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	65.4	+ 0.8	89	20	39	6	37	5.64	+0.69	1.30	0	15	14	9	8	se.	J. E. Wheeler
Marshall	Saline	779	46	66.0	+ 1.8	89	19	39	5†	35	7.39	+2.54	2.36	0	13	10	14	7	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	65.6	+ 1.1	87	8†	39	6	42	7.58	+2.27	2.78	0	11	16	3	12	s.	George A. Kaupp
Warrensburg	Johnson	878	46	64.6	− 0.4	89	20	39	6†	36	5.91	+1.37	1.45	0	14	13	6	12	sw.	E. A. Markey
Warsaw	Benton	687	32	67.3	+ 1.8	91	11	44	6	41	7.72	+2.60	2.52	0	16	14	12	5	s.	Everett Martin
Division means	**and extremes**	.....	..	**65.8**	**+ 1.0**	**91**	**11†**	**35**	**1**	**42**	**6.82**	**+1.91**	**2.78**	**0**	**14**	**11**	**10**	**10**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	62.6	+ 0.1	88	19	40	3	32	5.44	+1.01	2.37	0	11	16	6	9	sw.	A. S. Cumming
Chillicothe	Livingston	779	24	63.8	− 1.4	92	19	40	6	39	8.12	+4.14	3.24	0	11	11	14	6	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	62.8	+ 0.7	89	19	37	6	32	3.64	−0.73	1.45	0	7	10	10	11	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	63.9[a]	+ 0.9	88	19	37	6	34	4.70	+0.41	1.23	0	17	17	4	10	s.	Fred L. Stiff
Grant City	Worth	1,134	29	61.6	− 0.4	86	19†	40	3	35	2.23	−2.03	0.96	0	9	7	10	14	sw.	Howard Rybolt
Kansas City	Jackson	963	44	65.4	+ 0.6	90	19	43	6	29	6.94	+2.29	1.22	0	12	11	8	12	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	63.7	+ 1.1	89	19	40	6	30	5.57	+0.90	1.70	0	11	12	10	9	sw.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	4.83	+0.38	1.72	0	10	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	66.4	+ 2.0	92	20	40	6	39	5.64	+0.61	1.24	0	12	12	13	6	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	63.2	+ 1.9	91	19	38	3	37	2.95	−2.04	0.90	0	15	12	6	13	n.	J. R. Brink
Oregon	Holt	1,048	77	64.9	+ 1.7	91	19†	40	6	34	4.38	−0.30	2.30	0	8	17	6	8	sw.	Mina Wright
St. Joseph	Buchanan	967	23	64.2	+ 0.2	90	19	41	6	29	3.49	−0.59	1.02	0	14	12	9	10	se.	U. S. Weather Bureau
Tarkio	Atchison	916	30	61.2	− 1.4	90	19	38	6	36	3.63	−0.66	1.84	0	6	10	4	17	sw.	Albert Volker
Trenton	Grundy	822	37	64.8	+ 1.3	90	19	40	6	33	6.28	+1.47	1.90	0	12	7	13	11	s.	W. H. Estes
Division means	**and extremes**	.....	..	**63.7**	**+ 0.6**	**92**	**19†**	**37**	**6**	**39**	**4.87**	**+0.36**	**3.24**	**0**	**11**	**12**	**9**	**10**	**sw.**	
State means	**and extremes**	.....	..	**65.9**	**+ 1.6**	**96**	**20**	**35**	**1**	**44**	**7.53**	**+2.73**	**5.02**	**0**	**13**	**11**	**9**	**11**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for May, 1933

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Bethel	Mississippi		.48			.82			.33	.02		.13	1.22	.90								.34			.35		2.00						6.59
Boonville	Missouri		.17		T.	1.35	.01					.94	1.58	.64	.01	.01	.02		T.			.97	.76		.02	.30	1.90	.01	.06	.06	.02		8.83
Bowling Green	Mississippi		.31	.03		.38	.03		.31	.06		.23	.76	.27		.54	.14					.61	.15			.35	.44	.03		.12			4.76
Brunswick	Grand					.80	.10					.03	.65	2.48					.20		.15	.40	.10		.02		.60	.05	.84	.05			6.47
Canton	Mississippi		.26			1.16			.71	.27		.37	.96	1.13			.03			.22		3.03	.18			4.26			.39				12.97
Clifton Hill	Chariton	.19	T.			1.21	.02					.27	1.15	.08		.10		.06	.01	.02	1.64	.64	.02		.05	.50	.43	.01	.42	.01			6.83
Columbia***	Missouri	.49	T.	T.	.05	.61		T.			.74	1.50	.79	.62		.11		.01			1.18	T.			.33	.67	.04		.16				7.30
Downing	Mississippi		.06			1.16		.15		.01	.34	1.64	1.32					.02			.06	.45	.30	T.			.32	.16	.15	.02			6.16
Edina	do		.04		.70				.80	T.		.86	.73	1.27			T.	T.	T.			1.36	.12		T.		.55	.13	T.	.21			6.77
Elsberry	do	.66	T.			.13		.26				.14	.65	2.02		.84						.67			.17	.11	.11		.20		.27		6.23
Farber	do		.34			.42			.49			.40	1.20	.42		.26	.12					.58	.25			.46	.60						5.54
Fayette	Missouri		.09			1.09	.02					.71	1.86	.76	.02	.02		.06	.03			.67	.60			.25	1.42	.01	.20	.01			7.82
Fulton	do		T.	T.		.31	.01		.40			37	1.08	2.00	.06	.42	.04		T.			.87	T.		.22	.15	.89	T.	.13				6.95
Gorin	Mississippi	.15	.04			.10		.45			.72	.35	2.68								1.50	.20		.07		.11	.49		.33				7.19
Hannibal***	do	.46	T.	T.	T.	.59		.20		T.	.52	.67	2.38	.18		.11		T.	T.		.77	T.		.03	.13	.78	.16	T.	T.	.10			7.08
Hermann	Missouri		.08		T.	.33	.01		1.76	.02		.31	3.22	1.17	.56	.93	.06					.47	.81			1.30	.27		.10	T.			11.40
Jefferson City	do				.06	.69	.03		.10		.03	.36	.35	1.53	.36	.65	.05					90			.04	.42	.82		.69		.20		7.28
Kahoka	Mississippi		.09			.96						1.40	1.10	1.13								.85	.64				.70	.31		.43			7.61
Kirksville	do		.03			1.20					.85	.75	1.28								1.00	.25			.08		.62		.35	.03			6.44
LaBelle	do		.15			.70			1.07	.23		.40	1.42								1.27	.05					.88				.07		6.24
Linneus	Grand				.80	.04					.35	.85	.48					.22			2.20	.04				.80		.20					5.98
Louisiana	Mississippi	.35				.50		.20		.17		.50		.57		.57					.73			.67	.30	.37	.25	1.57	.20	.32			7.27
Lucerne	Grand		.05			.94	.09		.05	.09		.10	.45	.35								.11	.76			.94				.08			4.01
Macon	Chariton		T.			.98	.08					.18	1.12	.91			.04		.10			.56	.05		.32		.82	.15	.08				5.39
Memphis	Mississippi		.40			.94	.10		.66	T.	T.	.88	1.01	.25					T.			.90	.50		T.		.38	.14	.10	T.			6.26
Mexico	do	.27	.15			.52			1.10			.60	1.28	.65	.05	.10	.05					1.27	.80			.28	1.05	.04	.09				8.30
Milan	Grand		.05			1.08	.18					1.12	.56	.20							.26	.35	.12				.80	.14	.48		.21		5.55
Monroe City	Mississippi		.14			.56			T.				1.73	.99		.04					.36	.18		T.		.19	1.13			.38			5.70
New London	do		.51			.61			.21	.04			1.48	.67		.91	.10					.31				.25	1.21	.14	.09		.04		6.57
Pacific	Meramec			T.	T.	.16	.04		.10	.02	.05	.40	4.65	1.65	.92	.70	.10					.65	.25		.25	.40	2.63						12.97
Palmyra	Mississippi		.60	.03		.58	.10		.64	.03		.09	1.39	.72			.24					.92			.07	.05	.82	.06	T.				6.33
Paris	do		.70			.55			.16			.33	1.25	1.04								.50	.74			.10	2.40						7.77
Perry	do		.29		T.	.71		1.52		.04		.26	1.29	.60		.10	.10				T.	.30	.33			.23	.95		.05	T.			6.77
Philadelphia	do		.05			.87	.03		.32			.28	.91	1.54			.07			.06		.99	.08				4.25						9.45
St. Charles	Missouri	.50				T.		.80		.10	T.	.58	.95	1.54	T.	.90						1.00	.10	.90	.70	1.00	T.	T.	T.				9.07
St. Louis***	Mississippi	.24	T.		.28	.07		.20		.10	.01	.39	1.13	1.90	T.	.72			T.		.83	.29	T.	T.	1.08	1.11	T.	.06	.18				8.59
St. Louis University*	do	.18			.24	.07		.20		.12	.01	.57	1.04	1.44	T.	.70					.43	.24			.83	1.36		.17	.16				7.76
Shelbina	do		.21	T.		1.26	T.		.25	.01		.14	1.27	1.60		.04	.06	.04	T	.01	.41	.30			.07		2.46	.02	.03	T.	.07		8.25
Steffenville	do	.90	.05			.70		.05		T.	.10	.30	1.75			.20		T.			.50		.10	T.	.20	.32	1.45		.15	T.			6.77
Troy	do		.56	T.	.27	.02			.41			.18	.91	1.09	.33	1.02	.05					.48	T.		.12	.33	.35		.16	.01			6.29
Union	Meramec		.51			.23	.04		.17		.02	.09	2.82	1.24	.90	.76	.08					1.04	1.15		.09	.37	.62		T.				10.13
Unionville	Chariton		.10			1.50		T.		.10	.40	.30	1.00								.15	.15					1.10		.40				5.20
Valley Park	Meramec		.65	T		.23	T.		.18	.13	T.	.81	2.47	1.15	1.30	.58	.20	.28				.82	.92		.09	.65	2.17		T.	.05			12.68
Warrenton	Mississippi	.76	.02			.21		.76				.71	1.25	1.75		1.14						.51	.50		.64	.59	.16		.05				9.05
West Ely	do	.30			.49	T.		.53	.04		.20	1.35	1.01		T.	.20		.02	T.	.06	.51	.12		.02	.11	.85		T.				5.81
Winfield	do		.81			.20						.12	.95	1.07	.30	1.02	.10					.80				.76			.05				5.68
Keokuk, Ia.***	do	.19	.02	T.		.73		.32	T.		.85	.91	1.17	.02		T.	T.	T.	.21		.50	.50	T.	.02	T.	1.34	1.41	T.	.23	T.	.01		8.43
Southeast Lowlands																																
Bragg City	St. Francis					1.53				T.	T.	.30	1.51	.43	.85								T.	1.10	.50							6.22
Campbell	do		.05			2.10	.25		.02		.25		2.60	.30	2.20	.12	.47					.06		.18		.17	.05	.12		.20			9.14
Cape Girardeau	Mississippi		.96			2.09	.10		.64		.55	1.13	.30	.09	1.61	1.02	.23					.08	1.30	.09		.10	.01			.20			10.50
Caruthersville	do		.29			2.00			.15		.13		.40	.46	1.05	.05	.27									.05	.55	.16					5.56
Dexter	St. Francis		.17			2.56			.17		.16		2.55	T.	.98	1.13						.23				T.				.76			8.71
Doniphan	Black	.40	.55		.13	.56		.03				T.	1.02		1.82	.95							.27		T.	.10			T.				5.83
Fisk	St. Francis		.66			.98	.63				.17		.54		1.61	1.97						.27	.13	.14	T.	T.	T.	T.		.69			7.79
Jackson	Mississippi	.08	1.39			2.30		.77			.10	1.19	.09	.18	1.99	1.10						.27	1.35		.02	.13				.25			11.21
Marble Hill	do	.21	.93			.96		.86			.62	2.38	.38	.33	1.62	1.04						.43	.78	.21		.04				.48			11.27
Morehouse	do	.21				1.63	.04	.06			.51	1.22	.43		1 54	.70						T.	.70			.14	.01	.23	.11	.39			7.92
New Madrid	do		.02			1.50	.15		.24		.95		1.39	.55	2.07	.23	.49							.02		.21	.39	.15		.02			8.38
Parma	St. Francis		.21			1.45					.41		1.50	.38	1.51		.52						.74			.52	.20			.05			7.49
Poplar Bluff	Black		1.16			.87	.42		.02				.55		1.40	1.10	T.						.81	.18		T.	.07			.12			6.70
Sikeston	Mississippi	.04			1.45	.02		.10			.87	2.18	28	1.44	.40	.38					.02	.37			.32	.04	.02		.32				8.25
Cairo, Ill.***	do	.11	T.		.58	1.03		.13	.01	.72	T.	2.81	.05	.05	.98	.93					.05	T.	1.06		.14	.02	.01	.11	.06	.17			9.02
Ozark Plateau																																
Arcadia	St. Francis	1.11			.61	T.		.79			.67	.52	.09	5.02	1.19	.07					.18				.38	.37	.22	.22	.09				11.53
Birchtree (near)	Black	1.00			.05	.15		1.20				.15	1.04	.19	1.85	1.54						1.20	.05		.63		.35		.15	.25			9.80
Buffalo	Osage	T.			.35	.03				.15		.85	.15	1.86	.64	.99	.01					.61			.94	1.35	.45		.22	.27	.04		8.91
Caplinger Mills	do				.12	.49		T.			.08	.91	.52	.85	.10	.50			.05			.72			.57	.42			.97		T.		6.30
Chaonia	St. Francis		.31			.83			.10		.65	.03	.85	.15	1.08	.93	.20					.11	.22	.48		.04	.04			.38			6.40
Dean	Neosho				.64	.28		T.					1.10	3.13	2.15	.88						.32			.94	.64	.22		.15				10.45
Eldon	Missouri		.02			.66	.04		.03		.03	.65	1.00	1.49	.15	.80	.04					.35			.07	.36	.57		.24	.22	.17		6.89
Farmington	St. Francis																																
Fredericktown	do		.48			.60			.66			1.67		.22	3.54	.87						.08		.10		.22		.12					8.56
Galena	White				.10	.48							.38	2.93	.48	1.20						.12			.33	.34	.14		.10	.32			6.92
Goodland	Black	.40				.40		.17				.22	.44	2.90	.35	.93						.14			.68		.45			.05			7.13
Greenville	St. Francis	.09	.35			.79		.63			.14	.90	.47	.98	1.25	.75						.33	1.17			.12				.50			8.47
Hailey	White				.92	.10							1.30	4.18												.61			.61				7.72
Koshkonong	Black	1.37			.08	.16							1.15	.30	1.52	1.56						.15	.20		2.10	.16	.53			.03			9.31
Lakeside	Osage		.02			.65	.03		.11		.47	.36	.95	3.05	.38	.81	.02					.46			2.27	.16	.53		.11	.21	.02		10.56
Lebanon	do			T.		.42	T.				.16	.93	.62	2.92	1.26	.99						.31			1.11	1.32	.93		.15	.39			11.51
Leeper	Black		1.01			.51			.76		.44	.33	.64	.29	2.77	1.11						.43	.41	.29		.06	.24			.54			9.83
Lockwood	Osage					.42	.40		T.			.80	.39	1.42	.02	1.08			.12			.06			1.17	.45	.15		1.70				8.18
Mountain Grove	White	.24				.09	.63		.71			.02	.72	3.09	.27	1.31			T.			.22	T.		.95	.45	.43		.17	.20	.03		9.53
Neosho	Neosho					.43	.29		.16				.64	5 01	.06	1.76			.03			.73		T.	.98	.50	.22		.57				11.38
Owensville	Gasconade		.30	.32									.92	1.22	.88	.78	.12					.80			.50	1.35	.32		.10	.10			7.71
Ozark Beach	White				T.	.54					.35		1.46	.77	2.13	1.78									.18		.31			.36			7.88
Rolla	Meramec		.35			.18	.05		.13		.13	.21	.72	1.90	1.30	1.02	.03					.45	.17		.10	.68	.39		.15	.16			8 12
St. Thomas (near)	Osage					.94	.08		.31		.06	.72	.95	1.90	.46	.85	.06					.82			1.11	.88	.91		.26		.66		10.97
Salem	Meramec	.21				.23		.10			.03	.07	.37	3.62	.21	1.08						.55	.04		1.16	.94	60		T.				9.21
Seligman	Neosho				.33	.19					.31		.53	3.58	.29	1.27						.08				1.04	.65		.27				8.54
Seymour (near)	White				.14	.32						1.23	.80	3.72	.27	1.23						.35			.54	.20	.72		.11				9.63
Springfield	do				.27	.05		T.			.01	.81	1.06	2.58	.37	.74								T.	.17	.36			.37				6.79
Steelville	Meramec		1.06			.18			1.24			.05	.71	1.81	1.36	.95						.52	T.			.72	.68	.09					9.37
Stover	Missouri	.28				.64						1.83	1.75	3.10	.07	.30						.52			.32	.70	.97		.28	.08	.10		10.94
Versailles	Osage	.05			.06	.84		T.				.96	2.53	1.89		.56						.68			1.02	.09	.61		.22		.10		9.61
Williamsville	Black		.29				.75	.02	.24		.47	.09	.51	.27	1.87	.78	.08					.47	.13	.32			.07			.44			6.80
Willow Sprgs. (near)	White					.27	.05		.51			.02	.87	.49	2.04	1.43						.29	.14		.12	.86	1.01	.01		.31	.07		8.49

Continued on next page

Daily Precipitation for May, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain																																	
Appleton City	Osage	....	T.	....	.25	.66	....	.03	....	....	....	.32	1.80	.51	....	.21	....	....	.40	....	....	.08	....	....	.69	.58	....	....	.55	....	.10	....	6.18
Clinton	.... do	....	....	....	.18	.93	....	....	....	....	....	.32	.92	1.00	.15	.21	....	....	.32	....	....	.55	....	.50	....	.62	.03	....	.35	....	....	....	6.08
Concordia‖	Missouri	....	....	....	....	1.04	....	....	....	....	....	.82	.80	.47	....	.15	....	....	.46	....	....	.96	.06	....	.20	.15	.26	....	.20	.04	.16	....	5.77
Harrisonville‖	Osage	....	....	....	....	.99	.05	....	....	....	....	.01	.61	1.04	....	.02	....	....	.63	....	....	1.17	.56	....	.69	.20	.90	....	.51	.25	.05	....	7.68
Joplin‖	Neosho	....	....	....	.69	.07	....	.26	....	....	....	.52	.22	2.01	.37	.89	....	....	.10	....	....	.27	....	....	1.24	.26	....	....	.95	....	....	....	7.85
Lamar‖	....do	....	....	....	....	.60	....	....	.08	....	....	.72	.10	1.50	T.	.80	.05	....	.22	....	....	T.	....	....	.22	.32	.80	....	.80	1.13	....	....	7.34
Lamonte	Missouri	.10	....	....	.18	.76	....	.10	....	....	T	.36	1.30	.15	....	.10	....	.11	.20	....	....	.87	....	....	.39	.71	....	....	.16	....	.15	....	7.39
Marshall	.... do	....	T.	....	.04	.68	....	T.	....	....	T.	.71	2.36	.26	....	.33	....	T	.12	....	....	1.46	.37	....	.13	.43	.13	....	.37	....	....	....	7.39
Nevada	Osage	....	....	....	.15	.28	....	....	....	....	....	.89	2.78	.65	....	.22	....	....	.30	....	....	.35	....	....	.19	.61	....	....	1.16	....	....	....	7.58
Warrensburg	Missouri	....	....	....	.20	.83	....	.13	....	....	T.	.30	1.45	.15	....	.18	....	.15	....	....	T.	1.08	....	.10	.72	.38	.02	....	.22	....	....	....	5.91
Warsaw	Osage	....	.07	....	....	.87	.05	....	.01	....	....	.25	1.30	2.52	....	.31	.03	....	....	....	....	.72	....	....	.70	.13	.29	....	.18	.26	.03	....	7.72
Waverly ‖	Missouri	....	T.	....	....	.88	.05	....	....	....	....	.23	2.10	1.07	....	....	....	....	.23	....	....	.82	.31	T.	.26	.05	.42	....	.26	....	.05	....	6.73
Northwest Plateau																																	
Bethany	Grand	T.	....	....	....	.73	....	....	....	....	.13	....	2.37	....	....	....	....	.15	....	....	.81	.45	....	.03	....	.15	.14	....	.43	.05	....	....	5.44
Chillicothe ‖	....do	....	T.	....	....	.74	.08	T.	....	....	....	.39	.91	.47	....	....	....	....	.23	....	....	1.50	.14	.03	....	....	3.24	....	.39	....	....	....	8.12
Conception	Missouri	T.	T.	....	.03	.96	T.	T.	....	....	.04	T	T.	....	....	....	....	.12	....	....	.03	1.42	....	T.	....	T.	....	....	1.04	....	....	....	3.64
Edgerton	....do	.02	....	....	.10	.95	....	.02	....	....	.14	.67	.20	.01	....	....	....	.10	.04	....	.25	.39	....	.28	....	1.23	.02	....	.24	....	.04	....	4.70
Gallatin ‖	Grand	....	....	....	....	.80	.03	.03	....	....	....	.17	.27	.20	....	....	....	....	....	....	....	.72	.27	.05	....	....	1.85	....	.86	....	....	....	5.25
Grant City	.... do	T.	T.	....	T.	.72	....	.04	....	....	.05	T.	.21	T.	....	....	....	.02	....	....	T.	.96	....	....	....	T	.09	....	.13	.01	....	....	2.23
Kansas City***	Missouri	T.	T.	....	.20	.95	....	T.	....	....	.96	.46	.61	....	....	....	....	1.13	....	....	.50	.10	....	.08	....	.92	....	....	.83	.20	....	....	6.94
Kidder	Grand	T.	T.	T.	.80	.06	....	....	....	....	.22	.54	.41	....	....	....	....	.18	....	....	.46	.17	.35	....	....	1.70	....	.68	....	....	....	....	5.57
King City	Missouri	....	....	....	.08	.85	....	T.	....	....	.14	....	.42	....	....	....	....	.13	....	....	.87	.44	....	T.	....	.15	.03	....	1.72	....	....	....	4.83
Lexington ‖	....do	....	....	....	.02	1.15	.09	....	....	....	....	.10	1.10	1.24	....	....	....	....	.15	....	....	.75	.25	....	....	....	.47	....	.23	.09	....	....	5.64
Maryville‖	....do	....	.16	T.	....	.60	.18	T.	.12	....	....	.01	.10	.04	....	....	....	....	.07	....	....	.90	.30	.04	....	....	.03	.04	.35	.01	....	....	2.95
Oregon	....do	....	....	....	.07	1.14	....	....	....	....	T.	....	.01	....	....	....	....	.27	....	....	.44	1.86	....	....	....	.02	....	....	.57	....	....	....	4.38
St. Joseph***	....do	.03	.01	....	.07	1.00	....	....	....	....	.03	.44	.09	....	....	....	....	.52	....	....	.09	.56	....	.07	....	.18	....	.01	.39	T.	....	....	3.49
Tarkio	....do	....	....	....	T.	.62	....	.10	....	....	....	....	.34	....	....	....	....	....	....	....	....	1.84	....	.54	....	....	....	....	.19	....	....	....	3.63
Trenton	Grand	....	T.	....	....	.96	....	.02	....	....	.17	....	.93	....	....	....	....	.36	....	....	.39	.84	....	.04	....	.30	1.90	.03	.34	T.	....	....	6.28
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Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for May, 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.343	.349	.087	.102	.008	.095	.162	.236	.367	.276	.189	.293	....	.050	.061	.052	.210	.249	.203	.307	.325	.197	.319	....	.135	.082	.138	.236	.116	.255	.226	6.059
	Mean temperature	68	54	52	52	56	62	66	67	70	68	72	69	60	58	62	64	68	75	75	77	74	72	77	72	72	72	70	68	66	68	70	66.8
	Wind movement	92	164	96	81	84	113	81	76	79	87	115	90	80	38	49	34	49	78	50	68	82	43	103	75	51	82	64	83	92	74	50	2,403

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

Continued from Page 21

Hail, light.—1st, 5th, 7th, 9th, 10th, 11th, 12th, 17th, 20th, 21st, 25th, 28th; moderate, 1st, 7th, 9th, 10th, 11th, 12th, 20th, 21st, with minor damage to greenhouses, gardens, and crops at Buffalo, Bethany, Chillicothe, Kirksville, and Oregon; heavy, 1st, 7th, 20th, 28th; much damage reported near Lockwood on 28th.

Halos, solar.—1st, 8th, 11th, 16th, 18th, 23d, 25th, 28th; lunar, 8th.

Thunderstorms, local.—5th, 6th, 8th, 9th, 14th, 15th, 17th, 18th, 22d, 23d, 25th, 26th, 27th, 29th; more or less general on 1st, 7th, 10th, 11th, 12th, 13th, 20th, 21st, 24th, 28th.

Windstorms.—1st, 11th, 12th, 13th, 20th, 25th. (See special storm notes).

SPECIAL STORM NOTES

May, 1933, was characterized by unusual frequency of storms of more or less destructive character, but none of very great or widespread violence. Tornadoes, mostly of slight or moderate intensity, occurred on the 1st, 12th, 13th, 20th, and 25th, and one of possible tornadic violence on the 11th. On the same dates with these tornadoes, straight-line winds of damaging force occurred in various counties.

On May 1, in the southwest corner of Oregon County, about 2.15 p. m., a tornado caused property damage estimated at $60,000 and crop damage of $10,000, and injured 22 people, but killed none, while straight-line winds damaged farm buildings, fences, and trees in Marion, St. Louis, and Oregon counties, and caused some damage in the city of St. Louis.

On May 11, in the northeastern section, especially in Knox and Marion counties, damaging storms occurred; with $3,000 damage reported at Baring, Knox County.

On May 12, a tornado came from Kansas into Bates County, ending soon after entering Missouri, near Hume, apparently causing little damage; while straight-line winds in St. Louis and vicinity blew down poles, trees, and tops of chimneys, and broke some window glass.

On May 13, near Naylor, Ripley County, a tornado destroyed a number of houses and barns, killed one person and injured four others.

On May 20, damaging winds occurred in St. Louis and in

(Continued on page 26)

Daily Temperatures for May, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	77	60	56	57	52	64	79	85	78	64	86	81	72	75	70	79	75	85	89	89	80	85	86	80	78	78	87	79	77	77	85	76.3
	Minimum	53	47	46	47	47	44	52	48	58	49	52	63	52	49	56	52	57	62	68	63	63	62	69	64	58	59	61	67	53	55	58	55.9
Columbia	Maximum	79	54	52	52	59	66	79	84	70	70	87	76	67	71	63	79	78	84	89	88	81	83	85	76	76	75	82	74	75	76	81	74.5
	Minimum	50	47	47	47	47	42	56	53	52	48	62	62	54	49	54	52	59	67	66	65	63	66	69	62	60	61	59	60	52	54	57	56.2
Fayette	Maximum	78	56	53	52	57	64	80	84	70	68	87	74	71	75	63	81	71	85	85	90	82	84	87	74	77	78	85	76	77	79	78	75.0
	Minimum	54	46	46	45	47	39	40	46	48	48	50	58	56	49	53	47	54	60	64	66	62	61	63	64	55	58	58	60	49	52	54	53.3
Hannibal	Maximum	79	53	51	55	59	57	69	81	70	61	84	76	71	73	62	80	76	83	88	86	78	84	85	76	79	76	83	77	76	77	82	73.8
	Minimum	53	49	44	44	49	46	50	52	51	48	57	63	58	52	56	53	60	68	69	62	64	67	70	62	58	62	63	62	54	58	57	56.8
Jefferson City §§	Maximum	75	58	56	52	62	80	78	85	78	75	89	73	65	70	66	79	79	81	87	90	84	82	84	80	77	77	85	75	78	80	85	76.4
	Minimum	51	50	41	47	48	43	45	50	55	48	50	61	56	49	53	47	51	52	63	66	62	61	67	66	63	64	57	59	53	54	57	54.5
Kirksville	Maximum	69	59	55	56	55	57	68	73	70	50	85	82	72	76	69	80	75	85	88	86	74	82	85	82	74	80	83	81	75	79	84	73.8
	Minimum	50	44	44	41	42	42	45	45	50	44	46	61	55	50	54	51	56	61	67	59	60	62	66	60	56	57	60	62	50	52	57	53.2
Louisiana	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	58	48	44	46	50	..	..	..	..	50	..	..	..	46	55	49	55	57	60	62	66	63	67	64	60	65	57	62	60	55	52	....
Macon§§	Maximum	75	56	53	53	55	65	75	78	60	55	87	73	71	77	66	80	74	86	90	96	77	83	92	78	75	80	84	78	76	79	85	74.6
	Minimum	52	45	45	44	43	43	44	48	54	45	46	51	56	48	54	53	55	61	63	68	61	60	67	62	55	59	58	62	50	52	58	53.6
Mexico §§	Maximum	79	56	52	52	62	65	70	83	80	61	87	79	67	73	62	80	80	84	90	89	81	85	85	76	79	74	83	75	71	78	84	74.9
	Minimum	56	46	45	45	44	43	44	50	57	47	47	60	55	48	52	50	56	59	64	66	60	62	65	65	58	63	59	61	52	54	56	54.5
St. Louis	Maximum	82	57	53	54	68	67	74	82	84	69	74	80	73	72	64	78	80	82	89	93	83	84	87	77	77	77	82	78	77	79	81	76.0
	Minimum	53	50	45	48	51	48	51	57	52	49	62	62	57	57	55	56	61	64	65	62	63	65	67	64	67	67	63	65	60	61	65	58.5
Unionville	Maximum	70	57	60	60	55	60	70	74	67	54	75	74	74	77	76	80	77	85	90	85	76	85	85	80	80	82	83	77	75	80	86	74.5
	Minimum	47	43	40	40	42	40	45	47	47	42	46	50	53	50	53	50	56	58	66	65	60	63	67	56	53	55	58	60	50	50	55	51.8
Warrenton	Maximum	81	70	54	51	63	67	73	82	79	66	82	76	70	72	67	81	76	83	88	91	85	84	86	80	77	71	83	80	76	77	81	75.9
	Minimum	62	47	45	46	48	45	51	53	64	48	60	60	57	51	53	54	57	62	63	69	62	63	65	62	63	64	60	62	54	55	58	56.9
Southeast Lowlands																																	
Campbell	Maximum	80	75	63	64	62	76	75	84	86	79	76	80	84	79	66	79	85	87	90	91	91	89	89	88	87	86	86	89	81	86	85	81.2
	Minimum	63	46	51	49	53	49	53	48	60	57	64	59	70	58	55	50	51	57	58	63	62	65	62	66	64	61	61	60	62	63	57	58.0
Caruthersville	Maximum	84	83	76	64	66	75	78	79	83	83	79	79	82	85	82	76	77	82	82	91	93	86	85	90	87	88	79	81	90	83	89	81.8
	Minimum	69	51	54	53	55	54	61	54	63	64	72	64	73	67	64	57	60	63	65	70	68	70	68	70	70	70	66	65	66	58	66	63.5
Doniphan	Maximum	78	74	68	60	76	78	75	84	90	85	82	79	85	77	69	80	84	78	90	93	90	84	89	85	85	87	89	90	81	82	85	81.7
	Minimum	63	50	54	52	55	47	55	46	62	60	66	62	67	62	55	50	51	56	58	59	62	66	62	67	66	59	58	57	63	60	55	58.2
Jackson	Maximum	81	72	60	62	75	74	77	81	86	83	71	78	79	71	70	80	82	84	90	92	87	84	87	87	86	85	85	85	83	84	84	80.2
	Minimum	65	51	50	52	49	49	57	50	65	56	63	61	62	58	56	53	53	60	59	66	64	64	64	70	68	70	62	63	62	56	57	59.2
Poplar Bluff	Maximum	81	73	63	61	73	74	75	84	86	75	77	79	83	78	67	68	82	82	88	90	87	83	87	82	84	80	86	87	81	87	86	79.6
	Minimum	66	47	53	51	55	48	55	48	64	58	67	61	70	60	55	50	52	57	57	63	63	64	62	68	67	65	60	59	59	54	57	58.5
Sikeston	Maximum	82	74	63	68	74	74	76	82	86	79	79	78	83	78	72	77	82	82	90	92	88	84	89	85	86	83	84	89	81	86	82	80.9
	Minimum	68	53	52	53	55	51	57	52	64	57	67	61	62	62	57	54	56	62	60	67	65	65	65	69	67	70	64	62	64	57	59	60.5
Cairo, Ill	Maximum	82	65	56	64	72	73	75	80	83	75	73	77	82	75	70	77	79	82	87	88	84	81	86	83	85	79	81	85	78	82	79	78.0
	Minimum	65	54	51	54	55	55	58	55	67	58	58	63	74	62	58	57	62	64	68	70	66	64	69	72	70	69	64	66	65	63	65	62.6
Ozark Plateau																																	
Arcadia	Maximum	79	65	56	54	71	75	76	80	86	74	71	74	74	65	60	76	79	80	87	89	83	78	83	80	77	74	81	80	75	77	79	75.4
	Minimum	61	49	48	47	51	48	56	46	63	53	60	60	63	52	53	48	51	59	56	64	61	62	61	61	61	64	54	59	57	53	52	55.9
Birchtree	Maximum	80	78	58	58	72	79	76	81	86	81	84	75	71	68	67	75	80	81	86	88	84	81	86	79	80	79	84	80	77	81	81	77.9
	Minimum	68	56	50	49	51	45	57	45	66	58	65	50	60	50	50	50	56	57	56	67	63	65	63	57	63	63	65	58	57	57	56	57.0
Eldon§§	Maximum	81	58	53	51	60	71	80	83	78	81	82	75	57	68	64	79	78	79	82	84	84	82	83	77	76	76	82	76	74	76	83	74.6
	Minimum	59	48	47	47	49	45	46	50	52	50	50	60	57	48	53	51	53	57	60	60	63	61	61	68	63	64	59	62	54	54	56	55.1
Farmington	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Koshkonong	Maximum	80	67	63	58	72	77	77	83	87	78	84	76	79	72	63	79	83	84	88	90	82	84	85	79	79	75	83	82	78	81	81	78.4
	Minimum	61	47	51	47	52	47	59	55	66	61	69	62	64	56	54	54	56	59	61	63	67	64	65	64	67	65	59	62	60	57	59	59.1
Lebanon	Maximum	89	57	60	59	64	79	79	85	86	85	90	76	62	64	68	84	88	88	90	92	88	85	85	83	79	76	85	75	78	80	83	78.8
	Minimum	59	43	43	44	45	40	43	46	52	49	50	59	54	45	49	46	50	58	60	62	59	56	60	62	61	60	53	59	49	52	52	52.3
Mountain Grove	Maximum	79	70	59	56	65	73	75	80	85	75	84	74	73	63	65	76	77	76	83	87	81	79	81	78	74	73	82	78	76	79	82	75.4
	Minimum	58	43	47	46	49	42	57	52	64	55	63	58	60	49	51	48	55	58	58	63	59	61	63	63	62	62	54	52	56	54	53	55.3
Neosho	Maximum	78	65	68	67	70	83	84	86	86	85	86	85	75	59	64	77	82	85	87	87	87	84	81	78	76	77	83	82	76	80	79	78.8
	Minimum	57	42	42	48	52	40	64	46	66	62	67	62	57	46	54	46	52	61	66	67	62	58	69	61	61	59	54	60	48	53	50	55.9
Rolla	Maximum	80	69	55	52	66	73	77	82	85	77	86	80	74	64	61	76	79	80	87	88	85	79	83	80	76	73	80	78	72	75	78	75.8
	Minimum	64	47	46	47	49	46	62	49	67	50	61	61	57	51	51	50	58	65	60	66	62	62	66	65	65	65	57	63	53	54	57	57.3
Springfield	Maximum	79	57	62	57	61	76	76	84	81	84	86	76	66	60	63	76	79	83	87	87	80	81	79	76	78	73	80	71	73	75	80	74.9
	Minimum	48	44	47	48	49	44	60	54	59	56	62	60	54	52	53	51	58	63	64	68	62	62	68	63	62	61	59	59	54	59	59	56.8
Southwest Plain																																	
Appleton City	Maximum	75	58	59	54	58	74	73	86	81	85	86	79	71	66	67	78	81	85	88	87	83	84	84	76	70	80	84	78	77	75	83	76.3
	Minimum	51	47	46	49	48	41	63	49	61	52	54	62	56	51	54	52	56	61	67	68	62	62	70	62	63	61	60	61	50	57	67	56.9
Clinton	Maximum	78	60	58	52	60	73	80	89	86	86	82	75	72	72	70	83	82	88	90	91	88	88	87	78	76	85	88	78	80	80	86	78.5
	Minimum	53	48	46	50	50	40	58	48	62	52	55	60	56	49	55	52	55	62	64	66	62	60	68	60	60	61	59	62	50	54	56	55.9
Harrisonville§§	Maximum	70	59	56	51	55	68	76	86	74	77	88	75	71	74	70	81	77	85	88	89	79	83	86	73	73	80	85	74	78	78	84	75.6
	Minimum	35	44	42	44	46	38	46	48	56	48	49	52	53	45	53	50	55	58	61	65	59	59	60	59	58	57	60	60	49	52	53	52.1
Lamar§§	Maximum	78	61	64	56	60	80	75	86	79	85	86	80	64	68	65	78	82	84	87	87	86	85	83	76	76	75	82	68	75	77	82	76.3
	Minimum	62	43	44	45	50	42	42	50	51	56	58	64	57	51	54	52	54	58	64	68	64	62	64	65	64	61	59	60	52	53	56	55.6
Lamonte	Maximum	72	54	53	51	57	70	77	85	85	75	86	80	70	73	67	78	75	85	88	89	83	84	86	78	75	77	83	75	75	80	84	75.8
	Minimum	51	46	46	47	47	39	56	48	48	49	52	60	56	49	55	51	57	63	66	66	61	62	68	61	58	59	59	58	58	53	56	55.0
Marshall	Maximum	73	55	54	53	60	65	78	85	84	70	87	85	75	75	75	79	79	86	89	88	80	84	87	83	76	77	83	83	76	79	82	76.9
	Minimum	52	46	46	46	39	39	62	52	58	49	52	61	57	52	53	53	58	63	68	64	61	67	66	64	58	58	53	53	53	54	55	55.2
Nevada	Maximum	74	59	62	54	58	78	75	87	78	84	85	80	71	66	68	78	80	84	87	86	83	83	83	75	74	77	83	76	77	76	81	76.2
	Minimum	51	44	44	48	49	39	61	45	61	52	58	52	56	49	54	53	58	60	65	69	68	60	58	55	62	60	61	60	50	56	55	55.1
Warrensburg	Maximum	71	55	53	50	55	70	75	85	86	75	86	79	71	71	67	78	74	85	88	89	83	84	85	76	76	80	83	76	77	80	85	75.7
	Minimum	45	45	44	45	46	39	39	51	51	48	50	59	55	49	53	53	58	61	67	60	60	61	66	60	58	55	58	61	51	56	54	53.5
Warsaw	Maximum	84	56	57	57	59	75	79	89	84	87	91	80	72	67	67	81	82	88	90	90	86	84	86	80	77	80	86	76	78	79	86	78.5
	Minimum	51	47	45	49	48	44	62	48	61	51	58	61	56	47	53	50	55	63	66	69	61	60	70	64	61	61	57	61	51	55	55	56.1
Northwest Plateau																																	
Chillicothe §§	Maximum	70	54	60	52	48	64	79	78	62	53	85	74	78	79	75	84	76	88	92	91	81	87	87	82	78	81	86	77	75	80	87	75.6
	Minimum	48	45	42	44	43	40	43	47	51	45	46	50	53	46	53	52	56	58	64	68	58	59	63	57	53	57	58	61	49	51	53	52.0
Grant City	Maximum	60	48	57	55	55	56	73	70	66	53	60	69	67	74	71	82	76	84	86	84	82	82	81	77	73	72	80	76	71	74	86	71.0
	Minimum	43	44	40	45	42	52	49	45	47	44	46	53	50	47	48	50	60	59	69	70	60	61	68	56	52	57	54	60	47	48	51	52.2
Kansas City	Maximum	60	57	53	50	49	66	74	87	66	59	78	74	70	74	74	83	74	85	90	89	79	84	84	80	74	80	86	75	78	77	83	73.9
	Minimum	47	46	44	46	46	43	56	58	51	49	49	58	55	55	56	60	57	65	70	65	63	65	71	66	62	60	66	60	56	59	63	57.0
Kidder	Maximum	65	53	59	53	51	61	75	77	69	57	77	73	68	75	73	82	78	85	89	88	78	81	82	80	76	82	86	83	75	78	84	74.0
	Minimum	47	44	41	44	43	40	50	47	51	46	47	59	52	48	51	54	61	60	69	64	62	59	66	60	56	57	59	61	50	52	56	53.4
Lexington§§	Maximum	70	56	55	51	52	69	77	87	70	68	89	74	75	78	78	82	73	87	90	92	85	87	89	80	78	82	88	77	79	81	89	77.0
	Minimum	52	46	46	46	47	40	45	52	57	49	50	52	56	56	55	55	60	63	70	70	61	62	67	64	57	59	60	62	52	56	59	55.7
Maryville	Maximum	63	53	60	61	50	60	74	75	73	59	62	70	70	79	79	86	81	88	91	86	75	84	82	82	76	83	86	81	75	80	89	74.6
	Minimum	45	45	38	45	42	39	50	45	49	45	46	53	49	44	47	49	60	60	69	65	60	61	66	56	50	57	56	60	50	51	53	51.8
Oregon	Maximum	63	55	64	58	50	68	70	80	74	61	68	73	71	79	81	87	82	88	91	85	85	85	83	82	75	84	91	87	78	80	91	76.4
	Minimum	46	44	42	45	43	40	53	46	51	45	47	53	50	49	50	55	58	63	69	65	58	63	67	57	57	57	60	60	52	52	58	53.4
St. Joseph	Maximum	52	55	62	51	49	65	73	79	66	51	71	75	69	77	76	85	76	86	90	84	80	84	84	81	79	82	88	70	77	78	86	73.6
	Minimum	45	45	44	46	45	41	55	50	50	47	48	56	53	51	52	58	59	64	71	65	61	64	67	63	56	59	63	58	53	54	59	54.9
Trenton	Maximum	67	52	62	56	54	60	77	78	74	55	82	76	73	77	76	85	76	87	90	87	78	84	85	82	78	82	87	87	75	81	87	75.8
	Minimum	48	46	43	46	44	40	50	49	51	45	49	60	58	48	51	52	58	60	67	66	62	60	67	57	54	58	60	62	53	53	56	53.8

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 6-22-33—900.

Continued from Page 24

several northern counties, principally in Andrew, Gentry, Linn, Marion, and Adair counties, with a tornado developing east of Whitesville, Andrew County, and ending west of King City, Gentry County; the tornado causing property damage estimated at about $10,000, but hurting no person. In connection with this tornado, Mr. John M. Martin, cooperative observer, states: "About 2 p. m. a cloud came from the west and it developed into several small tornadoes, some that never came close to the ground."

On May 25, a tornado occurred near Pomona, Howell County, causing property damage of about $2,000, killing two persons and injuring one.

ERRATA

Page 16, April, 1933, mean atmospheric pressure at Columbia should be 29.88.

MR. ROBERT FORSYTH

In the death of Mr. Robert Forsyth, Cooperative Observer at Farmington, the Missouri Section of the Climatological Service of the Weather Bureau loses one of its most valued co-workers. Mr. Forsyth took charge of the Farmington station on July 9, 1918, and kept an excellent and unbroken daily weather record until a few days before his death, which occurred on May 7, 1933.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

JUL 25 1933

CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

VOL. XXXVII ST. LOUIS, MO., JUNE, 1933 No. 6

GENERAL SUMMARY

Heat and drought were the outstanding features of the weather of June, 1933, in Missouri, yet some very heavy local rains occurred. Springfield had excessive rainfall on the 27th and destructive floods occurred on the 28-29th in Adair, Scotland, Knox, Lewis, and Clark counties; but, outside of a belt extending across the most northern fourth of the State, rainfall was severely lacking during most of the month, except in some very small areas.

The average temperature for the State, 78.4°, was the third highest of record (years 1888 to 1933), the highest average having been 79.3° in 1914, and the second highest, 78.9° in 1911. The heat was almost continuous, there being only one break to subnormal temperatures, viz., about the 12th to 16th. At St. Louis it was the warmest June average of record, including the Dr. Engelmann records, which extend back to 1837. Periods of severe heat occurred on the 6-11th, 20-26th, and 29-30th, with maximum temperatures reaching 100° or higher at many stations, and as high as 107° at two stations. These extremes have been exceeded in past Junes.

This very dry June followed one of the wettest Mays of record, and the drought was not seriously felt until about the end of the second week. The last two weeks crops suffered severely, except in the most northern fourth of the State. As usual in such periods, what rain there was occurred irregularly and in spots. Three stations reported no measurable rainfall in the entire month, and many received none of any consequence, among them St. Louis, with only 0.15 inch, making it the second driest June at St. Louis in the long period of 1837 to 1933. On the other hand, as much as 9.01 inches fell in 24 hours at Gorin, Scotland County, on the 28-29th, while 5.00 inches or more fell at neighboring stations.

At the end of the month drought still prevailed over the central and southern thirds of the State. Wheat was greatly damaged at the beginning of the heat and drought, as it was just then reaching maturity in most fields. It was harvested under favorable conditions. Both quantity and quality of wheat were considerably reduced from the rather favorable prospects of early June. Oats suffered likewise. Corn held up fairly well until the last week of June, except in the southeastern counties. In the northern third of the State it was in good to very good condition; but over most of the central and southern portions it was only poor to fair. It was generally much under normal growth; some late planted had not even come up; chinch bugs were doing considerable damage. Hay crops were much shortened by the drought and heat; berries, fruits, gardens, and truck were badly damaged. But cotton stood the drought well and was reported generally in good condition.

The principal rivers were at fairly high stages at the beginning of June, but were falling, and they continued to fall, and reached low stages by the end of the month. The only floods of importance were those following the very excessive downpours in the northeastern counties on the 28-29th, mostly over the drainage basin of Fabius River. Considerable damage to bridges and crops occurred in the counties of Adair, Scotland, Knox, Lewis, and Clark. In the Steffenville area alone damage to crops was estimated at $20,000 and to ditches and levees, $15,000.

There were but few windstorms of consequence. What appears to have been a small tornado struck near the boundary line of Lawrence and Barry counties on the 25th, a few miles northeast of Monett, damaging farm buildings, trees, and crops. Severe thunderstorms and high winds occurred on the 27th in the Springfield area and on the 28th in St. Louis and St. Louis County.

(Continued on page 30)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia	29.97	30.33	13	29.75	4	6.9	18	n.	12	72	47	50	89
Hannibal	29.97	30.35	13	29.75	5	8.2	24	sw.	29	68	40	..	..
Kansas City	29.93	30.39	13	29.70	4	7.8	34	sw.	27	57	36	35	86
St. Joseph	29.92	30.40	13	29.67	4	7.7	24	sw.	24	65	40	39	86
St. Louis	29.98	30.33	14	29.76	4	9.3	33	nw.	28	60	38	41	87
Springfield	29.99	30.32	14	29.75	23	8.3	30	sw.	27	67	42	42	89
Cairo, Ill.	29.99	30.32	15	29.78	23	6.7	28	ne.	13	76	47	50	92
Keokuk, Iowa	29.97	30.37	13	29.76	5	7.1	19	sw.	8	64	42	45	87

COMPARATIVE DATA FOR JUNE

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	72.6	− 0.8	103	36	6.20	+1.41	10.52	2.87	0	7	..	..	..
1889	70.7	− 2.7	100	38	4.66	−0.13	8.80	1.78	0	6	..	..	..
1890	77.2	+ 3.8	106	44	2.59	−2.20	7.47	0.37	0	6	..	..	..
1891	73.2	− 0.2	103	46	6.94	+2.15	13.54	3.29	0	13	..	..	..
1892	74.5	+ 1.1	100	45	3.18	−1.61	7.63	0.45	0	7	15	9	6
1893	72.6	− 0.8	98	40	4.61	−0.18	8.58	1.29	0	9	12	12	6
1894	74.5	+ 1.1	105	35	3.92	−0.87	9.78	0.75	0	7	16	11	3
1895	73.3	− 0.1	100	42	5.77	+0.98	9.95	0.45	0	10	12	11	7
1896	72.5	− 0.9	101	45	8.32	+3.53	9.97	0.77	0	9	12	11	7
1897	73.6	+ 0.2	102	38	6.18	+1.39	11.67	2.78	0	12	9	14	7
1898	75.3	+ 1.9	100	49	5.88	+1.09	11.08	2.42	0	11	13	12	5
1899	74.3	+ 0.9	101	42	3.87	−0.92	9.05	1.53	0	9	15	10	5
1900	73.3	− 0.1	103	44	4.79	0.00	9.07	1.12	0	10	12	12	6
1901	77.9	+ 4.5	106	40	2.13	−2.66	5.31	0.26	0	6	18	10	2
1902	70.9	− 2.5	100	37	6.57	+1.78	12.55	2.55	0	12	11	10	9
1903	67.3	− 6.1	95	36	3.25	−1.54	8.30	1.22	0	9	15	9	6
1904	70.5	− 2.9	93	45	6.42	+1.63	13.79	1.60	0	11	12	12	6
1905	75.2	+ 1.8	103	42	3.09	−1.70	6.88	0.74	0	7	15	10	5
1906	72.7	− 0.7	101	40	4.70	−0.09	11.15	0.98	0	10	15	9	8
1907	71.2	− 2.2	97	40	5.84	+1.05	10.35	0.94	0	11	14	10	6
1908	72.3	− 1.1	98	43	6.30	+1.51	13.29	2.05	0	11	13	10	7
1909	73.9	+ 0.5	98	48	5.21	+0.42	10.05	0.74	0	11	11	13	6
1910	70.4	− 3.0	99	38	3.92	−0.87	9.01	0.96	0	8	16	7	7
1911	78.9	+ 5.5	112	43	1.78	−3.01	5.85	0.08	0	6	18	8	4
1912	69.5	− 3.9	100	42	4.78	−0.01	8.88	0.96	0	9	14	8	8
1913	75.4	+ 2.0	107	33	2.57	−2.22	6.39	0.37	0	6	18	8	4
1914	79.3	+ 5.9	106	43	2.37	−2.42	7.31	0.10	0	5	18	7	5
1915	70.8	− 2.6	98	38	6.51	+1.72	12.88	0.57	0	12	11	10	9
1916	70.0	− 3.4	100	42	6.99	+2.20	12.81	2.52	0	10	14	9	7
1917	71.0	− 2.4	103	35	3.78	−1.01	13.54	0.09	0	8	19	7	4
1918	77.2	+ 3.8	110	48	3.15	−1.64	8.06	0.62	0	7	17	8	5
1919	75.0	+ 1.6	104	44	5.59	+0.80	10.69	1.91	0	11	14	10	6
1920	72.7	− 0.7	104	41	2.35	−2.44	6.63	0.57	0	6	18	7	5
1921	76.6	+ 3.2	105	44	5.71	+0.92	11.39	2.31	0	12	12	10	8
1922	76.5	+ 3.1	108	43	1.66	−3.13	3.57	0.13	0	5	19	8	3
1923	73.5	+ 0.1	103	45	5.48	+0.69	9.36	2.12	0	11	14	9	7
1924	72.5	− 0.9	101	38	7.39	+2.60	13.53	2.59	0	14	12	12	6
1925	76.5	+ 3.1	103	46	6.10	+1.31	12.55	0.27	0	9	15	10	5
1926	70.9	− 2.5	101	37	3.62	−1.17	8.42	0.34	0	8	15	9	6
1927	70.3	− 3.1	99	41	5.77	+0.98	11.61	1.99	0	10	15	7	8
1928	67.7	− 5.7	91	40	11.17	+6.38	22.00	5.08	0	15	8	11	11
1929	71.3	− 2.1	99	39	5.77	+0.98	11.42	2.66	0	10	16	8	6
1930	72.4	− 1.0	109	36	3.83	−0.96	10.35	0.30	0	7	18	8	4
1931	77.1	+ 3.7	107	40	2.94	−1.85	9.14	0.56	0	6	19	8	3
1932	75.2	+ 1.8	103	47	4.95	+0.16	14.12	1.57	0	10	12	12	6
1933	78.4	+ 5.0	107	38	1.72	−3.07	9.10	0.00	0	3	22	6	2
Period	73.4	.....	112	33	4.79	.....	22.00	0.00	0	9	15	9	6

Climatological Data for June, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	79.2	+ 6.2	100	6†	49	14	34	2.12	−3.37	0.97	0	6	..	..	..	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	78.9	+ 6.5	100	22†	43	13	34	1.46	−3.43	0.54	0	4	24	6	0	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	78.0	+ 5.2	99	30	48	14	32	2.18	−2.58	1.57	0	5	22	8	0	s.	U. S. Weather Bureau
Downing	Schuyler	876	12	78.6	+ 7.2	101	6	46	13†	36	3.07	−2.39	1.90	0	3	25	4	1	sw.	James Taylor
Elsberry	Lincoln	449	2	77.4	.....	102	30	41	14	44	1.11	.....	0.71	0	3	16	14	0	sw.	Ray E. Mills
Fayette	Howard	661	53	77.3	+ 4.5	101	30	45	14	39	1.31	−3.48	1.15	0	3	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	77.4	+ 4.2	100	30	46	15	40	0.71	−3.96	0.23	0	6	23	6	1	sw.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	9.10	+4.81	9.01	0	3	21	5	4	sw.	J. W. Pulliam
Hannibal	Marion	534	41	79.2	+ 6.7	100	11	49	14	33	1.56	−2.34	0.96	0	4	19	8	3	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	78.2	+ 4.4	101	24	47	14	36	2.88	−1.39	2 70	0	4	17	10	3	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	78.4	+ 6.7	101	11	47	14	36	8.83	+4.12	5.20	0	3	23	5	2	sw.	Prof. J S. Stokes
Louisiana	Pike	469	39	78.0	+ 5.9	102	30	42	14	39	0.73	−3.46	0.53	0	2	21	9	0	s.	Stark Bro's Nurseries
Macon	Macon	875	34	79.0	+ 6.6	100	6†	47	14	32	4.22	−0.67	2.51	0	5	24	3	3	w.	W. C. Brown
Mexico	Audrain	800	44	78.3	+ 5.1	101	30	46	14	42	1.23	−3.85	0.60	0	5	21	9	0	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	0.84	−4.23	0.81	0	2	22	6	2	n.	J. S. Conway
St. Charles	St. Charles	456	45	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	....	L. C. Saeger
St. Louis	**St. Louis City**	568	60	81.7	+ 6.7	102	30	56	14	27	0.15	−3.67	0.15	0	2	22	7	1	sw.	**Section Center**
St. Louis University	St. Louis City	578	21	81.4	+ 6.5	101	29†	57	14†	28	0.36	−3.31	0 25	0	2	28	2	0	w.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	2.99	−2.02	2.47	0	4	..	..	..	.....	J C Jewett
Steffenville	Lewis	650	35	78.5	+ 5.9	99	23	45	14	33	5.05	+0.57	3.25	0	4	21	8	1	s.	Frank Hall
Unionville	Putnam	1,062	40	78.9	+ 7.6	103	26	40	14	44	3.10	−1.99	2 70	0	2	25	4	1	.....	Geo. W. Davis
Warrenton	Warren	816	51	79.8	+ 6.4	101	30	51	13†	32	0.36	−3.86	0.25	0	2	19	11	0	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	80.0	+ 7.5	99	6	55	14	28	6.88	+2.75	5.88	0	7	19	8	3	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**78.9**	**+ 6.1**	**103**	**26**	**40**	**14**	**44**	**2.67**	**−2.35**	**9.01**	**0**	**4**	**22**	**7**	**1**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	78.4	.....	104	7†	44	15	44	2.15	.....	1.38	0	4	23	7	0	s.	Jeff. King
Caruthersville	Pemiscot	265	37	80.6	+ 2.2	101	7	56	15	30	0.25	−3.77	0.25	0	1	24	3	3	.....	Sam Smith
Doniphan	Ripley	344	29	78.1	+ 3.1	104	21	42	15	48	0.92	−3.67	0.92	0	1	24	4	2	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	79.3	+ 5.2	102	21	43	15	41	0.07	−4.65	0.07	0	1	14	7	9	s.	John G. Putz
Marble Hill	Bollinger	470	38	77.3	+ 3.3	102	21	41	15	44	0.30	−4.41	0.30	0	1	20	9	1	w.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	0.54	−4.49	0.29	0	3	23	7	0	sw.	John A. Spence
Poplar Bluff	Butler	329	28	77.1	+ 1.7	101	20	44	15	43	0.63	−4.04	0.63	0	1	27	3	0	s.	J. H. Wolpers
Sikeston	Scott	318	26	79.7	+ 5.4	102	7	49	15	37	1.20	−3.03	0.90	0	2	20	10	0	sw.	John A. LaFont
Cairo, Ill.	Alexander, Ill.	358	61	79.6	+ 3.3	98	21	54	14	27	0.91	−2.92	0.54	0	3	18	4	8	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**78.8**	**+ 3.5**	**104**	**7†**	**41**	**15**	**48**	**0.82**	**−3.79**	**1.51**	**0**	**2**	**21**	**6**	**3**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	74.2	+ 2.4	98	30	41	15	38	T.	−4.69	T	0	0	19	10	1	sw.	Arcadia College
Birchtree (near)	Shannon	1,000	38	75.5°	+ 2.8	98	23†	44	15	42	0.75	−3.83	0.75	0	1	29	0	1	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	1.04	.....	1.04	0	1	26	4	0	s.	C. M. McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	T	.....	T.	0	0	17	12	1	s.	Ozark Utilities Co.
Dean ††	McDonald	1,000	29	76.0	+ 3.3	107	25	39	14	46	0.32	−5.72	0.32	0	1	21	9	0	sw.	H. E. Dean
Eldon	Miller	934	38	78.3	+ 5.3	102	25†	46	14	38	0.35	−4.27	0.26	0	3	19	9	2	sw.	E. H. Shepherd
Farmington	St. Francois	918	22	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	H. O. Miller
Goodland	Iron	1,000	40	74.0	+ 2.1	100	21†	38	15	46	0.18	−4.08	0.18	0	1	23	7	0	s.	F. M. Adams
Greenville	Wayne	381	24	75.0	+ 1.4	101	21	39	15	47	0.50	−4.28	0.50	0	1	24	6	0	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	0.20	−5.82	0.20	0	1	27	2	1	se.	A. W. Madison
Koshkonong	Oregon	958	32	79.2	+ 4.8	100	21†	52	14†	32	1.31	−3.40	0.50	0	3	21	6	3	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	77.8	+ 5.1	105	23†	40	14	43	1.46	−3.79	1.24	0	2	27	1	2	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	78.8	+ 5.2	100	23†	49	14	33	0.27	−5.07	0.27	0	1	22	8	0	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	76.6	+ 4.8	101	22	43	14	36	0.77	−4.01	0.76	0	2	24	4	2	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	75.9	+ 2.1	98	23†	40	14	39	0.47	−5.34	0.47	0	1	18	11	1	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	77.3	+ 4.3	98	29†	48	15	33	0.13	−4.13	0.08	0	3	15	8	7	s.	F. H. Lane
Salem	Dent	1,173	29	76.2	+ 3.8	99	30	42	14	37	0.48	−4.22	0.36	0	2	19	10	1	s.	E. E. Martin
Seligman	Barry	1,542	32	77.2	+ 4.8	99	25	46	14	30	1.13	−3.22	0.55	0	3	26	4	0	s.	Floyd E. Fawver
Seymour(near)	Webster	1,642	27	74.9	+ 3.2	97	22†	39	14	38	0.95	−4.45	0.95	0	1	24	4	2	sw.	A. L. Hailey
Springfield	Greene	1,324	45	78.3	+ 5.8	98	23	56	13	26	3.43	−1.25	3.17	0	3	26	4	0	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	79.1	.....	101	30	47	14	34	0.60	.....	0.33	0	3	22	7	1	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**76.7**	**+ 3.8**	**107**	**25**	**38**	**15**	**47**	**0.57**	**−4.46**	**3.17**	**0**	**2**	**23**	**6**	**1**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	78.5	+ 4.1	102	30	52	14	33	0.46	−4.79	0.39	0	2	14	16	0	sw.	W. G. Bigelow
Clinton	Henry	765	40	79.6	+ 5.8	104	25†	47	14	39	1.16	−3.86	0.98	0	3	19	11	0	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	78.4	+ 5.3	104	29†	50	13†	36	0.39	−4.24	0.36	0	3	17	6	7	s.	John H. Patterson
Lamar	Barton	980	45	78.4	+ 4.2	101	23†	48	14	34	0.25	−5.00	0.25	0	2	25	4	1	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	78.4	+ 4.4	101	24†	49	14	34	1.50	−3.33	0.70	0	5	26	3	1	se.	J. E. Wheeler
Marshall	Saline	779	46	80.6	+ 7.4	100	29†	50	14	35	1.06	−3.57	0.64	0	3	23	7	0	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	78.3	+ 4.8	100	30	45	14	33	0.26	−5.26	0.26	0	1	21	7	2	sw.	George A. Kaupp
Warrensburg	Johnson	878	46	79.2	+ 5.3	103	30	44	13	36	1.16	−3.87	0.58	0	3	22	8	0	sw.	E. A. Markey
Warsaw	Benton	687	32	80.0	+ 6.2	107	30	47	14	43	0.35	−5.03	0.20	0	3	24	4	2	s.	Everett Martin
Division means	**and extremes**	.....	..	**79.0**	**+ 5.3**	**107**	**30**	**44**	**13**	**43**	**0.86**	**−4.37**	**0.98**	**0**	**3**	**21**	**7**	**2**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	77.9	+ 5.9	100	11	42	14	37	1.66	−3.16	1.09	0	5	22	6	2	sw.	A. S. Cumming
Chillicothe	Livingston	779	24	79.0	+ 6.1	103	24	44	14	40	3.11	−2.73	2.44	0	6	20	7	3	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	79.6	+ 8.1	103	11	45	13	41	1.46	−3.48	0.83	0	4	23	2	5	s.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	78.2[b]	+ 6.3	101	24	44	14	38	2.88	−1.62	2.02	0	5	24	5	1	s.	Fred L. Stiff
Grant City	Worth	1,134	29	77.0	+ 6.2	101	6†	43	13	38	1.34	−3.57	0.77	0	5	11	16	3	sw.	Howard Rybolt
Kansas City	Jackson	963	44	81.8	+ 8.2	102	29	54	13	27	1.46	−3.53	1.29	0	4	20	6	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	78.4	+ 6.6	100	24	49	13†	33	2.42	−2.58	1.75	0	5	23	6	1	s.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	2.76	−2.66	2.16	0	4	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	81.4	+ 8.5	105	30	51	14	34	3.08	−2.04	1.65	0	5	23	7	0	sw	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	79.3	+ 9.5	105	6	45	13	36	2.42	−2.67	1.73	0	5	23	6	1	s.	J. R. Brink
Oregon	Holt	1,018	77	81.0	+ 8.8	105	10	48	13†	38	4.79	−0.22	3.08	0	5	27	2	1	sw.	Mina Wright
St. Joseph	Buchanan	967	23	80.6	+ 6.8	102	6	49	14	32	6.05	+1.02	3.31	0	6	23	4	3	s.	U. S. Weather Bureau
Tarkio	Atchison	916	30	79.2	+ 7.4	104	6†	46	13	37	3.87	−1.23	2.72	0	4	21	8	1	sw.	Albert Volker
Trenton	Grundy	822	37	79.8	+ 7.6	102	11	49	13†	37	1.79	−3.21	1.05	0	5	22	7	1	s.	W. H. Estes
Division means	**and extremes**	.....	..	**79.6**	**+ 7.4**	**105**	**6†**	**42**	**14**	**41**	**2.89**	**−2.00**	**3.31**	**0**	**5**	**22**	**6**	**2**	**s.**	
State means	**and extremes**	.....	..	**78.4**	**+ 5.0**	**107**	**25†**	**38**	**15**	**48**	**1.72**	**−3.07**	**9.01**	**0**	**3**	**22**	**6**	**2**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for June, 1933

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi												.05	1.49												.32			.10	1.90			2.32
Boonville	Missouri												.38	.09												.24	.40			.02			2.20
Bowling Green	Mississippi													.26													.18			.04			0.69
Brunswick	Grand												1.62													.55	.05	.02	.27	.97			2.12
Canton	Mississippi												.24													.41				2.51			4.54
Clifton Hill	Chariton												1.57									T.			.12	.53			.54	.15			1.46
Columbia***	Missouri												T.											T.	T.	.08			.07	.34			2.18
Downing	Mississippi												.40													.29			1.90	.88			3.07
Edina	....do												.14														T		.40	8.28			9.08
Elsberry	....do													T.										.26					.71				1.11
Farber	....do												1.15													.52							0.52
Fayette	Missouri												.23	.23									.02			.07			.07	.09			1.31
Fulton	....do																									.09	.10	.04	T.	T.			0.71
Gorin	Mississippi												.47									T.			T.	.09			1.10	7.91			9.10
Hannibal***	....do													.02									.02			.13		T.	.17	.79			1.56
Hermann	Missouri													.12									.02			.04	2.70	.54					0.58
Jefferson City	....do																								T.	.35				8.25			2.88
Kahoka	Mississippi																									.46			3.17	5.20			8.60
Kirksville	....do												.16																**	8.00			8.83
LaBelle	....do												.92											T.	.41		.05	2.24	.15				8.16
Linneus	Grand												.53												T.	.20							3.77
Louisiana	Mississippi												1.25													.19			.59	1.75	.10		0.73
Lucerne	Grand																									.34	.12		.26	2.25			2.68
Macon	Chariton												.15	.60												T.			.43	6.06			4.22
Memphis	Mississippi												.08													.23	.17			.08			6.49
Mexico	....do				T.							.03													T.	.51			1.06	.32			1.23
Milan	Grand													.08																.81			1.97
Monroe City	Mississippi																										.11			.89			0.84
New London	....do													.08									.02				T.	.05					1.08
Pacific	Meramec												.29	.11									T.			.11	.04		1.08				0.07
Palmyra	Mississippi												.45						.16														1.63
Paris	....do												.12											T.			.25			.26			1.56
Perry	....do																									.23			.05	2.05			0.63
Philadelphia	....do																																2.33
St. Charles	Missouri												T.									.10	.05				T.	T.	T.				....
St. Louis***	Mississippi																					.11							.25				0.15
St. Louis University*	....do												.23																.03	2.47			0.36
Shelbina	....do												.15													.15			1.50	3.25			2.99
Stelfenville	....do													.02																.62			5.05
Troy	....do													T.									.03			.08	.05						0.64
Union	Meramec																							T.		.40			2.70				0.16
Unionville	Chariton												T.										.03			T.		T.		1.24			3.10
Valley Park	Meramec																						.11			T.	T.		.25				1.27
Warrenton	Mississippi											.16	.14												.13	T.			.56				0.36
West Ely	....do																													.58			0.99
Winfield	....do											T.										.01		T.	.15	.68	T.		2.04	3.84			0.58
Keokuk, Ia.***	....do				.15	.01																											6.88
Southeast Lowlands																																	
Bragg City	St. Francis													1.05														.02					1.07
Campbell	....do											.05	.70	1.38														.02					2.15
Cape Girardeau	Mississippi											.01											.20	.01									0.22
Caruthersville	....do																											.25					0.25
Dexter	St. Francis											.55												T.									0.55
Doniphan	Black												T.														.92						0.92
Fisk	St. Francis																						T.	.01				1.51					1.52
Jackson	Mississippi																						.07										0.07
Marble Hill	....do																												.30				0.30
Morehouse	....do										.29		T.										.02							.23			0.54
New Madrid	....do											.60		.20														.02		.25			1.07
Parma	St. Francis													.95																			0.95
Poplar Bluff	Black																						T.					.63					0.63
Sikeston	Mississippi										.90														.30								1.20
Cairo, Ill.***	....do										T.	T.	.27										T.				.10		.54				0.91
Ozark Plateau																																	
Arcadia	St. Francis																						T.				T	T.					T.
Birchtree (near)	Black																										.75						0.75
Buffalo	Osage																											1.04					1.04
Caplinger Mills	....do																									T.							T.
Chaonia	St. Francis													.12	.20								.09										0.41
Dean	Neosho											.32															T.						0.32
Eldon	Missouri													.03									.06				.26						0.35
Farmington	St. Francis																																....
Fredericktown	....do																						.04					.02					0.06
Galena	White																										.45	.10					0.55
Goodland	Black																										.18						0.18
Greenville	St. Francis											T.	T.														.50						0.50
Hailey	White																											.20					0.20
Koshkonong	Black											T.													.44		.50	.37					1.31
Lakeside	Osage																										T.	.02					0.02
Lebanon	....do													T.														1.24	.22				1.46
Leeper	Black												.07															.72					0.79
Lockwood	Osage																										T.	.27					0.27
Mountain Grove	White												T.									T.					.76	.01					0.77
Neosho	Neosho												T.															.47	T.				0.47
Owensville	Gasconade																																0.00
Ozark Beach	White																											.05					0.05
Rolla	Meramec					.03								.08														.02					0.13
St. Thomas (near)	Osage																																0.00
Salem	Meramec																									.12		.36					0.48
Seligman	Neosho											.54	.55															.04					1.13
Seymour (near)	White																												.95				0.95
Springfield***	....do													.33													.02	.24	3.17				3.43
Steelville	Meramec														.35												T.	.16	T.				0.16
Stover	Missouri																											.11	T.				0.46
Versailles	Osage													.07	.02								.03				T.	.25	.02				0.60
Williamsville	Black																							.01					.87				0.99
Willow Sprgs. (near)	White																												1.05				1.06

Continued on next page

Daily Precipitation for June, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain																																
Appleton City	Osage				T.				T.				.07									T.			T.		T.	.39	T.				0.46
Clinton	do				T.								.12															.98	.06				1.16
Concordia‖	Missouri												.10	.52												.24		.04	.15				1.05
Harrisonville‖	Osage								.02																	.01			.36				0.39
Joplin‖	Neosho																									.45	.96						1.41
Lamar‖	do																								T.		.18	.07					0.25
Lamonte	Missouri												.70														.58	.02	.10		.10			1.50
Marshall	do												.64													.32	T.	T.	.10					1.06
Nevada	Osage																										.26							0.26
Warrensburg	Missouri				T.				T.				.28													.30		.58					1.16
Warsaw	Osage				T.									.20														.03	.12				0.35
Waverly‖	Misouri												.05	.21												.20			.70	.05			1.21
Northwest Plateau																																
Bethany	Grand																							.25	.14			.04	1.05		.18		1.66
Chillicothe‖	do						T.						.64												T.	T.		.02	2.44	.01			3.11
Conception	Missouri								T.				.33									T.		.05		.16		.03	.83		.06		1.46
Edgerton	do				.02								.68									T.			T.	.08	T.	.08	2.02				2.88
Gallatin‖	Grand												.89												.15	.02		.18	3.00				4.24
Grant City	do												.07									T.		.09				.09	.77		.32		1.34
Kansas City***	Missouri								T.				.03												T	.14	T.	.94	.35				1.46
Kidder	Grand							T.				.40										T.		.09		.10	T.	1.75	.08				2.42
King City	Missouri											.33														T.		.04	2.16		.23		2.76
Lexington‖	do												.18	.10												.72		.43	1.65				3.08
Maryville‖	do												.20											.40		.01			1.73		.08		2.42
Oregon	do				T.								.60												.23			.35	3.08		.63		4.79
St. Joseph***	do		T.		.02				T.				2.44									T.		T.	.20	.05	T.	1.16	2.18		T.		6.05
Tarkio	do												.42												T.			.02	2.72		.71		3.87
Trenton	Grand												.61											.02		.07		.04	1.05				1.79

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for June, 1933
(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.239	.232	.234	.220	.291	.325	.300	.367	.332	.280	.370	.267	.141	.320	.297	.279	.291	.310	.310	.323	.340	.329	.374	.311	.333	.262	.223	.207	.358	.475	....	8.940
	Mean temperature	70	72	72	73	84	84	80	78	78	82	80	71	64	64	66	70	73	74	76	76	80	84	83	84	82	82	82	82	88	87	..	77.4
	Wind movement	46	43	48	59	77	59	63	79	65	41	39	45	62	57	63	48	49	38	55	48	49	51	47	40	49	50	54	43	70	71	..	1,608

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

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TEMPERATURE

The monthly mean temperature for the State, 66 stations reporting, was 78.4°, or 5.0° above normal. The highest monthly mean was 81.8° at Kansas City, and the lowest monthly mean was 74.0° at Goodland. The highest temperature recorded was 107° at Dean on the 25th, and at Warsaw on the 30th, and the lowest was 38° at Goodland on the 15th. The greatest daily range was 48° at Doniphan on the 17th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 1.72 inches, or 3.07 inches less than normal. The greatest local monthly amount was 9.10 inches at Gorin, and the least local monthly amount was 0.00 inch at Owensville and St. Thomas. The greatest amount in any twenty-four hours was 9.01 inches at Gorin on the 28-29th. The average number of days with 0.01 inch or more of precipitation was 3.

MISCELLANEOUS PHENOMENA

Floods.—Local, on 29th.

Hail.—Light, 10th, 11th, 12th, 24th, 25th, 28th.

Halos.—Solar, 2d, 6th, 7th, 8th, 12th, 13th, 26th; lunar, 4th.

Thunderstorms.—Local, on 4th, 8th, 21st, 22d, 23d, 26th, 29th; more or less general, on the 12th, 24th, 25th, 27th, 28th, 30th.

Windstorms.—Local, on 11th, 24th, 25th, 26th, 28th with minor damage to trees, small outbuildings, etc.

Daily Temperatures for June, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	86	85	87	88	96	100	96	90	94	100	99	92	76	79	86	89	91	93	94	88	93	99	98	100	94	96	89	92	98	100	..	92.6
	Minimum ...	60	61	64	65	72	75	72	74	63	69	71	59	52	49	53	58	59	59	61	65	68	68	71	76	68	73	74	70	74	74	..	65.9
Columbia.	Maximum...	84	85	86	86	94	95	95	89	94	96	96	80	70	74	80	86	88	90	92	95	95	96	96	96	89	93	89	93	98	99	..	90.0
	Minimum ...	60	61	64	65	74	74	73	67	62	71	70	60	53	48	52	58	60	61	63	65	68	70	71	73	70	73	74	74	74	76	..	66.1
Fayette	Maximum...	78	87	87	87	95	99	95	90	95	100	100	77	75	80	84	88	90	92	93	96	97	99	98	98	89	97	89	90	100	101	..	91.5
	Minimum ...	55	57	61	60	72	73	71	71	63	65	66	68	51	45	47	53	51	55	57	60	62	65	67	73	67	69	72	70	71	75	..	63.1
Hannibal	Maximum...	84	85	86	88	96	99	95	90	93	98	100	82	72	73	83	89	91	93	93	96	95	94	96	91	93	97	94	85	98	99	..	90.9
	Minimum ...	58	66	66	68	73	76	73	71	62	71	70	64	54	49	51	61	64	60	64	67	70	69	72	77	73	73	74	74	71	80	..	67.4
Jefferson City $$	Maximum...	86	84	86	86	93	94	92	90	92	98	96	77	75	78	85	88	93	92	94	96	99	100	100	101	95	93	92	95	98	98	..	91.5
	Minimum ...	59	61	61	62	73	74	69	69	62	70	61	69	53	47	49	56	59	59	62	63	67	71	69	71	72	69	71	72	73	74	..	64.9
Kirksville.	Maximum...	86	87	86	88	97	98	95	91	93	99	101	89	78	79	85	89	91	93	94	97	95	96	91	91	95	99	95	85	92	97	..	91.7
	Minimum ...	60	60	63	65	71	73	68	68	63	69	72	63	48	47	53	53	63	62	64	69	68	68	68	73	68	71	72	67	69	72	..	65.0
Louisiana	Maximum...	85	87	87	90	96	98	98	94	92	98	99	85	73	76	83	90	91	92	95	98	98	96	95	92	94	97	95	90	100	102	..	92.2
	Minimum ...	52	64	60	65	70	72	70	71	55	62	70	66	52	42	44	58	62	55	64	62	67	62	70	70	66	70	68	66	76	82	..	63.8
Macon$$	Maximum...	86	87	88	87	98	100	96	90	94	100	100	77	75	79	86	90	92	94	95	98	95	96	97	94	94	100	90	84	98	99	..	92.0
	Minimum ...	58	60	65	66	71	74	70	73	65	69	72	67	50	47	54	60	60	64	64	68	69	68	66	74	69	71	73	69	69	72	..	65.9
Mexico $$	Maximum...	85	86	87	89	95	97	96	89	95	98	99	76	76	72	82	83	91	93	98	97	97	98	99	98	98	96	89	96	100	101	..	91.9
	Minimum ...	57	60	64	64	72	73	72	69	59	70	66	66	50	46	52	59	60	51	63	62	67	67	68	73	68	68	72	72	74	77	..	64.7
St. Louis	Maximum...	82	85	88	88	96	96	96	95	95	96	96	83	71	74	81	89	92	95	96	97	98	96	95	96	96	93	96	95	100	102	..	91.9
	Minimum ...	66	65	67	67	69	75	76	74	77	75	77	67	56	56	57	63	68	71	73	76	77	76	75	78	78	77	73	78	75	82	..	71.5
Unionville	Maximum...	86	87	88	90	100	102	96	90	96	100	101	96	88	84	90	95	94	97	98	100	98	100	97	98	96	103	93	85	95	98	..	94.7
	Minimum ...	55	58	60	55	70	70	70	60	67	72	60	45	40	50	62	61	60	61	66	66	65	70	72	60	70	72	70	70	70	66	..	63.1
Warrenton	Maximum...	84	85	87	88	95	95	95	91	96	97	93	92	73	75	84	90	92	94	96	97	97	96	98	97	94	94	90	94	100	101	..	92.0
	Minimum ...	61	60	62	64	71	75	72	71	64	73	73	65	51	51	53	60	63	66	68	70	71	71	71	74	74	74	71	72	75	79	..	67.5
Southeast Lowlands																																	
Campbell	Maximum...	87	89	89	91	95	96	104	96	96	99	98	94	75	75	78	90	94	96	102	101	102	101	104	102	103	101	96	101	100	99	..	95.1
	Minimum ...	51	52	55	56	65	66	66	67	64	68	64	65	58	49	44	46	50	55	60	63	64	69	67	65	70	70	66	68	72	73	..	61.6
Caruthersville	Maximum...	84	80	86	85	91	97	101	98	98	96	93	91	92	75	76	80	87	93	95	98	100	100	99	99	98	95	100	93	93	99	..	92.4
	Minimum ...	62	64	64	65	73	72	72	74	72	72	72	69	65	57	56	56	59	64	68	70	70	74	75	74	72	76	72	75	76	76	..	68.9
Doniphan	Maximum...	80	88	90	94	97	98	101	99	99	99	98	95	79	78	84	89	94	97	100	103	104	101	101	103	102	100	94	98	100	101	..	95.5
	Minimum ...	61	50	52	56	64	61	64	63	65	66	64	66	57	50	42	44	46	51	56	59	58	65	67	65	69	72	70	70	74	74	..	60.7
Jackson	Maximum...	83	87	89	90	95	96	100	98	97	99	97	92	77	76	83	89	93	97	98	101	102	99	99	100	99	97	97	98	101	101	..	94.3
	Minimum ...	57	55	56	60	69	77	67	72	70	70	63	69	59	46	43	49	52	59	59	60	64	71	63	69	74	72	69	72	75	88	..	64.3
Poplar Bluff	Maximum...	84	84	86	90	94	95	98	95	93	99	93	91	78	78	80	85	91	93	95	101	100	98	98	98	96	94	92	97	98	99	..	92.4
	Minimum ...	54	56	55	59	67	68	65	61	68	68	67	66	54	48	44	46	48	53	58	60	62	67	69	66	70	71	68	71	73	73	..	61.8
Sikeston	Maximum...	82	84	89	93	95	97	102	99	97	98	93	92	74	75	82	87	92	96	98	99	101	98	99	97	97	95	95	98	100	98	..	93.4
	Minimum ...	59	57	60	63	69	71	70	72	70	73	69	70	60	51	49	53	55	59	63	65	67	74	71	71	72	75	70	73	75	75	..	66.0
Cairo, Ill.	Maximum...	77	83	84	88	93	93	96	94	94	94	91	88	70	71	78	86	88	92	95	96	98	94	95	94	92	94	92	92	95	94	..	89.7
	Minimum ...	64	65	66	68	73	74	74	76	75	75	72	68	62	54	55	59	62	66	69	70	73	76	73	75	74	73	72	74	75	77	..	69.6
Ozark Plateau																																	
Arcadia $$	Maximum...	79	79	80	84	91	95	93	90	89	92	90	81	70	72	78	85	88	90	92	95	95	95	92	95	92	79	91	94	95	98	..	88.0
	Minimum ...	52	52	52	52	57	66	65	70	67	65	63	65	57	43	41	49	55	52	55	60	63	66	64	64	68	73	66	69	69	75	..	60.5
Birchtree	Maximum...	81	81	85	88	91	93	93	92	93	95	90	85	78	78	80	86	90	..	..	..	..	..	98	97	98	91	89	93	96	97	..	°89.5
	Minimum ...	56	54	54	57	60	67	70	67	78	67	70	56	48	46	44	47	48	..	..	..	..	..	68	65	66	68	68	70	73	71	..	°61.5
Eldon$$	Maximum...	85	83	86	87	94	94	95	90	96	99	96	85	74	79	86	89	93	92	95	96	98	98	99	102	96	92	93	97	100	102	..	92.4
	Minimum ...	56	59	59	62	70	74	71	71	63	65	69	52	54	46	48	52	60	60	61	63	66	70	70	70	72	71	71	71	72	77	..	64.2
Farmington	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Koshkonong	Maximum...	84	83	87	89	94	94	95	94	96	96	92	86	75	77	81	84	90	94	96	99	100	100	100	99	99	90	88	94	96	98	..	91.7
	Minimum...	61	68	60	63	69	69	69	69	74	70	70	68	59	52	52	56	58	64	69	68	75	72	71	69	71	70	68	72	72	75	..	66.8
Lebanon $$	Maximum...	85	86	89	91	95	95	94	96	97	97	74	79	83	86	94	96	98	99	100	100	103	105	105	87	95	101	102	105	..	94.6
	Minimum ...	52	54	56	58	68	72	66	63	61	63	65	64	49	40	46	51	54	55	57	61	64	65	62	66	70	72	65	65	72	72	..	60.9
Mountain Grove	Maximum...	83	79	81	85	91	94	89	90	90	94	92	85	75	79	81	86	87	90	93	97	99	101	97	96	97	91	84	94	98	98	..	89.9
	Minimum ...	56	57	59	61	68	70	66	65	65	67	62	67	53	43	50	55	58	62	65	63	68	73	66	69	70	66	63	70	73	73	..	63.4
Neosho	Maximum...	83	87	87	91	91	94	90	93	90	93	92	88	76	76	80	83	87	89	91	94	94	95	98	97	98	97	95	95	97	97	..	90.6
	Minimum ...	52	56	57	62	69	68	67	66	64	60	64	64	55	40	41	48	50	54	52	58	63	73	63	64	71	68	68	69	74	75	..	61.2
Rolla	Maximum...	79	81	83	86	92	92	92	90	91	92	91	89	72	73	78	84	87	91	91	94	95	95	94	96	94	92	86	95	98	98	..	89.0
	Minimum ...	57	60	58	64	71	72	68	69	66	70	68	70	55	49	48	60	61	58	64	65	67	73	68	69	72	75	69	72	76	75	..	65.6
Springfield	Maximum...	81	81	83	87	91	93	92	88	91	94	91	78	72	76	81	84	88	90	90	93	95	95	98	95	95	86	82	93	96	96	..	88.5
	Minimum ...	62	62	63	65	72	74	71	70	71	72	73	64	56	57	56	60	64	65	68	69	73	78	72	73	74	67	64	72	75	77	..	68.0
Southwest Plain																																	
Appleton City	Maximum...	83	83	84	88	92	94	91	91	93	95	95	86	74	80	84	85	88	81	93	96	98	97	101	100	97	91	91	97	100	102	..	91.0
	Minimum ...	60	60	63	65	71	73	68	71	65	68	72	59	53	52	53	55	55	62	62	65	67	70	71	75	74	73	70	74	77	77	..	66.0
Clinton	Maximum...	87	87	89	90	96	98	94	94	98	100	100	88	84	83	88	90	93	95	98	100	101	101	104	104	100	100	94	98	103	103	..	95.3
	Minimum ...	58	60	60	62	70	73	66	70	61	64	68	60	57	47	50	53	56	56	60	61	65	70	69	75	74	65	68	70	78	75	..	64.0
Harrisonville$$	Maximum...	85	86	87	89	94	98	93	91	95	98	96	78	76	81	88	89	91	93	95	98	97	99	98	100	96	95	91	96	104	104	..	92.7
	Minimum ...	60	59	61	64	68	70	67	70	64	68	68	59	50	50	52	54	55	58	60	63	64	70	70	75	70	70	72	68	70	74	..	64.1
Lamar$$	Maximum...	87	84	85	88	91	92	91	89	94	99	97	76	75	79	85	85	89	91	93	95	98	96	101	101	101	91	93	98	100	100	..	91.5
	Minimum ...	57	59	63	63	71	73	71	71	69	67	68	69	55	48	51	54	56	60	60	61	68	69	68	70	72	70	72	73	76	77	..	65.4
Lamonte	Maximum...	84	83	87	89	94	97	93	92	97	98	100	92	70	81	84	87	89	91	93	95	95	97	100	101	92	95	93	99	99	101	..	92.3
	Minimum ...	57	61	61	61	69	75	69	67	63	69	69	58	56	49	52	55	57	58	61	64	67	69	69	75	69	69	71	70	71	75	..	64.5
Marshall	Maximum...	90	93	95	96	95	98	95	89	94	97	97	94	78	75	83	87	89	91	92	95	94	96	96	99	97	95	91	93	100	100	..	92.8
	Minimum ...	68	69	70	74	73	76	74	72	65	72	72	59	51	50	55	60	60	64	78	69	69	71	72	79	68	68	74	70	77	77	..	68.5
Nevada	Maximum...	81	80	83	88	90	92	89	89	91	94	95	87	78	78	83	85	87	89	91	94	97	97	98	99	97	89	91	96	99	100	..	90.2
	Minimum ...	60	61	62	66	72	72	70	72	69	70	69	69	59	45	50	58	60	61	62	66	70	67	68	72	73	71	72	74	77	75	..	66.4
Warrensburg	Maximum...	86	85	87	89	94	97	93	92	97	99	99	92	68	81	87	89	91	93	95	98	99	100	101	102	96	95	90	94	100	103	..	93.1
	Minimum ...	62	62	62	65	69	74	68	71	65	70	72	57	44	45	54	58	58	61	64	65	66	69	72	75	72	71	68	69	76	75	..	65.3
Warsaw	Maximum...	87	87	88	89	96	97	95	93	97	100	102	88	77	84	90	92	95	98	99	100	100	105	104	105	100	100	97	99	106	107	..	95.9
	Minimum ...	55	59	60	63	70	75	70	71	59	66	67	69	50	47	48	55	55	55	57	60	65	67	67	75	74	72	70	71	72	76	..	64.0
Northwest Plateau																																	
Chillicothe $$	Maximum...	88	87	90	92	99	102	97	89	98	101	101	78	73	82	90	93	94	97	98	101	96	102	96	103	99	101	93	90	100	101	..	94.4
	Minimum ...	56	58	62	65	69	71	70	72	60	67	67	56	48	44	50	58	60	59	59	65	79	65	68	72	72	72	71	57	67	70	..	63.6
Grant City	Maximum...	78	78	88	87	97	101	91	91	93	97	101	85	76	70	84	90	89	92	93	96	92	95	86	101	97	96	90	81	87	87	..	89.6
	Minimum ...	58	61	61	58	62	68	70	68	64	59	66	61	43	51	55	52	58	62	64	66	73	70	70	74	77	78	70	66	69	67	..	64.4
Kansas City ..	Maximum...	85	85	88	92	97	99	94	90	95	99	96	82	72	80	88	89	91	93	94	97	92	96	97	99	94	94	90	95	102	102	..	92.2
	Minimum ...	67	68	69	72	75	80	76	75	72	77	79	59	54	58	63	66	69	71	71	75	76	75	78	79	72	76	68	69	75	77	..	71.4
Kidder	Maximum...	84	84	86	89	99	98	94	88	94	98	99	84	74	79	87	89	90	92	94	98	95	99	95	100	94	94	88	88	97	96	..	91.5
	Minimum ...	60	59	63	67	70	74	73	74	63	68	69	57	49	49	54	59	60	60	63	68	74	66	72	74	72	71	70	62	70	69	..	65.3
Lexington$$	Maximum...	89	84	89	91	98	102	97	93	98	103	103	81	78	85	90	92	94	95	97	99	96	103	104	102	96	96	92	95	102	105	..	95.0
	Minimum ...	63	63	65	68	73	77	74	74	69	71	73	59	52	51	58	63	63	63	65	70	70	72	73	77	68	72	73	69	70	75	..	67.8
Maryville	Maximum...	88	85	91	92	101	105	97	89	99	103	103	93	81	85	91	94	94	95	97	100	98	99	92	94	99	92	89	87	94	97	..	94.1
	Minimum ...	58	60	61	69	67	70	69	74	63	70	67	57	45	50	55	59	59	60	64	67	73	67	66	73	69	69	71	66	68	68	..	64.5
Oregon	Maximum...	89	87	92	94	100	104	96	91	99	105	104	91	80	86	90	94	94	95	98	99	96	102	94	96	98	97	89	92	98	99	..	95.0
	Minimum ...	62	66	65	70	70	73	70	72	70	74	71	56	48	48	60	64	63	66	68	70	73	65	75	73	73	72	71	65	73	68	..	67.1
St. Joseph..	Maximum...	86	83	89	92	98	102	95	89	96	100	100	81	76	81	88	90	91	92	95	97	92	99	96	97	94	96	88	91	97	97	..	92.3
	Minimum ...	65	66	67	72	74	76	73	74	72	75	72	57	53	49	62	64	67	68	70	73	74	69	78	74	75	73	67	67	71	74	..	69.0
Trenton	Maximum...	92	90	85	91	99	101	101	91	92	101	102	96	81	82	89	92	92	93	97	100	100	97	97	97	98	98	95	89	97	98	..	94.4
	Minimum ...	60	59	59	66	70	89	73	66	60	68	68	59	49	49	52	59	60	60	63	67	72	68	69	69	69	72	72	68	71	72	..	65.3

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. $$ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 7-19-33—900.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

ROSCOE NUNN, Meteorologist

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VOL. XXXVII ST. LOUIS, MO., JULY, 1933 No. 7

GENERAL SUMMARY

Although the average temperature for the State was the lowest July average since 1929, this was an unusually warm month. July was very warm in each of the three preceding years. There were no record-breaking high temperatures in July, 1933, but the heat was persistent, with only short intervals of relief. Very warm days, with maximum temperatures around 100°, occurred on the 1st, 2d, 21st, and 22d. The principal spells of comparatively cool weather were about the 16-18th and the 24-27th.

The rainfall averaged much below normal, but the month in several past years has had less, taking the State as a whole. The distribution of rainfall was extremely irregular, with some localities receiving more than normal amounts and others less than one-fourth the normal. About ten counties in the most southeastern part received as much or more than normal, and various localities in the southwest quarter received good rains. The northwestern quarter, which had been favored in June, had some very dry areas in July. The remainder of the State, except small areas, had very deficient amounts for the most part. St. Louis city had a record-breaking downpour of 3.68 inches in two hours on the 23d, but the surrounding country had only light showers.

The two-months period, June-July, had the second lowest average rainfall for the State of record (years 1888 to 1933, inclusive). The driest June-July period was in 1901, with a total rainfall of 4.15 inches, but in 1933 the total was only slightly greater, viz., 4.21 inches. Other very dry combinations of June and July were, 1930, with 4.80 inches, and 1918, with 4.91 inches.

River stages were fairly low at the beginning of the month and by the end were very low for the season.

The month was unusually free from damaging storms.

Wheat and oats were mostly threshed during the month. Wheat turned out good yields in the northwestern, north-central, and western counties, but was poor to fair elsewhere. Oats averaged a rather poor crop, with poorest yields in north-central, northeastern, and southeastern counties. Corn suffered greatly from heat and drought over most of the State, but was still good in some northwestern portions and some other small areas. Its condition varied greatly. In many central and southern counties early corn was in very poor condition at the end of July. Late plantings for the most part had a chance to make a fair crop, provided sufficient rain came in the next several weeks. Cotton was in good to very good condition, rainfall in the cotton counties having been ample. Pastures, hay crops, tomatoes, and gardens were poor except in spots favored by rains. The apple crop was fairly good in most sections.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 79.3°, or 1.7° above normal. The highest monthly mean was 82.1° at Lexington, and the lowest monthly mean was 76.0° at Grant City. The highest temperature recorded was 108° at Warsaw on the 2d, and the lowest was 49° at Elsberry on the 17th. The greatest daily range was 50° at Greenville on the 21st.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 2.49 inches, or 1.35 inches less than normal. The greatest local monthly amount was 7.26 inches at Sikeston, and the least local monthly amount was 0.12 inch at Milan. The greatest amount in any twenty-four hours was 3.79 inches at Springfield on the 8-9th. The average number of days with 0.01 inch or more of precipitation was 5.

(Continued on page 35)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.97	30.23	4	29.73	1	7.1	18	n.	14	76	46	47	85
Hannibal.....	29.98	30.32	4	29.78	2	8.0	22	w.	2	60	44	..	..
Kansas City...	29.95	30.23	24	29.68	1	7.9	31	nw.	7	68	43	45	79
St. Joseph	29.94	30.24	24	29.63	1	7.5	23	nw.	7	74	48	47	86
St. Louis....	29.97	30.26	4	29.77	2	9.9	28	s.	31	70	51	54	70
Springfield	29.96	30.18	24	29.78	1	8.5	24	sw.	8	76	57	56	73
Cairo, Ill.....	29.97	30.20	5	29.79	14	6.9	24	sw.	23	81	60	59	77
Keokuk, Iowa.	30.00	30.33	4	29.70	2	6.5	22	sw.	31	69	49	53	86

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	79.3	+ 1.7	111	50	3.31	−0.53	10.48	0.50	0	7	..	..	..
1889....	77.1	− 0.5	107	46	3.75	−0.09	6.65	1.02	0	8	..	..	..
1890....	79.6	+ 2.0	110	42	2.98	−0.86	6.85	0.20	0	5	..	..	..
1891....	72.7	− 4.9	103	45	3.55	−0.29	7.30	0.10	0	8	..	..	..
1892....	75.8	− 1.8	102	45	4.99	+1.15	9.05	2.06	0	9	12	10	9
1893....	77.3	− 0.3	103	51	4.91	+1.07	18.30	0.30	0	8	14	12	5
1894....	76.5	− 1.1	109	42	2.48	−1.36	8.15	0.15	0	5	18	10	3
1895....	74.4	− 3.2	106	45	6.79	+2.95	14.51	2.92	0	10	10	12	9
1896....	77.3	− 0.3	108	48	5.87	+2.03	14.98	1.51	0	9	15	11	5
1897....	78.7	+ 1.1	106	48	3.22	−0.62	9.97	0.60	0	6	19	9	3
1898....	76.1	− 1.5	104	42	5.58	+1.74	15.06	1.97	0	9	16	10	5
1899....	76.0	− 1.6	102	43	4.51	+0.67	9.39	1.69	0	9	15	11	5
1900....	76.9	− 0.7	102	46	4.11	+0.27	9.75	0.77	0	8	17	10	4
1901....	85.4	+ 7.8	116	46	2.02	−1.82	4.90	0.05	0	5	19	10	2
1902....	77.0	− 0.6	103	50	4.59	+0.75	10.77	0.15	0	8	17	11	3
1903....	77.4	− 0.2	102	51	3.22	−0.62	8.56	0.78	0	8	17	10	4
1904....	74.2	− 3.4	100	47	4.65	+0.81	10.81	1.63	0	10	15	11	5
1905....	73.4	− 4.2	101	48	7.45	+3.61	17.98	2.35	0	12	12	10	9
1906....	74.7	− 2.9	100	48	3.53	−0.31	8.18	0.40	0	8	17	9	5
1907....	78.4	+ 0.8	105	51	4.57	+0.73	12.37	0.71	0	8	19	8	4
1908....	76.5	− 1.1	101	49	3.23	−0.61	5.60	1.10	0	8	18	9	4
1909....	76.7	− 0.9	102	41	6.41	+2.57	15.25	2.14	0	10	17	8	6
1910....	76.8	− 0.8	109	45	6.70	+2.86	12.69	0.20	0	9	16	9	6
1911....	78.0	+ 0.4	113	43	3.95	+0.11	11.82	0.64	0	8	16	9	6
1912....	78.8	+ 1.2	104	52	2.74	−1.10	6.22	0.18	0	7	18	9	4
1913....	80.2	+ 2.6	108	47	3.13	−0.71	7.68	0.03	0	7	18	9	4
1914....	80.5	+ 2.9	109	45	2.67	−1.17	7.61	0.34	0	7	17	9	5
1915....	74.6	− 3.0	102	42	6.05	+2.21	20.22	0.58	0	12	14	9	8
1916....	81.6	+ 4.0	109	52	1.25	−2.59	5.99	T.	0	3	25	5	1
1917....	77.5	− 0.1	107	42	2.96	−0.88	7.73	0.13	0	8	20	8	3
1918....	77.1	− 0.5	110	41	1.76	−2.08	4.94	0.21	0	6	19	8	4
1919....	80.0	+ 2.4	105	50	2.33	−1.51	8.52	0.32	0	5	23	6	2
1920....	76.3	− 1.3	105	47	3.25	−0.59	9.78	0.73	0	7	18	8	5
1921....	80.3	+ 2.7	109	46	2.32	−1.52	5.60	0.41	0	5	20	8	3
1922....	76.8	− 0.8	103	46	5.85	+2.01	17.68	1.92	0	8	17	9	5
1923....	78.2	+ 0.6	105	50	3.07	−0.77	10.29	0.24	0	6	18	8	5
1924....	73.3	− 4.3	103	40	5.39	+1.55	14.52	1.70	0	10	15	11	5
1925....	77.9	+ 0.3	106	46	2.71	−1.13	8.60	0.57	0	7	16	10	5
1926....	78.0	+ 0.4	108	40	3.14	−0.70	8.65	0.50	0	7	17	9	5
1927....	75.8	− 0.8	101	48	4.13	+0.29	10.95	0.88	0	8	18	9	4
1928....	77.2	− 0.4	102	48	2.97	−0.87	7.02	0.34	0	7	17	10	4
1929....	77.8	+ 0.2	104	50	4.12	+0.28	11.35	0.55	0	8	16	10	5
1930....	81.2	+ 3.6	113	42	0.97	−2.87	3.42	T.	0	3	22	7	2
1931....	80.3	+ 2.7	110	49	3.23	−0.61	8.66	0.43	0	7	18	9	4
1932....	79.8	+ 2.2	109	48	3.67	−0.17	8.07	0.52	0	7	19	8	4
1933....	79.3	+ 1.7	108	49	2.49	−1.35	7.26	0.12	0	5	18	9	4
Period.	**77.6**	.....	**116**	**40**	**3.84**	.....	**20.22**	**T.**	**0**	**5**	**17**	**9**	**5**

Climatological Data for July, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	81.0	+ 4.9	102	22	59	16	33	0.48	−3.87	0.23	0	3	20	8	3	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	79.8	+ 3.4	101	22	57	26	33	1.18	−2.22	0.47	0	5	25	3	3	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	79.7	+ 2.8	100	1	58	17	31	1.02	−2.47	0.34	0	6	19	11	1	s.	U. S. Weather Bureau
Downing	Schuyler	876	12	76.6	+ 0.2	95	30	55	5†	34	1.57	−2.92	0.66	0	4	22	6	3	s.	James Taylor
Elsberry	Lincoln	449	2	78.6	.....	102	2	49	17	40	1.81	.....	0.87	0	5	12	11	8	se.	Ray E. Mills
Fayette	Howard	661	53	79.2	+ 2.0	102	22	53	17	39	0.83	−2.77	0.67	0	3	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	79.1	+ 1.4	102	2	53	17	38	1.96	−1.89	0.52	0	6	25	4	2	sw.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	1.50	−2.41	0.74	0	5	18	8	5	ne.	J. W. Pulliam
Hannibal	Marion	534	41	79.2	+ 2.4	100	1	57	17	32	1.30	−1.79	0.82	0	4	15	11	5	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	43	79.6	+ 1.5	101	2	55	17	37	3.02	−0.43	1.65	0	5	14	15	2	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	76.6	+ 0.6	97	1	56	26	33	2.60	−1.47	1.29	0	4	23	4	4	s.	Prof. J. S. Stokes
Louisiana	Pike	469	39	79.8	+ 3.4	104	1	50	17	40	2.11	−1.13	1.86	0	2	17	13	1	s.	Stark Bro's Nurseries
Macon	Macon	875	34	78.6	+ 1.4	99	1†	56	26	32	2.14	−1.23	0.80	0	4	24	4	3	e.	W. C. Brown
Mexico	Audrain	800	44	79.1	+ 1.8	104	1†	51	17	35	1.83	−1.77	1.20	0	5	25	2	4	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	2.03	−1.70	1.16	0	3	16	9	6	ne.	J. S. Conway
St. Charles	St. Charles	456	45	81.5[b]	+ 3.4	103	1†	60	17	36	0.95	−2.17	0.65	0	3	..	..	..	s.	L. C. Saeger
St. Louis	**St. Louis City**	568	60	81.2	+ 2.4	103	2	65	4	29	4.63	+1.65	3.72	0	4	18	8	5	sw.	**Section Center**
St. Louis University	St. Louis City	578	21	80.9	+ 0.8	102	2	67	5†	27	3.31	+0.84	1.68	0	5	21	6	4	sw.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	1.55	−2.33	0.97	0	4	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	35	77.8	0.0	96	1	56	26	30	2.35	−1.92	1.45	0	4	15	15	1	e.	Frank Hall
Unionville	Putnam	1,062	40	78.0	+ 1.5	98	1†	53	25†	42	1.45	−2.61	1.20	0	3	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	81.0	+ 3.2	103	2	61	5†	30	1.50	−1.76	1.04	0	4	7	21	3	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	78.4	+ 1.5	96	1	62	25	25	1.61	−1.80	1.14	0	6	15	11	5	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**79.3**	**+ 2.0**	**104**	**1†**	**49**	**17**	**42**	**1.72**	**−1.67**	**3.72**	**0**	**4**	**18**	**9**	**4**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	79.3	.....	104	2	55	18	44	5.13	.....	2.10	0	11	17	8	6	s.	Jeff. King
Caruthersville	Pemiscot	265	37	81.9	+ 0.6	104	2	67	4†	26	4.84	+1.45	2.00	0	6	17	8	6	.....	Sam Smith
Doniphan	Ripley	344	29	79.6	+ 1.0	104	2	56	18	40	2.42	−1.69	1.42	0	6	19	7	5	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	80.0	+ 2.4	105	2	57	17	35	4.40	+0.92	3.35	0	6	14	6	11	s.	John G. Putz
Marble Hill	Bollinger	470	38	79.4	+ 1.6	104	2	55	17	40	3.56	−0.84	2.08	0	6	18	9	4	w.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	7.20	+4.18	2.39	0	8	21	5	5	s.	John A. Spence
Poplar Bluff	Butler	339	28	79.0	− 0.2	103	2	58	7†	36	1.70	−1.78	0.72	0	6	24	3	4	s.	J. H. Wolpers
Sikeston	Scott	318	26	80.0	+ 1.4	102	2	61	17†	30	7.26	+2.89	2.45	0	10	19	6	6	ne.	John A. LaFont
Cairo, Ill.	Alexander, Ill	358	61	79.4	− 0.2	100	2	65	18	22	7.49	+4.42	2.45	0	9	12	7	12	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**79.8**	**+ 0.9**	**105**	**2**	**55**	**17†**	**44**	**4.48**	**+1.00**	**3.35**	**0**	**8**	**18**	**7**	**6**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	76.1	+ 0.3	101	2	53	17	32	3.97	−0.17	1.67	0	9	10	13	8	s.	Arcadia College
Birchtree (near)	Shannon	1,000	38	78.3	+ 1.7	102	2	59	19	34	1.77	−2.09	0.48	0	6	20	5	6	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	1.99	.....	1.89	0	3	14	15	2	e.	C. M. McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	2.58	.....	1.33	0	4	19	7	5	se.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	29	79.6	+ 2.3	106	2	54	16	42	3.21	−0.98	1.10	0	4	16	10	5	se.	H. E. Dean
Eldon	Miller	934	38	80.6	+ 3.4	106	2	59	17	35	1.98	−1.56	1.34	0	5	8	19	4	s.	E. H. Shepherd
Farmington	St. Francois	918	22	78.2	+ 1.9	100	21	55	17	39	5.20	+1.76	2.10	0	8	22	5	4	s.	H. O. Miller
Goodland	Iron	1,000	40	77.4	+ 1.8	105	31	51	17	43	4.69	+0.81	2.15	0	8	19	10	2	s.	F. M. Adams
Greenville	Wayne	381	24	77.1	− 0.3	103	2	51	21	50	2.21	−1.56	0.73	0	5	21	6	4	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	5.10	+1.10	2.20	0	5	20	7	4	se.	A. W. Madison
Koshkonong	Oregon	958	32	79.8	+ 1.0	102	2	64	17	31	4.44	+0.77	2.09	0	7	18	4	9	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	79.2	+ 2.3	105	2	52	17	41	3.27	−0.70	2.22	0	3	28	2	1	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	80.6	+ 3.0	104	2	60	16†	32	2.53	−2.18	1.23	0	4	14	16	1	se.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	78.4	+ 2.0	102	2	59	17	32	3.11	−0.72	1.03	0	7	13	15	3	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	78.8	+ 1.3	100	2	55	16	35	2.99	−1.32	1.92	0	5	11	19	1	ne.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	78.9	+ 1.2	101	2	58	17	29	2.26	−1.62	1.15	0	6	7	11	13	se.	F. H. Lane
Salem	Dent	1,173	29	77.8	+ 1.0	104	2	54	17	33	1.75	−1.61	1.14	0	6	13	12	6	s.	E. E. Martin
Seligman	Barry	1,542	32	80.2[a]	+ 3.5	99	2†	63	6†	29	2.63	−1.68	1.07	0	7	20[a]	7[a]	3[b]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	27	76.9	+ 1.4	99	2	56	5	33	4.67	+0.43	2.22	0	8	13	14	4	se.	A. L. Hailey
Springfield	Greene	1,324	45	78.3	+ 1.5	100	2	64	18	24	4.17	−0.04	3.79	0	6	13	15	3	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	80.8	.....	106	2	56	26†	34	1.13	.....	0.45	0	4	18	8	5	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**78.7**	**+ 1.7**	**106**	**2**	**51**	**17†**	**50**	**3.01**	**−0.59**	**3.79**	**0**	**6**	**16**	**11**	**4**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	80.1	+ 1.9	107	2	61	17	31	2.32	−2.19	1.55	0	6	11	19	1	sw.	W. G. Bigelow
Clinton	Henry	765	40	81.6	+ 3.3	106	2	60	27	35	1.96	−1.87	1.05	0	6	18	11	2	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	80.1	+ 2.4	104	2	59	26†	36	1.69	−2.07	0.58	0	5	15	13	3	s.	John H. Patterson
Lamar	Barton	980	45	80.2	+ 1.8	103	2	63	17†	30	3.57	−0.61	2.75	0	4	20	10	1	ne.	Jesse A. Mann
Lamonte	Pettis	867	32	80.8	+ 1.7	103	22	58	17	36	1.56	−2.39	0.95	0	3	28	1	2	se.	J. E. Wheeler
Marshall	Saline	779	46	81.0	+ 3.5	101	1	60	26	36	0.64	−3.20	0.38	0	3	20	11	0	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	79.6	0.0	105	2	60	17†	30	3.12	−0.82	1.60	0	3	19	5	7	e.	George A. Kaupp
Warrensburg	Johnson	878	46	80.3	+ 1.5	103	1†	59	26†	33	1.46	−2.39	0.83	0	5	20	8	3	ne.	E. A. Markey
Warsaw	Benton	687	32	81.7	+ 3.4	108	2	58	17†	38	3.24	−0.85	2.23	0	4	21	7	3	e.	Everett Martin
Division means	**and extremes**	.....	..	**80.6**	**+ 2.2**	**108**	**2**	**58**	**17†**	**38**	**2.03**	**−1.96**	**2.75**	**0**	**4**	**19**	**9**	**3**	**e.**	
Northwest Plateau																				
Bethany	Harrison	916	38	77.4	+ 1.1	97	1	52	26	39	2.53	−1.70	2.25	0	3	26	3	2	se.	A. S. Cumming
Chillicothe	Livingston	779	24	78.8	− 0.1	102	1†	55	5†	42	1.43	−2.73	0.96	0	3	23	6	2	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	78.8	+ 2.2	99	1	59	25†	32	2.18	−2.15	1.91	0	4	20	7	4	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	78.4[a]	+ 2.3	99	1	53	26	36	2.22	−1.66	2.10	0	3	23	7	1	s.	Fred L. Stiff
Grant City	Worth	1,134	29	76.0	− 0.2	99	1	55	27	32	3.32	−1.51	1.80	0	5	8	20	3	se.	Howard Rybolt
Kansas City	Jackson	963	44	80.9	+ 2.8	103	1	62	26	24	1.13	−3.00	0.93	0	3	15	12	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	78.3	+ 1.7	98	1	57	26	30	3.21	−0.71	2.27	0	3	16	13	2	s.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	1.61	−2.24	1.23	0	2	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	82.1	+ 4.7	104	22	60	26†	34	0.84	−3.84	0.30	0	5	22	9	0	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	78.8	+ 3.1	99	1†	55	26	37	2.33	−2.80	1.72	0	5	21	5	5	ne.	J. R. Brink
Oregon	Holt	1,048	77	80.4	+ 4.8	101	1	57	26	36	3.36	−0.90	2.84	0	4	26	5	0	se.	Mina Wright
St. Joseph	Buchanan	987	23	80.0	+ 1.1	102	1	59	26	31	2.59	−0.54	1.80	0	5	20	9	2	se.	U. S. Weather Bureau
Tarkio	Atchison	916	30	76.8	0.0	97	1	55	25	36	2.42	−1.32	1.76	0	5	15	13	3	se.	Albert Volker
Trenton	Grundy	822	37	79.0	+ 2.2	99	1	57	17	34	1.69	−2.37	1.47	0	3	22	8	1	s.	W. H. Estes
Division means	**and extremes**	.....	..	**78.9**	**+ 2.0**	**104**	**22**	**52**	**26**	**42**	**2.16**	**−2.00**	**2.84**	**0**	**4**	**20**	**9**	**2**	**se.**	
State means	**and extremes**	.....	..	**79.3**	**+ 1.7**	**108**	**2**	**49**	**17**	**50**	**2.49**	**−1.35**	**3.79**	**0**	**5**	**18**	**9**	**4**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson.

Daily Precipitation for July, 1933

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi								.38	.70															1.29								2.37
Boonville	Missouri								T.	.04	.20								.55														0.79
Bowling Green	Mississippi										.88								.04						.25								1.17
Brunswick	Grand								.23	.10															.15								0.48
Canton	Mississippi							.23	.56																.62							.43	1.84
Clifton Hill	Chariton								.14							.10			.05					.42								.47	1.18
Columbia***	Missouri								.34	T.					.07				.30	.02				.25								.04	1.02
Downing	Mississippi							.20	.32															.66								.39	1.57
Edina	do								.12	.16									T.						.31								0.59
Elsberry	do								.78	.02									T.			T.		.87	.12						.02		1.81
Farber	do									3.52																							3.52
Fayette	Missouri									.04									.12													.67	0.83
Fulton	do							.02	.52		T.					.44			.43	.19					.36								1.96
Gorin	Mississippi							.05	.18	.01														.52								.74	1.50
Hannibal***	do							T.	.82					T.					.02					.43								.03	1.30
Hermann	Missouri									.61						.31							T.		.79								1.71
Jefferson City	do									.30	.04								.08	.95					1.65								3.02
Kahoka	Mississippi								.20	T.															.52								0.72
Kirksville	do								.70										.11					1.29								.50	2.60
LaBelle	do								.07	.30															1.00								1.37
Linneus	Grand							.80	.22						.04			.04						.10								.61	1.81
Louisiana	Mississippi								1.86															.25									2.11
Lucerne	Grand								.72	.04																						.59	1.35
Macon	Chariton								.62	.70										.02					.80								2.14
Memphis	Mississippi								.28	.35															1.70								2.33
Mexico	do								.26	.14						.03			.20						1.20								1.83
Milan	Grand								T.										.12														0.12
Monroe City	Mississippi						T.		1.16										T.					.72								.15	2.03
New London	do									1.52						.04										.29						.03	1.88
Palmyra	do								.03	.76						.02			T.					.77									1.58
Paris	do									.95															.09								1.04
Perry	do									.37									T.						.40								0.77
Philadelphia	do									1.30															1.65								2.95
St. Charles	Missouri									.65					.05									.25									0.95
St. Louis***	Mississippi								.41	T.					.45	.05			T.					3.72	T.	T.	T.						4.63
St. Louis University*	do								.72	T.					.74	.17			T.					1.65	.03	T.							3.31
Shelbina	do								.17	.97									.09	T.					.32								1.55
Steffenville	do							T.	.80										.05			T.		1.45								.05	2.35
Troy	do								T	.16						.04			T.	T.					.37								0.57
Union	Meramec								.06	1.88						.47								.43	.84								3.68
Unionville	Chariton							.40	.80																							.25	1.45
Valley Park	Meramec								T.	.58	.12					.80									.22								1.72
Warrenton	Mississippi								.17	.16						T.			T.			.13			1.04								1.50
West Ely	do								1 02							.04								.48							T.	T.	1.54
Winfield	do									.70															.30								1.00
Keokuk, Ia.***	do		T					.02	1.14	.01	T.				.04									.39							.01	1.61
Southeast Lowlands																																	
Bragg City	St. Francis																								.70	.75	1.96		.23				3.64
Campbell	do	.10		.50						.15						.03								.07	2.10	.96	.44	.60	.07		.11		5.13
Cape Girardeau	Mississippi									1.55	1.17					T.									.24	1.05	.18	.02	.10		T.		4.31
Caruthersville	do									.52	.07															.80	1.40	2.00	.05				4.84
Dexter	St. Francis									.30	.40					.60											1.36		.50				3.16
Doniphan	Black									.23						.03									.09	1.42	.20	.45			T.		2.42
Fisk	St. Francis									.14	.23					.51									.04	.57	.17	1.43					3.09
Jackson	Mississippi								.05	3.35						.05									.65		.16	.14					4.40
Marble Hill	do									2.08						.21									.55		.09	.41	.22				3.56
Morehouse	do			.12						1.59		T				1.05									.32	2.39	.12	1.26	.35			T.	7.20
New Madrid	do	.33		.05						.55	.17					.38										.75	.62	2.00	.75				5.60
Parma	St. Francis															.88										.63	.57	1.20	.10				3.38
Poplar Bluff	Black										.18					.19										.21	.15	.25	.72				1.70
Sikeston	Mississippi		.10						1.25	.58					.06										1.40	2.45	.70	.70	.01	.01			7.26
Cairo, Ill.***	do									2.41	.01					.02								.14	.80	2.27	.25	1.48		T.	.11		7.49
Ozark Plateau																																	
Arcadia	St. Francis	T.	T.							.44	.24					.19									1.67	.95	.34	.06	.05	.03			3.97
Birchtree (near)	Black								.20	.40															.09	.40		.48	.20				1.77
Buffalo	Osage									1.58	.31									.10												T.	1.99
Caplinger Mills	do									1.33							T.		1.03					.09								.13	2.58
Dean	Neosho			T.						.95	T.			T.					1.10					.14	1.02			T.	T.		T.	T.	3.21
Eldon	Missouri									.03	.30								.13	.18					1.34								1.98
Farmington	St. Francis		.18						1.27	2.10					.16									T.	.80	.47	T.	.17	.05				5.20
Fredericktown	do			.12						1.14	1.61					.14								2.01		.32		.12	.04				5.50
Galena	White									1.12	.31									.54					.97	1.47							4.41
Goodland	Black			.04						1.80						.20									2.15	.15	.25	.05	.05				4.69
Greenville	St. Francis								.73							.65								T.	.46	T.	.15	.22	T.				2.21
Hailey	White									1.50									1.20					.10	2.20				.10			T.	5.10
Koshkonong	Black								.13	.39															2.09	.07	.29	1.37	.10				4.44
Lakeside	Osage									.02	.30						.01		.12	.24					.07							.05	0.81
Lebanon	do									2.22	.81									.24													3.27
Leeper	Black									.12	.42					.44									.77	.03		.20	.57				2.55
Lockwood	Osage								.20	1.03									1.01					.29							T.	T.	2.53
Mountain Grove	White								.20	83						T.			.74						.75	.10	T.	.05	.44	T.			3.11
Neosho	Neosho									1.92	.09			T.					.38	.13					.47						T.	T.	2.99
Owensville	Gasconade									.70										.45					.40								1.55
Rolla	Meramec			.02						.67	.35					T.				1.15				.02	.05								2.26
St. Thomas (near)	Osage										.25								.12	.75					1.15								2.27
Salem	Meramec								.74	.40						.40			.03			.09			.09								1.75
Seligman	Neosho			.13						1.07									.27	.25				.03	.75							.13	2.63
Seymour (near)	White								1.70	.52	.21					.14			.27						1.76	.06		.01					4.67
Springfield***	do								2.60	1.19					.02				.22					T.	.02							.12	4.17
Stover	Missouri									.43	.06									.36					.09								0.94
Versailles	Osage								T.	.45									.29	.01				.38								T.	1.13
Williamsville	Black									.06	.19					.71									1.03		.09	.35	1.66				4.09
Willow Sprgs. (near)	White									.12	.43									.32					T		.47	.22	.13	.74			2.43
Southwest Plain																																	
Appleton City	Osage								.04	.45							.02		1.55	T.				.24							T.	.02	2.32
Clinton	do								.08	.53						.02			1.05					.03								.25	1.96
Concordia	Missouri										.30																					.45	0.75
Harrisonville	Osage								.09	.30									.22						.58							.50	1.69

Continued on next page

Daily Precipitation for July, 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin‖‖	Neosho								1.81	.75	.12			.10					.54				T.	.18	.20						T.	.61	3.81
Lamar‖‖	do									2.75									.20	.45				T.								.17	3.57
Lamonte	Missouri								.02	.59														.16								.95	1.56
Marshall	do								.10																							.38	0.64
Nevada	Osage								.20	1.32									1.60														3.12
Warrensburg	Missouri								.08	.83									.09					.82								.14	1.46
Warsaw	Osage								T.	2.23							T.		.12	.66					.23								3.24
Waverly ‖	Missouri								.06	.17															T.								0.23
Northwest Plateau																																	
Bethany	Grand								2.25										.12													.16	2.53
Chillicothe ‖‖	do								.96	.29			T.											.18							T.	1.43
Conception	Missouri							T.	1.87	.04			T.		T.				.07													.20	2.18
Edgerton	do								2.10										.04	T.												.08	2.22
Gallatin ‖	Grand								1.50																								1.50
Grant City	do	T.						.20	1.80				.11		T.			T.	.30													.91	3.32
Kansas City***	Missouri			T.				T.	.93	.01			T.				T.	T.	T.												T.	.19	1.13
Kidder	Grand							2.27				T.																			.45	.49	3.21
King City	Missouri								1.23										T.					T.								.38	1.61
Lexington ‖	do								.23	.30	.21																					.09	0.84
Maryville‖‖	do								1.72	.02			.26						.12					.01								.21	2.33
Oregon	do								2.84				.05						.10													.37	3.36
St. Joseph***	do							.86	.94				T.				T.	.05	.01					T.								.73	2.59
Tarkio	do							1.72	.04				.10					.54														.02	2.42
Trenton	Grand							T.	1.47			T.			T.				.02													.20	1.69

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for July, 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.418	.452	.416	.363	.358	.344	.409	.347	.156	.127	.352	.301	.239	.273	.354	.389	.270	.377	.008	.272	.299	.321	.428	.263	.219	.323	.245	.334	.277	.198	.228	9.360
	Mean temperature	86	88	84	78	76	78	82	82	81	83	84	82	80	81	76	75	73	68	76	78	80	82	81	80	78	74	75	79	82	80	82	79.5
	Wind movement	63	79	86	84	58	54	75	62	56	48	55	42	38	40	65	64	43	68	36	51	43	38	77	60	69	63	59	64	57	78	65	1,840

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April, 1932, report.

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MISCELLANEOUS PHENOMENA

Floods.—None.

Fogs.—Dense, 19th.

Hail.—Moderate, on 14th at Guthrie, Callaway County.

Halos.—Solar, 3d, 17th.

Thunderstorms.—Local, 2d, 7th, 9th, 11th, 12th, 14th, 15th, 18th, 21st, 24th, 25th, 31st; more or less general, on 8th, 23d.

Windstorms.—Local, on 14th at Guthrie, Callaway County, where trees and outbuildings were blown down. Amount of damage not estimated.

During a severe electrical storm at Morehouse the night of the 14th, lightning struck the Himmelberger-Harrison Mfg. Co. plant, causing fire damage estimated at $25,000.

ERRATA

May, 1932, page 24, monthly evaporation for Lakeside should be 7.620.
June, 1933, page 27, maximum wind velocity for Springfield should be 29; page 28 mean temperature and departure for Springfield should be 78.2 and + 5.7, respectively

Daily Temperatures for July, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	100	97	88	88	93	96	93	88	90	94	96	94	97	95	88	87	93	87	92	95	99	102	92	89	88	93	94	95	95	90	90	92.8
	Minimum ...	87	80	68	63	62	67	73	72	74	73	74	75	71	68	63	59	60	70	63	66	69	72	76	69	63	60	62	65	73	73	74	69.2
Columbia.	Maximum...	100	99	88	86	90	91	94	84	88	92	95	93	93	95	88	85	89	76	90	95	96	99	93	84	85	87	89	91	94	91	95	90.8
	Minimum ...	76	73	68	64	63	70	73	74	74	72	74	72	69	68	63	64	58	64	61	66	72	73	71	67	66	62	63	68	72	74	72	68.6
Fayette	Maximum...	101	101	89	90	92	94	94	83	91	95	98	96	97	98	92	89	92	72	92	97	100	102	95	90	88	90	93	94	94	91	90	92.9
	Minimum ...	74	76	69	62	56	62	67	72	72	71	70	70	64	62	61	62	53	54	61	61	64	68	73	69	64	59	60	61	68	72	71	65.4
Hannibal	Maximum...	100	93	85	85	88	92	94	82	86	90	92	92	91	94	83	81	89	79	92	96	95	97	94	82	83	85	89	90	94	92	95	89.7
	Minimum ...	78	72	66	67	63	68	75	71	74	73	74	72	68	66	65	63	57	67	64	66	68	73	73	70	64	64	62	66	74	77	74	68.8
Jefferson City §§	Maximum...	99	101	88	87	93	91	96	91	91	94	97	96	96	97	93	88	92	70	89	93	98	97	94	84	87	86	87	91	90	92	95	91.7
	Minimum ...	76	74	70	64	62	69	71	73	73	72	72	71	68	67	62	64	55	62	60	64	66	72	74	70	66	61	62	65	69	72	71	67.6
Kirksville.	Maximum...	97	95	80	80	87	90	84	84	83	86	91	93	91	92	84	84	86	83	90	93	94	91	87	81	80	83	84	92	92	90	85	87.5
	Minimum ...	74	73	63	61	59	57	71	70	70	69	70	70	69	67	62	60	60	63	63	66	70	72	70	66	61	56	60	62	65	70	69	65.7
Louisiana	Maximum...	104	101	98	88	90	92	94	93	87	90	94	93	94	100	96	90	87	80	90	95	96	100	100	81	88	90	95	98	99	98	100	93.6
	Minimum ...	75	80	65	65	60	65	73	73	70	72	67	66	65	60	61	59	50	62	58	60	65	70	72	70	64	60	65	60	70	70	73	66.0
Macon §§	Maximum...	99	95	93	82	89	92	91	80	86	90	90	93	91	93	87	85	90	83	93	97	97	99	92	84	83	85	87	94	95	94	91	90.3
	Minimum ...	75	79	64	60	58	65	71	72	70	70	71	70	68	65	63	61	61	63	61	66	72	72	78	66	58	56	59	62	71	74	73	66.9
Mexico §§	Maximum...	104	102	90	88	93	95	98	82	88	94	95	96	96	99	93	86	82	76	93	98	101	104	99	85	86	88	85	84	90	94	97	92.3
	Minimum ...	74	77	65	60	60	68	71	71	70	70	60	69	65	68	62	60	51	65	60	65	67	72	74	61	63	56	59	64	70	72	73	65.9
St. Louis	Maximum...	102	103	88	84	90	93	94	84	88	91	91	93	93	97	91	84	88	79	91	97	98	98	96	84	77	81	84	87	89	92	94	90.4
	Minimum ...	81	74	67	65	67	74	74	73	73	73	75	74	75	69	69	70	68	71	68	75	75	77	73	72	68	68	67	72	73	75	77	72.0
Unionville	Maximum...	98	95	86	84	92	94	90	84	88	95	95	97	96	93	88	88	87	86	96	98	95	97	94	90	87	95	84	98	98	95	90	92.0
	Minimum ...	67	70	67	56	54	61	68	70	66	68	70	70	65	65	57	55	57	65	63	64	68	70	70	62	53	53	57	60	70	70	71	63.9
Warrenton	Maximum...	101	103	95	87	91	93	96	94	86	91	94	96	95	98	94	87	90	85	91	99	101	102	100	85	83	84	89	91	92	93	97	93.0
	Minimum ...	76	78	66	64	61	71	70	74	72	72	72	69	69	68	66	64	62	67	61	70	72	72	72	70	66	62	63	68	71	72	75	68.9
Southeast Lowlands																																	
Campbell	Maximum...	101	104	94	91	93	96	100	99	82	95	99	95	98	99	92	91	92	89	100	103	102	101	92	90	77	73	85	90	85	92	92	93.3
	Minimum ...	74	73	73	62	64	59	56	68	70	71	67	62	60	64	62	63	60	55	61	62	63	66	69	68	68	64	64	68	68	69	70	65.3
Caruthersville §§	Maximum...	101	104	98	90	91	94	94	97	93	91	93	90	94	95	90	89	90	87	94	95	97	99	92	93	77	74	85	87	89	93	95	92.0
	Minimum ...	77	78	78	67	71	68	68	74	73	75	73	70	70	73	73	70	68	67	70	70	72	75	74	75	71	69	68	70	72	74	73	71.8
Doniphan	Maximum...	102	104	94	87	91	94	98	101	90	95	91	95	97	91	89	92	95	86	90	100	96	100	97	90	79	83	80	88	90	84	94	92.4
	Minimum ...	73	74	78	69	64	64	58	69	75	71	68	64	62	61	65	63	57	56	62	60	64	66	70	74	71	68	67	71	70	70	70	66.9
Jackson	Maximum...	102	105	103	89	92	96	95	95	85	90	91	91	93	94	92	89	89	85	93	96	98	98	96	91	77	75	82	86	85	92	93	91.5
	Minimum ...	76	77	77	65	65	64	60	74	74	75	73	65	64	68	69	65	57	60	62	65	67	69	72	73	71	67	68	70	71	72	72	68.6
Poplar Bluff	Maximum...	100	103	93	89	90	92	94	93	89	94	95	93	94	96	90	90	89	85	94	97	98	97	93	89	76	75	77	86	87	89	93	91.0
	Minimum ...	74	76	73	63	66	62	58	69	73	71	69	64	63	63	69	63	59	58	62	62	65	68	71	72	70	67	66	69	70	71	70	67.0
Sikeston	Maximum...	101	102	97	87	90	92	95	96	90	89	92	89	91	92	90	87	87	86	92	97	98	97	98	97	76	75	80	86	88	91	93	90.5
	Minimum ...	76	76	77	63	68	65	65	73	73	73	73	66	65	70	69	65	61	61	65	68	70	73	73	74	70	68	68	70	72	72	73	69.5
Cairo, Ill.	Maximum...	98	100	88	84	87	90	90	92	83	86	88	87	89	91	87	85	85	83	90	93	95	96	89	82	74	72	77	84	85	88	90	87.4
	Minimum ...	77	78	74	66	71	71	69	74	72	75	72	69	70	72	71	70	65	65	70	71	74	75	74	72	70	67	68	70	73	74	73	71.4
Ozark Plateau																																	
Arcadia §§	Maximum...	97	101	87	84	87	90	91	92	85	86	90	87	89	91	86	84	85	77	87	93	94	95	92	76	74	75	71	79	83	88	89	86.6
	Minimum ...	74	75	73	61	60	59	60	73	72	69	68	62	61	59	65	59	53	57	58	61	65	65	68	71	71	71	67	67	70	71	69	65.6
Birchtree	Maximum...	97	102	90	86	89	91	94	91	81	90	95	92	94	96	90	88	91	88	92	94	98	98	93	87	82	75	73	85	85	90	92	90.0
	Minimum ...	71	71	75	66	64	62	64	71	71	71	68	66	64	64	66	62	61	62	59	60	64	67	63	72	70	68	66	66	69	71	71	66.6
Eldon §§	Maximum...	102	106	91	90	94	94	97	88	91	96	98	96	97	100	94	90	93	71	95	96	100	101	95	86	87	86	98	91	93	93	95	93.7
	Minimum ...	74	75	73	66	61	64	66	71	74	72	70	70	69	69	62	63	59	63	60	63	70	70	73	71	67	61	63	65	67	67	73	67.5
Farmington	Maximum...	97	99	90	88	93	94	94	95	90	95	96	98	91	99	92	98	93	86	97	95	100	98	93	87	80	83	83	85	88	92	93	92.3
	Minimum ...	74	75	69	58	58	60	66	70	60	62	69	67	63	65	65	60	55	59	67	59	61	60	60	69	65	65	60	63	65	70	70	64.2
Koshkonong	Maximum...	98	102	90	88	89	96	94	95	78	92	95	94	95	96	89	89	92	79	93	97	100	99	91	83	79	75	73	82	84	88	90	89.8
	Minimum ...	75	74	75	67	66	66	69	73	73	72	72	70	68	69	69	66	64	67	67	66	72	73	72	69	71	68	65	69	69	71	73	69.7
Lebanon §§	Maximum...	104	105	95	96	97	95	93	90	88	93	98	92	95	97	92	89	92	74	94	98	98	95	91	88	88	86	94	92	95	96	97	93.5
	Minimum ...	72	69	69	62	56	59	66	73	67	66	68	68	64	64	59	55	52	67	58	59	65	67	65	67	66	63	66	66	69	70	71	64.8
Mountain Grove	Maximum...	96	102	96	88	88	85	94	92	80	91	92	90	93	97	96	90	90	82	88	90	93	92	90	82	84	80	78	88	84	87	89	89.3
	Minimum ...	74	73	71	66	61	68	67	71	68	69	69	70	68	66	64	61	59	61	64	66	69	70	70	69	68	67	65	66	68	69	71	67.4
Neosho	Maximum...	99	100	99	91	90	90	93	93	92	92	94	93	91	91	91	86	91	90	84	89	93	95	95	93	83	83	83	87	89	90	84	90.8
	Minimum ...	74	70	73	73	65	61	67	68	68	73	74	72	65	62	71	55	56	65	65	64	66	68	69	69	65	59	60	65	67	72	71	66.8
Rolla	Maximum...	99	101	100	87	90	90	94	92	84	87	91	90	91	95	92	86	87	84	85	90	93	93	89	81	83	80	83	85	88	91	94	89.5
	Minimum ...	79	75	71	65	63	65	72	73	72	71	70	69	68	67	64	64	58	65	60	64	65	71	73	71	70	66	65	69	71	71	71	68.3
Springfield	Maximum...	96	100	86	88	85	86	93	90	84	89	90	88	87	92	83	83	85	75	84	89	92	93	85	81	83	80	80	86	86	84	88	86.8
	Minimum ...	77	76	73	71	65	66	71	70	68	71	74	74	72	73	68	65	64	64	65	68	72	74	73	72	69	65	64	67	69	71	72	69.8
Southwest Plain																																	
Appleton City	Maximum...	101	107	90	92	92	91	96	89	90	94	95	94	94	96	92	88	92	82	85	89	94	95	88	88	86	87	89	89	91	84	86	91.2
	Minimum ...	78	76	71	68	65	68	71	74	70	73	73	75	69	69	65	63	61	64	66	67	71	71	74	68	65	62	62	66	71	71	73	69.0
Clinton	Maximum...	104	106	91	95	97	95	100	91	93	97	103	98	99	100	97	93	93	78	90	94	100	101	91	92	90	91	92	98	95	92	92	95.1
	Minimum ...	76	76	70	66	62	62	68	75	70	72	72	73	68	68	68	63	68	64	64	64	68	69	73	68	68	62	60	64	72	72	68	68.2
Harrisonville §§	Maximum...	103	104	90	91	93	93	98	90	91	95	96	95	97	97	93	90	93	82	89	93	98	100	94	91	89	90	92	96	95	93	87	93.5
	Minimum ...	77	75	66	65	62	64	67	70	68	69	73	73	68	68	62	62	61	62	64	66	68	71	74	66	62	59	59	60	68	70	69	66.7
Lamar §§	Maximum...	101	103	88	93	94	94	96	92	91	92	94	93	87	95	90	87	93	70	86	90	95	97	91	86	85	86	87	89	91	87	86	90.6
	Minimum ...	77	76	73	73	68	67	70	75	69	70	75	75	71	68	68	67	63	65	65	68	70	71	73	72	69	63	63	63	70	73	73	69.8
Lamonte	Maximum...	102	102	92	89	92	92	98	87	89	96	98	94	98	97	90	90	94	85	93	96	100	103	95	91	89	92	94	98	97	93	93	94.2
	Minimum ...	78	74	69	64	61	61	69	74	72	72	72	73	68	66	60	60	58	66	63	65	68	72	75	67	61	60	60	65	72	74	71	67.4
Marshall	Maximum...	101	99	90	87	90	91	95	95	88	95	95	95	95	95	91	90	90	89	90	94	99	100	99	87	85	88	89	92	93	92	94	92.7
	Minimum ...	79	80	69	64	63	68	74	73	74	73	73	74	72	70	62	61	61	68	63	68	73	74	63	77	63	60	62	68	74	72	72	69.3
Nevada	Maximum...	100	105	94	92	92	91	95	89	91	91	92	92	89	94	90	86	90	84	84	89	93	93	89	86	85	86	88	90	90	86	85	90.4
	Minimum ...	79	77	71	71	65	66	72	73	68	74	72	74	69	69	65	62	60	62	64	68	68	72	72	69	65	60	60	66	72	71	73	68.7
Warrensburg	Maximum...	103	103	90	88	94	94	98	89	89	95	98	90	99	95	89	92	94	87	90	94	100	102	90	88	86	89	90	95	94	89	89	93.0
	Minimum ...	78	76	71	64	61	68	71	73	68	71	73	73	66	67	63	63	63	63	63	65	71	72	71	66	61	59	59	65	71	72	70	67.6
Warsaw	Maximum...	104	108	95	97	98	94	102	91	90	97	97	95	97	99	95	93	95	82	90	94	99	99	94	91	90	93	96	95	95	90	95	95.2
	Minimum ...	77	77	71	68	62	64	72	78	70	73	73	74	67	68	63	63	58	65	65	64	67	72	74	68	65	58	58	64	71	73	71	68.2
Northwest Plateau																																	
Chillicothe §§	Maximum...	102	96	83	84	91	94	93	85	89	93	93	94	95	91	87	89	94	89	93	96	100	102	91	89	89	89	92	99	99	96	90	92.5
	Minimum ...	73	77	65	61	55	64	68	69	70	70	72	70	66	63	58	57	55	68	61	64	68	70	71	66	58	55	57	57	69	70	70	65.1
Grant City	Maximum...	99	90	86	86	90	84	84	86	85	82	93	88	90	83	78	84	84	79	77	89	89	92	85	86	76	84	84	89	90	92	85	86.1
	Minimum ...	74	73	66	61	61	64	73	69	70	71	74	70	69	67	61	58	56	67	63	67	70	73	69	65	60	56	55	57	67	72	69	66.0
Kansas City..	Maximum...	103	96	84	85	88	91	96	84	88	90	92	88	94	91	86	85	91	83	86	92	98	100	86	85	84	85	87	94	93	91	88	89.8
	Minimum ...	83	73	68	67	67	73	76	72	73	74	79	74	76	75	70	68	69	70	68	73	76	79	75	68	66	62	65	70	75	75	72	72.0
Kidder	Maximum...	98	96	83	84	88	91	94	89	87	93	93	89	92	89	85	83	89	86	88	93	96	96	88	87	85	87	89	94	95	93	87	89.9
	Minimum ...	76	78	66	61	59	64	70	69	72	71	73	71	69	67	63	59	60	67	62	65	68	71	73	64	59	57	59	64	69	72	69	66.7
Lexington §§	Maximum...	102	100	88	90	94	95	97	87	90	97	98	94	98	96	90	91	95	89	92	98	101	104	93	93	90	94	94	99	97	93	91	94.5
	Minimum ...	80	80	70	64	62	69	74	72	72	73	76	75	70	69	65	63	65	70	66	69	73	72	78	68	62	60	60	65	72	74	72	69.7
Maryville	Maximum...	99	92	86	89	92	94	88	85	88	92	95	91	95	90	86	86	90	89	89	94	97	98	92	89	85	92	94	98	99	95	92	91.6
	Minimum ...	78	74	66	62	61	64	65	70	73	71	71	69	70	68	61	59	57	63	63	63	69	71	69	65	59	55	58	63	66	71	69	65.9
Oregon	Maximum...	101	95	89	91	93	92	98	90	88	95	97	94	96	88	87	89	91	88	87	95	99	99	91	92	89	93	94	98	97	95	88	92.9
	Minimum ...	80	76	66	67	60	67	75	69	73	72	74	70	72	69	63	60	62	64	66	69	72	72	70	65	60	57	62	64	70	74	69	68.0
St. Joseph..	Maximum...	102	93	85	87	89	90	96	86	89	91	93	89	92	86	85	86	89	84	86	93	97	97	88	88	86	89	91	94	96	92	89	90.3
	Minimum ...	81	73	69	65	65	71	71	70	75	74	76	74	72	70	65	63	63	67	66	71	74	76	72	67	63	59	60	66	74	75	71	69.6
Trenton	Maximum...	99	97	84	85	86	92	91	86	88	96	93	94	94	92	85	83	87	85	84	94	98	98	96	89	87	89	90	94	93	93	91	90.7
	Minimum ...	77	78	68	69	61	64	69	69	72	73	74	72	69	67	62	61	57	67	62	67	68	70	73	65	62	59	60	60	67	70	72	67.2

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis 8-16-33—800.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

R. NUNN
ST. LOUIS, MO.

VOL. XXXVII AUGUST 1933 No. 8

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

Temperature conditions were mostly near the normal. Unusually warm days occurred about the 1st-2d and 8th to 12th, and a rather cool spell prevailed from about the 27th to the 31st; but no great extremes occurred at any time. The month averaged slightly cooler than normal.

As in the preceding two months, rainfall was very irregularly distributed, with larger amounts in the northern third of the State and the western portions of the southern third and mostly very light amounts in the central third and some parts of the southeast. Excessive amounts occurred in some localities of the northwestern quarter, also at a few points in the southwestern and south-central portions. The driest area was in the western suburbs of St. Louis, including most of St. Charles County, St. Louis County, and parts of Warren and Franklin counties.

The State as a whole, during the present summer (June, July, and August) received about 66 per cent of normal rainfall, but the amounts in various localities differed greatly, ranging from a minimum of 1.69 inches (16 per cent of normal) at St. Charles to a maximum of 16.36 inches (112 per cent of normal) at Gallatin. The northwestern quarter of the State in general had nearly normal summer rainfall, as did a section in the southwest embracing the counties of Greene and Webster, and also a few small areas in the northeastern quarter and the southeastern quarter; but over the central third of the State—even a wider belt in the east portion—the summer rainfall was generally less than one-half the normal and in some places less than one-fourth.

River stages were quite low all the month in the principal rivers, except a flood occurred at Gallatin on the Grand River on the 22-23d.

The month was unusually free from damaging storms.

Progress and condition of crops varied in accordance with the amount and distribution of rainfall; that is, from very poor to excellent. Corn, alfalfa, potatoes, apples, and pastures were good to excellent in large parts of the northern third of the State and in some parts of the southern third, especially the southwest, but over much of the central third crops were poor to fair. On the whole, most crops improved somewhat during the month. Cotton was in good condition and tobacco was good to excellent. About ten per cent of corn was excellent, about fifty per cent fair to good, and the remainder very poor to fair. Fall plowing was well up except in the very dry areas.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 75.4°, or 0.7° below normal. The highest monthly mean was 79.1° at Caruthersville, and the lowest monthly mean was 71.4° at Grant City. The highest temperature recorded was 103° at St. Charles on the 12th, and the lowest was 48° at Elsberry on the 14th and Goodland on the 16th. The greatest daily range was 46° at Lebanon on the 24th.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 3.91 inches, or 0.03 inch less than normal. The greatest local monthly amount was 10.62 inches at Gallatin, and the least local monthly amount was 0.36 inch at Valley Park. The greatest amount in any twenty-four hours was 6.20 inches at Gallatin on the 9th. The average number of days with 0.01 inch or more of precipitation was 9.

MISCELLANEOUS PHENOMENA

Floods.—In Grand River at Gallatin on the 22-23d.

Hail.—Light, at Jefferson City on 12th, Memphis on 18th, and Trenton on 16th; moderate, at Maryville on 17th and St. Joseph on 19th, with some minor damage to crops and trees, but amount not estimated.

(Continued on page 40)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia	29.99	30.18	5	29.77	12	6.5	23	sw.	2	81	53	54	65
Kansas City	29.98	30.21	30	29.76	9	7.6	30	nw.	16	77	54	53	58
St. Joseph	29.97	30.20	29	29.75	9	7.1	20	se.	20	80	56	60	61
St. Louis	29.98	30.20	6	29.75	12	9.0	23	sw.	2	69	47	51	64
Springfield	29.99	30.18	15	29.79	12	7.6	24	n.	2	82	62	63	63
Cairo, Ill.	29.97	30.20	15	29.79	24	6.2	25	se.	27	85	59	66	76
Keokuk, Iowa	30.02	30.24	29	29.76	12	6.1	20	nw.	12	74	52	56	74

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	74.0	− 2.1	110	45	7.25	+3.31	11.53	2.07	0	11	..	..	..
1889	73.5	− 2.6	101	52	1.96	−1.98	5.25	0.10	0	14	..	..	..
1890	73.3	− 2.8	106	47	4.84	+0.90	15.39	1.10	0	9	..	..	..
1891	73.2	− 2.9	102	38	5.34	+1.40	13.10	2.37	0	8	..	..	..
1892	74.3	− 1.8	102	44	2.42	−1.52	7.00	0.29	0	6	17	8	6
1893	72 8	− 3.3	100	40	2.20	−1.74	6.63	0.20	0	4	18	10	3
1894	77.0	+ 0.9	111	39	1.58	−2.36	5.64	0.04	0	5	14	16	1
1895	75.3	− 0.8	104	46	4.23	+0.29	9.92	1.17	0	8	15	11	5
1896	76.6	+ 0.5	108	41	3.25	−0.69	8.45	0.38	0	6	17	10	4
1897	74.1	− 2.0	108	41	2.39	−1.55	7.87	0.56	0	6	19	9	3
1898	75.8	− 0.3	103	44	3.03	−0.91	7.20	0.40	0	5	17	10	4
1899	78.8	+ 2.7	107	49	3.25	−0.69	7.33	0.20	0	7	18	10	3
1900	80.3	+ 4.2	105	52	3.51	−0.43	8.37	0.34	0	6	19	9	3
1901	78.4	+ 2.3	109	47	1.88	−2.06	6.98	0.12	0	5	19	9	3
1902	75.0	− 1.1	103	47	6.16	+2.22	11.49	0.96	0	10	14	11	6
1903	74.5	− 1.6	102	43	5.40	+1.46	11.63	1.17	0	10	16	11	4
1904	73.7	− 2.4	100	43	5.46	+1.52	9.51	1.98	0	8	16	10	5
1905	76.4	+ 0.3	99	48	4.69	+0.75	9.32	1.35	0	8	19	7	5
1906	76.6	+ 0.5	101	40	4.72	+0.78	12.43	1.28	0	11	14	10	7
1907	77.3	+ 1.2	109	47	3.71	−0.23	7.07	1.56	0	9	17	8	6
1908	76.4	+ 0.3	102	46	3.87	−0.07	7.28	0.78	0	8	17	9	5
1909	79.5	+ 3.4	110	40	0.55	−3.39	4.30	0.00	0	2	24	6	1
1910	74.7	− 1.4	103	40	2.77	−1.17	10.07	0.91	0	6	15	9	7
1911	75.4	− 0.7	109	41	4.20	+0.26	12.04	1.39	0	7	15	8	8
1912	76.2	+ 0.1	104	41	4.19	+0.25	8.70	1.40	0	9	17	8	6
1913	82.8	+ 6.7	110	41	1.06	−2.88	3.51	0.00	0	3	22	7	2
1914	78.0	+ 1.9	106	49	4.25	+0.31	8.31	1.16	0	9	15	9	7
1915	69.8	− 6.3	98	37	7.86	+3.92	15.14	1.78	0	12	12	9	10
1916	79.2	+ 3.1	107	41	4.05	+0.11	14.86	0.30	0	7	19	7	5
1917	73.3	− 2.8	104	38	4.45	+0.51	11.46	0.98	0	9	16	8	7
1918	81.8	+ 5.7	111	45	3.34	−0.60	7.83	0.68	0	8	17	9	5
1919	75.7	− 0.4	106	44	4.29	+0.35	11.27	0.53	0	8	17	9	5
1920	73.1	− 3.0	102	43	4.78	+0.84	10.47	0.96	0	9	15	8	8
1921	76.8	+ 0.7	109	48	5.27	+1.33	10.04	1.79	0	9	14	10	7
1922	77.5	+ 1.4	107	46	2.40	−1.54	6.22	0.13	0	6	18	8	5
1923	77.3	+ 1.2	108	42	3.99	+0.05	9.80	0.24	0	8	16	9	6
1924	77.2	+ 1.1	106	48	4.14	+0.20	9.51	0.99	0	7	19	8	4
1925	76.5	+ 0.4	107	45	3.45	−0.49	11.24	0.68	0	6	19	8	4
1926	77.5	+ 1.4	106	50	5.63	+1.69	13.55	1.83	0	10	15	9	7
1927	71.1	− 5.0	97	39	5.06	+1.12	13.87	1.94	0	9	14	10	7
1928	76.4	+ 0.3	99	45	5.35	+1.41	11.24	0.96	0	9	15	10	6
1929	76.0	− 0.1	105	43	2.50	−1.44	8.57	0.32	0	6	18	9	4
1930	78.5	+ 2.4	114	47	2.02	−1.92	4.81	0.04	0	6	16	10	5
1931	74.9	− 1.2	106	44	4.77	+0.83	11.00	0.54	0	9	15	9	7
1932	77.2	+ 1.1	106	46	5.98	+2.04	13.96	0.61	0	9	18	9	4
1933	75.4	− 0.7	103	48	3.91	−0.03	10.62	0.36	0	9	13	10	8
Period	76.1	.....	114	37	3.94	.....	15.39	0.00	0	8	17	9	5

Climatological Data for August 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	75.7	+ 1.5	92	2†	57	14	30	4.58	+0.74	1.78	0	10	12	12	7	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	74.7	− 1.3	93	1	55	15	33	4.68	+0.67	2.11	0	11	16	7	8	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	75.3	− 0.3	96	12	56	14	31	2.86	−0.74	1.73	0	10	14	12	5	n.	U. S. Weather Bureau
Downing	Schuyler	876	12	72.4	− 2.5	93	7	54	4†	31	4.34	+0.62	1.15	0	12	17	9	5	sw.	James Taylor
Elsberry	Lincoln	449	2	72.7[b]	.....	98	12	48	14	42	2.58	.....	0.71	0	7	9[b]	7[b]	7[b]	ne.	Ray E. Mills
Fayette	Howard	661	53	75.0	− 0.9	99	12	52	14	39	2.63	−0.63	0.67	0	12	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	75.2	− 1.2	98	6	53	14	38	2.93	−0.54	2.14	0	8	15	11	5	e.	Clyde C. Herring
Gorin	Scotland	700	46	....	....	..	..	..	..	..	3.34	+0.22	1.28	0	13	11	6	14	ne.	J. W. Pulliam
Hannibal	Marion	759	41	75.1	+ 0.1	94	12	57	19	28	2.24	−1.10	0.48	0	10	15	8	8	n.	Hannibal Water Dept.
Jefferson City	Cole	557	43	76.3	− 0.4	98	12	56	14	36	3.09	−0.16	0.90	0	10	10	13	8	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	72.5	− 1.5	93	7	52	19	35	4.59	+1.08	1.14	0	11	14	9	8	s.	Prof. J. S. Stokes
Louisiana	Pike	469	39	74.4	− 0.5	99	1	49	14	40	4.15	+0.33	1.20	0	6	16	12	3	e.	Stark Bro's Nurseries
Macon	Macon	875	34	74.2	− 1.9	96	1	55	19	32	2.53	−1.01	0.85	0	11	17	10	4	e.	W. C. Brown
Mexico	Audrain	800	44	74.2	− 1.8	97	12	55	31	34	3.59	+0.35	1.63	0	9	24	2	5	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	1.90	−2.67	0.58	0	8	12	9	10	ne.	J. S. Conway
St. Charles	St. Charles	456	45	77.4	+ 0.6	103	12	57	14†	40	0.72	−2.76	0.16	0	7	10	14	7	s.	L. C. Saeger
St. Louis	**St. Louis City**	568	60	77.8	+ 0.3	99	12	61	19	29	0.60	−2.39	0.32	0	6	13	11	7	ne.	**Section Center**
St. Louis University	St. Louis City	578	21	77.6	+ 0.4	99	12	62	4†	32	0.73	−3.52	0.23	0	9	17	10	4	n.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	2.55	−0.47	0.53	0	10	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	35	73.6	− 2.9	94	1	54	18	29	3.42	−0.29	0.73	0	10	13	12	6	e.	Frank Hall
Unionville	Putnam	1,062	40	74.2	− 0.6	98	7	50	18†	36	4.95	+0.88	1.25	0	9	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	76.6	+ 0.1	101	12	58	5†	36	0.92	−3.48	0.25	0	6	11	14	6	ne.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	74.0	− 1.0	91	7	56	19	26	1.83	−1.37	0.84	0	8	9	10	12	e.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**74.9**	**− 0.7**	**103**	**12**	**48**	**14**	**42**	**3.10**	**−0.64**	**2.48**	**0**	**9**	**14**	**10**	**7**	**ne.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	76.7	.....	97	1†	54	15	39	4.25	.....	1.96	0	8	18	10	3	s.	Jeff. King
Caruthersville	Pemiscot	265	37	79.1	− 1.2	97	1	63	15	29	3.98	+0.60	1.20	0	7	19	5	7	.....	Sam Smith
Doniphan	Ripley	344	29	76.0	− 1.6	95	2	52	6	34	4.19	−0.09	1.52	0	7	11	15	5	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	77.0	+ 0.9	97	26†	54	15	37	2.25	−1.36	0.67	0	5	12	4	15	s.	John G. Putz
Marble Hill	Bollinger	470	38	77.1	+ 0.1	99	1†	51	5†	42	1.98	−1.62	0.93	0	6	12	15	4	w.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	3.73	−0.25	1.80	0	6	19	9	3	se.	John A. Spence
Poplar Bluff	Butler	339	28	76.4	− 1.6	95	1	56	15	33	5.27	+0.90	3.17	0	8	24	4	3	w.	J. H. Wolpers
Sikeston	Scott	318	26	77.1	− 0.5	95	1	59	15	31	3.80	−0.06	1.95	0	6	13	12	6	.....	John A. LaFont
Cairo, Ill	Alexander, Ill	358	61	76.8	− 1.0	92	1	63	16	23	4.41	+1.39	1.83	0	7	11	10	10	ne.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**77.0**	**− 0.7**	**99**	**1†**	**51**	**5†**	**42**	**3.70**	**−0.20**	**3.17**	**0**	**7**	**16**	**9**	**6**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	72.8	− 1.5	93	8	51	16	34	1.68	−2.05	0.94	0	11	15	7	9	w.	Arcadia College
Birchtree (near)	Shannon	1,000	38	76.0	− 0.1	96	8	53	16	37	3.15	−1.43	1.40	0	8	23	4	4	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	5.38	.....	2.13	0	7	20	6	5	s.	C. M. McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	3.01	.....	0.85	0	11	9	13	9	s.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	29	75.8¶	− 1.9	..	..	..	..	..	5.78¶	+1.62	....	0	9¶	..	..	..	.....	H. E. Dean
Eldon	Miller	934	38	75.6	− 0.8	96	10†	55	13†	34	3.88	+0.06	1.18	0	12	5	13	13	se.	E. H. Shepherd
Farmington	St. Francois	918	22	75.3	− 0.1	101	8	50	24	42	2.02	−1.55	1.20	0	5	17	12	2	s.	H. O. Miller
Goodland	Iron	1,000	40	75.4	+ 0.9	96	8†	48	16	39	3.27	−0.71	1.05	0	8	15	12	4	s.	F. M. Adams
Greenville	Wayne	381	24	74.6	− 2.1	96	1†	51	6†	40	4.01	+0.66	2.90	0	5	17	11	3	se.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	6.37	+1.00	2.50	0	7	16	9	6	se.	A. W. Madison
Koshkonong	Oregon	958	32	76.0	− 1.9	93	19	58	16	29	9.62	+5.28	4.53	0	10	17	4	10	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	75.7	− 0.4	99	1†	52	16†	46	4.62	+0.74	1.54	0	11	17	7	7	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	75.6	− 1.6	94	2	57	31	29	6.38	+2.02	2.52	0	9	11	14	6	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	75.1	− 0.4	94	1†	55	31	38	4.09	−0.23	1.73	0	10	13	17	1	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	75.2	− 1.9	93	7	54	31	35	5.21	+1.07	2.52	0	10	10	13	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	76.1	− 0.1	95	2†	57	24	34	2.83	−1.25	1.38	0	9	11[a]	2[a]	17[a]	se.	F. H. Lane
Salem	Dent	1,173	29	75.0	− 0.9	98	8	52	16†	38	2.19	−2.29	0.52	0	7	8	16	7	s.	E. E. Martin
Seligman	Barry	1,542	32	76.0	− 0.2	95	7	60	13†	29	5.76	+1.72	2.42	0	11	12	11	8	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	27	73.4	− 1.6	90	7†	52	31	36	5.59	+1.63	1.74	0	12	14	9	8	se.	A. L. Hailey
Springfield	Greene	1,324	45	74.7	− 1.0	90	10	59	30	25	4.86	+0.77	2.32	0	12	15	9	7	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	76.8	.....	99	6†	54	31	35	2.63	.....	0.85	0	13	10	14	7	s.	I. M. Wilson
Division means	**and extremes**	.....	..	**75.3**	**− 0.9**	**101**	**8**	**48**	**16**	**46**	**4.19**	**+0.21**	**4.53**	**0**	**9**	**14**	**10**	**7**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	77.5	− 0.3	102	10†	57	30†	35	2.88	−0.80	0.75	0	11	5	22	4	sw.	W. G. Bigelow
Clinton	Henry	765	40	78.1	+ 0.5	102	12	56	31	37	1.56	−1.81	0.45	0	9	10	15	6	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	75.2	− 0.7	98	9†	52	30	33	3.45	−0.60	1.01	0	12	6	11	14	n.	John H. Patterson
Lamar	Barton	980	45	76.2	− 1.5	94	10	57	31	30	4.65	+0.42	1.55	0	12	11	12	8	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	76.8	− 0.3	101	12	56	14	38	1.79	−1.94	0.55	0	10	23	4	4	sw.	J. E. Wheeler
Marshall	Saline	779	46	76.2	+ 0.2	97	12	58	25	31	2.04	−1.60	0.91	0	9	14	14	3	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	76.0	− 1.1	96	10	55	31	33	2.95	−0.69	1.13	0	9	12	11	8	sw.	George A. Kaupp
Warrensburg	Johnson	878	46	76.7	− 0.4	100	12	55	29	37	2.09	−1.40	0.85	0	9	14	7	10	ne.	E. A. Markey
Warsaw	Benton	687	32	77.6	0.0	99	10	58	14†	34	2.94	−1.35	0.68	0	14	11	12	8	s.	Everett Martin
Division means	**and extremes**	.....	..	**76.7**	**− 0.4**	**102**	**10†**	**52**	**30**	**38**	**2.85**	**−0.88**	**2.64**	**0**	**11**	**12**	**12**	**7**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	72.6	− 2.4	90	1†	52	18	28	8.80	+4.85	3.49	0	9	13	11	7	se.	A. S. Cumming
Chillicothe	Livingston	779	24	73.5	− 2.2	96	1	52	18	36	9.55	+5.09	2.78	0	12	13	7	11	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	74.2	− 0.5	93	7	54	18†	35	7.67	+3.97	2.95	0	9	6	14	11	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	74.3[b]	− 0.8	94	9	49	30	34	5.31	+2.09	2.07	0	11	14	3	14	s.	Fred L. Stiff
Grant City	Worth	1,134	29	71.4[f]	− 3.5	89	6	53	30	25	9.84	+6.10	4.35	0	9	4[f]	6[f]	15[f]	se.	Howard Rybolt
Kansas City	Jackson	963	44	76.2	− 0.4	95	9	56	30	25	4.00	−0.09	2.07	0	11	7	10	14	e.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	73.6	− 1.8	93	9	55	14†	31	4.77	+0.90	2.10	0	12	10	13	8	se.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	8.15	+4.44	3.30	0	10	..	..	..	.....	John M. Martin
Lexington	Lafayette	688	48	77.7	+ 1.5	99	12	54	30	34	2.21	−1.24	0.65	0	10	17	9	5	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	73.8	0.0	95	6†	51	30	34	8.34	+4.38	2.19	0	14	9	9	13	n.	J. R. Brink
Oregon	Holt	1,048	77	75.6	+ 0.4	97	6†	52	18	35	7.84	+3.83	3.57	0	11	15	8	8	se.	Mina Wright
St. Joseph	Buchanan	967	23	75.0	− 1.7	94	9	54	30	29	5.09	+1.59	1.98	0	11	12	8	11	se.	U. S. Weather Bureau
Tarkio	Atchison	916	30	71.6	− 3.6	97	6	52	18	32	6.06	+2.01	2.54	0	8	6	12	13	se.	Albert Volker
Trenton	Grundy	822	37	74.6	− 0.6	93	9	55	18†	33	5.49	+1.80	1.37	0	8	16	10	5	s.	W. H. Estes
Division means	**and extremes**	.....	..	**74.2**	**− 1.2**	**99**	**12**	**49**	**30**	**36**	**6.92**	**+3.10**	**6.20**	**0**	**10**	**11**	**9**	**11**	**se.**	
State means	**and extremes**	.....	..	**75.4**	**− 0.7**	**103**	**12**	**48**	**14†**	**46**	**3.91**	**−0.03**	**6.20**	**0**	**9**	**13**	**10**	**8**	**se.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for August 1933

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Bethel	Mississippi	.36		.80				.42	.32										.29			.31				.44	.17		.16				3.27
Boonville	Missouri	1.51	.01	1.48				.08	.06	.07	.08							.01				.65							.06		.45	.04	.10	4.63
Bowling Green	Mississippi	.07	.53	1.10				.05			.71								.55		.03					.05			.80		.23		4.12
Brunswick	Grand	.05		.15				.02		1.78	.13							.92				.74				.07			.67	.05			4.58
Canton	Mississippi	.72		.42				.23		.36	.70								.32							.82			.32				3.89
Clifton Hill	Chariton		.41	.01			.04	.09		2.11							.09	.33			.50	.09				.26			.75				4.68
Columbia***	Missouri	T.	1.73	.02				.13	T.	.31								T.			.41	.05				.09		.06	.04	.02	T.		2.86
Downing	Mississippi		.76	.08			.05	.36		1.15								.06			.76	.32		.01	.03		.43	.33					4.34
Edina	do	.66	.55	.09				.42		.65	.74							T.				.16					.16		.34				3.77
Elsberry	do	.71	.26	.30				.07		.38																		.36			.50		2.58
Farber	do		2.40	2.10					.10		.98																		.75				6.33
Fayette	Missouri	.67	.01	.24				.16		.33	.04							.09				.48			.03		.05		.50		.03		2.63
Fulton	do	.02		2.14				.07	T.	.42	.05											.01							.13		.09		2.93
Gorin	Mississippi	.03	.10	.26			.01	.83		1.28	.04							.19			.15	.04		T.	.12		.09		.20		T.		3.34
Hannibal	do	.36	.12	.09				.33		.42	.17							T.	.09							.11			.46		.09		2.24
Hermann	Missouri	.25		.37					.09	T	.26							T.	T.			T.							.60		.64		2.21
Jefferson City	do		.74	.90				.02	.16					.20								.12	.14						.15	.04	.62		3.09
Kahoka	Mississippi			.95				.61		.38	.68																		.60				3.22
Kirksville	do	.24	.50				.05	.37		1.14	.13							.25			1.05	.18						.57	.11				4.59
LaBelle	do	.42	.08	.15				.50		.40	1.35															.08			.45				3.43
Linneus	Grand	.40						.03	.95								.04			T.	1.16	.32			.87			.57	T.				4.34
Louisiana	Mississippi	1.15	1.20							.45								.60											.60	.15			4.15
Lucerne	Grand	.09	.20	.65			.16			.62	.09							.02			.10	1.10				.16	.13	.20	1.02				4.13
Macon	Chariton	.24		.05				.20		.85	.06											.42							.30				2.53
Memphis	Mississippi	.86	T.	.80				.43		.40	.53								.40			.30				.22				.56			4.50
Mexico	do	.03		1.63				.37		.80	.22											.02				.13			.34		.05		3.59
Milan	Grand	.24	.38	2.48						1.20	.33						.12					1.45	.14					1.25					8.11
Monroe City	Mississippi	.07	.11	.20				.17		.42	T.							T.			T.					.26				.09			1.90
New London	do		.02	.38				.25	.04	.09	.23											.09					T.	.08	.50	.04	.11		1.83
Palmyra	do	.22	.39	.40	.02			.31		.14	.65							T.	.12			.04				.11	.07	.02	.32	.03			2.84
Paris	do	.21	.59					.15		.66											.10								.74				2.45
Perry	do	.29	.32	.92						.51	.28								.24			T.							.77			T.		3.33
Philadelphia	do	.28	.98	.36					.32		.94																.47							3.35
St. Charles	Missouri	.16						.02		.11			.11					.02			T.							.15		.15			0.72
St. Louis**	Mississippi	T.	.01	T.				T.		T.	.08		T.					.32			T.	T.						.04	.13	T.	.02		0.60
St. Louis University*	do	.01	.06	.06				.02		T.	.12		T.					.23			T.							.02	.16		.05		0.73
Shelbina	do	.46	T.	.33				.14		.53	.03							T.	.05		T.	.05				.57		.15	.10				2.55
Steffenville	do	.60	.70	.10				.37		.73									.12			.11				.35	.20		.28				3.42
Troy	do	.22	T	.45	T.				.10		.23								.09															1.90
Union	Meramec		.02						.19					.05				T.	.02		1.25	.70						.85	.20				1.38
Unionville	Chariton	.30	.40				.20	.10		.95										T.		T.		T.					.36	T.			4.95
Valley Park	Meramec		T.						T.		T.			T.						T.									.23		25		0.36
Warrenton	Mississippi		T	.07				.12		.13			.12					T.			T.				.23		.52	T.	.02			0.92
West Ely	do	T.	.98				.29		.07	.26																			.10	.60				2.37
Winfield	do	.13	.23	.21														T.	.06			T.				.03		.43	.09		T.		1.27
Keokuk, Ia.***	do	T	.12	T.				.26		.80	.04																							1.83
Southeast Lowlands																																	
Bragg City	St. Francis		.50	.70	.10						1.90		.24																1.75				5.19
Campbell	do		.10	.30					.05			1.96						.52										.10	.80	.42		4.25
Cape Girardeau	Mississippi			.42	.28					.09	.23								.04										.21	.54			1.81
Caruthersville	do		.35	1.20	.38							.88		.04																.50	.63		3.98
Dexter	St. Francis				.30					.38		2.28																		.78	.17		3.91
Doniphan	Black		.35	.08					.04								.52		.03									.32	1.36	1.52			4.19
Fisk	St. Francis			.47	T.							1.43						.03											T.	.31	.07		2.31
Jackson	Mississippi		.57	.10					.67			.40						T.											.51				2.25
Marble Hill	do		.12	.18				.05			.93																		.68	.02			1.98
Morehouse	do		.02	.43								1.80						T.											1.02	.04	.42		3.73
New Madrid	do			1 32								1 62		.08	T.				.15											.11	.64		3.92
Parma	St. Francis			.64	.57							2.20																			1.05		4.46
Poplar Bluff	Black			.11	.07					.14		3.17						.09											.22	.90	.57		5.27
Sikeston	Mississippi		.36	.22							1.95							.01											1.10	.16			3.80
Cairo, Ill.***	do		.48	1.29						T.	1.64	.19		T.				T.				T.						.53	.20	T.	.08		4.41
Ozark Plateau																																	
Arcadia	St. Francis			.13					.02	.27	.02	.94		.01				.02					.01						.06	.19	.01		1.68
Birchtree (near)	Black											1.30																	1.40	.45			3.15
Buffalo	Osage			1.66						2.13	.21	.09							.13											.79	.37		5.38
Caplinger Mills	do	T.	.25	.85				.48			.11	.12	.13					.05			.25							.05	.70	.02		3.01
Dean	Neosho											2.90															.35	1.98	T			¶5.78
Eldon	Missouri		.07	1.18					.22			.11		.04					.21		.83	.14				.03			.31	.02	.72		3.88
Farmington	St. Francis			.05				.06	1.20	T.	.43	T.	T.															T.	.28				2.02
Fredericktown	do				.36				.12	1.00	.06	2.23																		.66			4.43
Galena	White			1.41						.82	.05	.10		.33	.05			.10											.65	.66	.08		4.25
Goodland	Black		.03	.80				.05		.17	.70	1.05																	.40	.07			3.27
Greenville	St. Francis		.15	.22					T.			2.90																	.58	.16			4.01
Hailey	White			1.20	T.	T			1.51		.05								.73			.22							2.50	.16			6.37
Koshkonong	Black		.33	.27						.73		.53		.47				.10		1.55									.51	.01	.71	.02	9.62
Lakeside	Osage	T.	.42	.83				.02	.18			.16		.03	T.				.04		.63	.06				T.	T		.51	.01	.71	.02	3.62
Lebanon	do		.01	1.51	.42					T.	.30	.34		.06				.24				.05						T.	.24	1.15	.24		4.62
Leeper	Black				.86				T.			1.37		.03															T.	.42	.26		2.94
Lockwood	Osage		T.	2.52		T.			.25		.06	.45																	.40	.30			6.38
Mountain Grove	White		.10	.70				.13			.03	.33		.04					.04		.02					T.			.97	1.73			4.09
Neosho	Neosho	T.	T.	2.52		.10			.10		.12	.08		.05							.53	.78						T.	.83	.10			5.21
Owensville	Gasconade								.45					.75															.17				1.37
Rolla	Meramec			.77	.02				.11		T.	1.38		.05															.17	.27	.02	.04	2.83
St. Thomas (near)	Osage		.09	1.62								.09										.14							.32	.07	.49		2.82
Salem	Meramec			.35						.46	.13	.51															.15		.52	.07			2.19
Seligman	Neosho	.15	T.	.53		.43					.14	.97		.28							.21	.07				.39		.17	2.42				5.76
Seymour (near)	White	.14	.33	1.74					.20		.14	1.35		.02				.03			.06	.04							.39	1.15			5.59
Springfield****	do	.11	1.76	.56	T.			T.			.12	.90	.71				.04	.10			.10	T.							.33	.12	.01		4.86
Stover	Missouri	.21	1.01	1.17											.46			.03				.28							.20	.05			3.41
Versailles	Osage	.85	.03					.25				.07	.15	T.				.61			.16	.11				.08		.05	.23	.05	.04		2.63
Williamsville	Black			.03	.87				.03	1.61	.02	2.23						.02											.25	1.37	.35		6.78
Willow Sprgs. (near)	White			.33					.02	.08		.47						.04			.08	.01							.30	2.36			3.69
Southwest Plain																																	
Appleton City	Osage	.02	T.	.59				.04			.75		.01					.23				.44	T.				T.		.43	.25	.11	.01		2.88
Clinton	do			.10					.05			.15	.05					.45				.36	.14							.19	.07			1.56
Concordia	Missouri		.65	.08						.02													.85						.65				2.25
Harrisonville	Osage	.18	.20	.43	.03				.02	.04				.04				.67				1.01				.07			.36	.40			3.45

Continued on next page

Daily Precipitation for August 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																
Joplin ‖‖	Neosho	T.	T.	2.64							.50								.22		.47	.35						.03	.51	T.			4.72
Lamar ‖	do	.25		.70					.05	.53	.05	.18						T.				.55	.17				1.55		.17	.25	.20	4.65
Lamonte	Missouri		.12						.20									.04		.04	.55	.30						.04	.40	.08	.02	1.79
Marshall	do	.05	.25					T.	T.	.21							T.	.18			.86	.05				T.		.25	.11	.08		2.04
Nevada	Osage		.08	.51				T.				1.13	.04					.31			.58	.05						T.	.15	.10		2.95
Warrensburg	Missouri	.85	.13	.08					T.	T.				T.				.05			.45	.15			T.	.04		.03	.31			2.09
Warsaw	Osage	.15	.05	.37			.06					.68			.06			.17	.16	.01	.06	.15							.51	.43	.08	2.94
Waverly ‖	Missouri	.22	.12	.37	T.					.19								.07				.87				.06	.04		.95	.04		2.93
Northwest Plateau																																
Bethany	Grand	.30	.68							2.19					.02			.09		.24	.25	3.49						1.54				8.80
Chillicothe ‖‖	do	1.28	1.69	.56	T.			T.	.07	2.78	.06							.38		.07		1.44	.06		T.	.38			.78			9.55
Conception	Missouri	.15	.05					T.	.06	2.95								T.	T.	.36	.05	2.30	T.	T.	T.			1.68	.07			7.67
Edgerton	do	T.	1.24	.01				.08	.18	.12				T.		.02		T.			.52	2.07			.06			**	1.01			5.31
Gallatin ‖	Grand	.29	.25	.09					.10	6.20								.73		.20		1.20	1.24					.32				10.62
Grant City	do	.50	1.07						T.	4.35							T.	.01		.38	.25	2.30			T.			.96	.02			9.84
Kansas City***	Missouri	.02	.71	T.				T.	.10	T.			T.	.01		T.	.22				.65	.03		T	T.		.02	1.18	.89	.17		4.00
Kidder	Grand	.22	.68				T	.07	.58	.02					T.		.04		.05	.11	.55	2.10			T.			.30	.05			4.77
King City	Missouri	T.	.95					.12	.12	.96								.13		.31	.06	3.30		T.				2.10	.10			8.15
Lexington ‖	do	.04	.54	.15						.06	.02							.03				.65	.07			.05			.60			2.21
Maryville‖‖	do	.04	.63						.02	1.81	T.							1.15		.37	.12	2.19	1.10	.01	.02	.01		.56	.31	T.		8.34
Oregon	do	.08	.01					.03	.42	.07					.02		T.	T.	T.	.76	.49	1.95	T.		.44			3.57	T.			7.84
St. Joseph***	do	.03	1.14	T.				.08	.30	.05					.04		T.		T	.37	.82	1.45		T.	T.			.77	.04	T.		5.09
Tarkio	do	.61							.20	.33										1.31	.28	2.54	.10					.69				6.06
Trenton	Grand		.45				T.	T.	T.	1.05					T.		1.00	T.		.02	.76	1.37			.09			.75				5.49

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for August 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.330	.197	.213	.077	.212	.233	.236	.076	.205	.213	.278	.279	.296	.222	.288	.301	.208	.221	.315	.270	.044	.187	.203	.246	.238	.158	.244	.199	.030	.061	.085	6.365
	Mean temperature	82	80	71	74	73	76	82	82	82	88	82	79	74	72	74	73	78	74	77	72	78	76	76	74	76	78	80	70	68	69	72	76.2
	Wind movement	72	30	80	62	44	44	77	37	39	40	70	44	57	52	50	55	39	58	56	63	40	57	35	42	47	42	48	67	56	55	41	1,599

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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Halos.—Solar, 1st, 9th, 16th, 17th, 18th, 20th.

Thunderstorms.—Local, on 3d, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 16th, 19th, 20th, 21st, 24th, 27th, 28th; more or less general, on 1st, 2d, 7th, 17th.

Windstorms.—(See special storm notes).

SPECIAL STORM NOTES

About 4.15 p. m. August 2, 1933, a small tornado, attended by heavy rain, uprooted two trees in the Connet apple orchard one and one-half miles west of Willow Brook, Buchanan County, Missouri. It then lifted and moved northeastward to a point about three-fourths of a mile north of Willow Brook, where it again came down to the ground and moved to the southeastward for about one and one-half miles, damaging or destroying about twenty acres of growing corn. The path of the tornado was narrow. The estimated loss caused by the storm was placed at $350.00 by the County Farm Agent.—(Weather Bureau Office, St. Joseph, Mo.)

THE HANNIBAL, MO., STATION

On July 31, 1933, the regular Weather Bureau station at Hannibal, Mo., in operation for the last 41 years, was closed, due to the demands for reduction in Government expenses. But on August 1 a cooperative station was established at Hannibal, and records of daily temperatures and precipitation and notes regarding important miscellaneous weather happenings will be maintained. The new station is under the supervision of the Hannibal Water Department.

Daily Temperatures for August 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	90	92	79	83	88	92	91	89	88	87	91	92	85	87	91	89	89	84	86	77	83	90	91	83	85	89	85	75	74	80	85	86.1
	Minimum	72	72	65	66	62	65	76	72	67	74	70	65	63	57	63	66	60	60	60	67	65	64	67	64	67	64	66	64	62	59	59	65.3
Columbia	Maximum	92	87	74	79	84	88	87	88	88	86	91	96	82	85	88	88	90	83	88	81	85	89	89	88	85	88	87	71	73	78	86	85.3
	Minimum	73	73	66	64	61	66	73	75	68	73	67	65	63	56	63	64	65	63	61	65	65	63	66	60	66	68	68	65	62	62	56	65.3
Fayette	Maximum	95	90	73	82	87	89	87	90	88	89	95	99	87	89	90	90	94	87	90	79	88	92	93	91	83	91	90	74	77	81	88	87.7
	Minimum	70	71	66	64	59	62	71	72	66	66	66	60	60	52	53	59	61	58	59	62	64	59	60	59	62	64	65	63	63	59	53	62.2
Hannibal	Maximum	93	91	86	78	80	90	91	89	86	85	88	94	83	83	91	91	92	81	81	82	91	92	89	88	82	88	88	75	74	79	85	86.0
	Minimum	71	70	63	60	58	63	69	72	66	70	69	66	59	58	63	65	70	58	57	63	68	68	63	62	66	65	66	64	60	60	59	64.2
Jefferson City §§	Maximum	94	91	76	81	88	89	89	94	92	95	94	98	86	87	90	90	93	89	93	79	86	94	93	94	92	95	92	70	80	82	86	88.8
	Minimum	71	72	67	62	58	63	70	70	72	72	67	62	65	56	57	58	63	61	58	65	65	60	65	58	66	64	66	66	63	59	58	63.8
Kirksville	Maximum	92	86	72	77	82	87	93	84	85	87	90	89	81	83	89	87	88	88	75	73	81	85	86	83	83	86	81	76	72	80	86	83.5
	Minimum	70	69	61	56	56	61	73	67	65	68	70	67	57	56	55	64	61	53	52	60	62	63	63	65	66	59	61	60	56	55	57	61.5
Louisiana	Maximum	99	90	76	80	83	90	90	92	90	90	95	95	88	82	90	90	96	82	82	80	90	92	90	90	88	90	90	83	73	82	87	87.6
	Minimum	73	71	68	59	52	58	70	66	68	72	73	59	60	49	50	64	60	50	52	60	66	69	55	50	60	55	60	64	60	61	62	61.2
Macon §§	Maximum	96	91	73	79	85	89	94	86	88	86	90	93	83	88	90	91	92	83	82	80	83	90	89	88	84	87	84	76	74	78	85	85.7
	Minimum	70	70	63	58	56	61	72	69	66	66	69	67	59	56	62	65	62	56	55	61	64	62	62	63	65	64	66	63	59	56	58	62.7
Mexico §§	Maximum	94	87	75	79	84	90	90	88	85	89	89	97	82	80	90	90	93	88	83	89	86	90	89	90	86	89	86	72	76	82	83	86.2
	Minimum	72	70	65	62	56	62	69	70	65	65	66	63	58	58	60	60	64	57	56	60	65	59	63	56	67	63	63	63	59	60	55	62.3
St. Louis	Maximum	95	95	77	80	84	86	89	94	88	90	93	99	82	85	88	88	92	85	85	86	87	89	88	91	90	91	93	73	78	81	86	87.4
	Minimum	77	75	68	62	62	68	70	76	75	73	72	70	69	66	66	66	67	67	61	65	71	69	67	68	69	70	68	66	62	64	64	68.2
Unionville	Maximum	95	90	75	85	86	90	98	96	95	90	92	90	86	88	95	90	94	86	82	76	80	90	90	86	85	88	80	80	75	85	86	87.2
	Minimum	66	68	70	53	55	60	70	70	65	67	70	70	54	54	64	65	64	50	54	60	62	60	62	65	64	55	61	60	54	50	54	61.2
Warrenton	Maximum	96	91	85	81	87	91	87	93	91	88	92	101	86	88	92	90	93	89	89	84	85	94	90	89	87	91	90	85	74	79	87	88.5
	Minimum	72	71	67	59	58	63	70	74	67	75	68	65	63	58	61	61	67	63	58	66	69	63	65	63	64	64	68	65	60	60	60	64.7
Southeast Lowlands																																	
Campbell	Maximum	97	97	87	79	85	88	93	89	96	94	89	95	95	89	87	89	90	95	93	89	95	94	91	90	95	94	96	81	73	83	88	90.2
	Minimum	69	72	70	64	59	57	59	71	70	70	65	66	67	59	54	56	59	64	61	60	64	67	60	57	56	58	65	70	63	64	62	63.2
Caruthersville §§	Maximum	97	96	84	82	84	86	91	91	96	96	92	92	90	85	82	89	90	95	90	87	91	90	97	90	90	92	91	85	74	84	87	89.2
	Minimum	75	75	72	68	66	65	69	74	74	75	68	72	70	65	63	66	70	70	68	66	69	71	68	65	67	70	66	66	68	69	68	69.0
Doniphan	Maximum	94	95	92	86	91	86	91	92	90	95	91	91	89	88	91	91	93	91	90	82	90	78	82	91	88	86	81	78	78	82	82	87.9
	Minimum	70	73	70	59	60	52	60	71	72	74	68	64	69	59	62	60	62	64	65	63	62	61	59	62	60	69	62	62	63	65	62	64.0
Jackson	Maximum	91	91	85	85	84	88	89	95	94	94	93	95	88	86	88	89	91	91	91	90	89	94	92	94	95	97	97	90	82	85	89	90.4
	Minimum	71	72	71	66	59	58	62	72	71	75	69	66	60	59	54	56	58	63	64	59	67	70	59	58	58	60	62	65	62	66	60	63.6
Poplar Bluff	Maximum	95	91	89	86	85	87	90	91	93	94	91	92	88	88	83	86	92	93	89	87	89	92	90	90	90	93	91	77	75	85	87	88.7
	Minimum	68	73	70	64	62	57	58	70	69	74	67	70	68	59	56	57	61	66	62	60	68	66	60	57	58	60	65	69	63	65	63	64.0
Sikeston	Maximum	95	94	85	80	80	85	91	92	94	94	87	93	86	83	84	86	87	89	89	88	89	92	89	90	92	93	92	82	75	85	88	88.0
	Minimum	74	73	71	67	62	60	67	73	72	75	67	71	70	60	59	61	67	68	61	61	66	66	63	60	62	62	70	70	64	66	63	66.2
Cairo, Ill	Maximum	92	91	82	77	81	83	87	89	90	90	85	90	84	80	80	85	84	87	84	84	86	88	86	87	87	90	91	75	75	81	83	85.0
	Minimum	77	71	71	68	65	64	70	74	74	72	69	73	72	64	64	63	70	69	64	64	70	71	67	64	69	70	70	68	66	68	67	68.6
Ozark Plateau																																	
Arcadia §§	Maximum	92	89	79	77	80	83	86	93	89	91	88	90	83	80	80	83	87	85	84	80	80	87	87	86	89	89	90	70	73	76	82	84.1
	Minimum	70	71	71	65	54	55	62	71	69	72	66	60	65	55	53	51	56	64	55	59	65	61	55	52	57	58	62	67	64	64	62	61.6
Birchtree	Maximum	94	94	84	83	85	88	93	96	95	93	90	93	87	85	83	87	91	91	91	85	85	92	91	92	92	92	91	85	75	77	85	88 5
	Minimum	69	70	70	60	57	59	61	72	69	73	67	67	60	57	53	62	61	62	62	67	63	64	55	60	63	65	68	62	64	59	63.5	
Eldon §§	Maximum	95	93	73	81	87	89	89	94	93	96	95	96	83	88	90	90	93	89	93	76	85	92	91	92	93	84	95	69	73	77	84	87.7
	Minimum	71	72	68	64	60	61	66	72	72	72	68	64	55	55	58	59	61	62	59	59	66	61	62	59	61	66	66	66	64	59	57	63.4
Farmington	Maximum	97	95	85	83	89	90	90	101	92	95	92	93	87	85	88	86	87	86	89	86	84	93	92	92	95	98	98	75	78	80	85	89.2
	Minimum	70	69	69	65	52	51	53	72	69	73	75	69	65	67	59	54	64	55	51	60	58	60	62	50	53	68	63	55	52	60	60	61.4
Koshkonong	Maximum	92	89	87	76	84	87	91	89	91	91	86	92	83	84	83	85	87	92	93	80	80	89	87	89	89	90	85	79	77	76	81	85.9
	Minimum	71	73	70	67	63	64	67	71	73	69	66	71	65	64	62	58	63	67	64	64	67	66	66	62	65	67	67	70	62	64	63	66.2
Lebanon §§	Maximum	99	96	79	79	87	91	93	95	98	97	95	97	87	90	92	93	95	94	99	80	93	97	97	98	96	97	97	70	66	76	87	90.6
	Minimum	70	71	67	61	56	60	67	68	68	70	65	64	59	55	57	52	57	59	59	63	58	55	59	52	59	59	61	65	59	56	53	60.8
Mountain Grove	Maximum	94	89	80	77	79	82	93	94	90	93	90	90	86	85	83	80	80	82	80	79	84	92	90	94	90	92	88	86	72	70	82	85.4
	Minimum	70	74	68	64	60	65	74	72	69	73	69	68	64	61	61	56	63	59	62	68	66	71	63	56	62	63	64	67	61	60	55	64.8
Neosho	Maximum	92	90	89	75	77	88	93	92	90	92	92	90	91	84	85	85	87	92	92	88	77	86	86	83	83	84	84	87	73	76	85	86.1
	Minimum	73	73	68	68	67	67	70	73	69	72	67	62	59	62	57	58	60	57	57	67	65	62	63	66	64	61	65	68	62	59	54	64.4
Rolla	Maximum	93	95	85	77	82	86	90	95	91	95	92	92	87	82	85	86	91	85	88	81	81	90	89	91	89	91	92	85	70	73	84	86.9
	Minimum	76	76	68	65	58	62	71	74	73	75	68	64	66	58	58	59	65	62	60	67	68	62	66	57	61	66	72	66	62	61	59	65.3
Springfield	Maximum	87	86	77	75	74	84	89	84	89	90	89	88	84	84	81	83	87	88	89	73	78	88	87	88	84	88	82	73	66	72	82	82.9
	Minimum	73	67	66	64	65	66	70	74	73	72	68	64	65	66	66	62	62	67	66	70	69	66	68	66	68	69	68	65	59	59	60	66.5
Southwest Plain																																	
Appleton City	Maximum	90	94	76	75	83	91	94	101	97	102	102	102	88	90	93	94	94	98	92	83	84	87	85	89	86	90	87	70	68	76	83	88.5
	Minimum	72	72	66	65	63	66	76	73	73	76	67	67	62	72	63	63	61	63	60	69	68	65	67	66	69	68	68	66	62	57	57	66.5
Clinton	Maximum	91	100	76	82	89	95	100	97	100	97	100	102	94	92	88	92	96	90	97	77	90	97	92	92	90	95	88	75	75	80	89	90.9
	Minimum	71	71	68	65	60	65	75	73	73	73	66	65	62	60	60	59	60	62	60	68	66	66	65	64	68	68	68	66	62	60	56	65.3
Harrisonville §§	Maximum	89	93	73	74	85	92	96	93	98	96	98	97	89	89	91	90	93	88	92	74	86	88	92	80	83	87	83	70	75	73	83	86.8
	Minimum	69	69	63	63	61	64	68	70	70	71	66	64	62	59	62	62	60	60	59	64	62	65	68	69	63	65	66	63	60	52	56	63.7
Lamar §§	Maximum	88	92	74	80	78	90	93	92	92	94	89	92	89	88	90	88	91	92	92	73	79	90	88	89	86	89	85	74	65	74	83	85.8
	Minimum	72	75	72	66	66	68	73	75	72	75	68	67	63	65	63	63	62	62	62	64	68	66	68	65	65	66	67	70	64	60	57	66.7
Lamonte	Maximum	88	92	93	93	87	91	94	94	97	94	95	101	87	89	93	92	95	88	93	79	89	90	91	87	90	91	90	71	74	78	86	89.4
	Minimum	64	61	64	64	60	67	76	73	70	72	65	63	62	56	63	63	61	60	61	67	65	63	67	64	67	65	67	65	63	58	57	64.3
Marshall	Maximum	93	92	85	78	84	86	91	90	94	93	92	97	92	88	90	90	91	88	88	87	85	89	90	87	85	87	86	87	74	78	85	87.8
	Minimum	71	72	64	67	61	63	65	73	67	75	68	66	63	59	63	65	62	61	61	64	66	64	68	65	58	65	63	64	61	59	59	64.6
Nevada	Maximum	88	93	78	77	80	91	92	91	95	96	89	93	85	85	88	88	88	85	92	79	87	86	87	88	85	89	83	73	68	75	84	85.7
	Minimum	72	73	66	64	65	66	75	74	75	73	75	67	65	62	64	63	61	63	59	65	67	66	68	64	67	65	67	66	62	60	55	66.3
Warrensburg	Maximum	92	92	97	75	80	92	93	94	96	92	97	100	90	90	93	89	97	89	95	76	89	91	94	85	93	90	90	69	72	79	88	89.0
	Minimum	65	71	63	63	64	61	75	72	68	73	65	67	63	58	63	65	60	61	59	67	65	63	67	65	65	65	65	63	55	65	56	64.4
Warsaw	Maximum	96	96	82	80	87	93	97	97	96	99	95	97	88	89	91	91	93	91	95	77	89	95	94	92	95	92	75	70	80	86		90.1
	Minimum	71	72	67	65	59	65	73	75	74	78	67	65	62	58	60	60	60	60	61	69	67	62	64	60	68	66	67	66	63	60	58	65.2
Northwest Plateau																																	
Chillicothe §§	Maximum	96	91	73	82	88	94	89	79	93	89	93	92	86	89	92	90	91	85	87	73	83	89	91	77	87	79	72	76	71	84	88	85.5
	Minimum	70	69	61	61	57	64	70	67	65	65	67	64	58	53	59	62	67	52	54	57	63	61	64	67	65	59	59	61	57	54	54	61.5
Grant City	Maximum	84	88	73	79	81	89	82	83	82	..	..	..	..	..	..	86	85	76	79	71	72	81	87	78	82	80	74	73	72	78	80		†79.8
	Minimum	70	70	60	62	62	67	72	68	68	..	..	..	..	..	..	67	60	55	58	61	62	61	69	68	63	58	63	62	57	53	57		†62.9
Kansas City	Maximum	89	88	71	72	82	92	94	85	95	86	93	94	86	88	91	88	91	84	88	76	85	85	89	77	83	84	76	70	71	78	82	84.3
	Minimum	75	71	63	65	67	70	79	72	70	73	73	75	68	67	70	69	67	65	65	64	67	70	72	71	68	67	63	63	61	56	64	68.1
Kidder	Maximum	92	89	76	78	83	88	88	84	93	85	90	90	85	86	90	89	92	84	80	77	81	87	88	79	82	84	75	76	71	78	82	83.9
	Minimum	72	70	60	63	62	66	75	67	66	69	68	67	59	55	61	66	62	55	58	63	63	63	68	67	64	60	62	62	58	55	57	63.3
Lexington §§	Maximum	96	93	76	81	87	95	95	90	97	92	97	99	89	93	95	93	96	89	95	80	89	92	95	82	90	91	84	74	79	82	87	89.5
	Minimum	73	71	64	64	65	67	76	73	68	69	70	70	65	59	63	68	63	61	62	66	66	65	68	69	67	64	67	64	63	54	59	65.9
Maryville	Maximum	87	90	79	79	86	95	92	85	91	90	95	91	85	84	95	90	93	79	80	76	78	85	87	81	85	85	79	78	74	80	84	85.1
	Minimum	72	69	60	63	61	61	75	67	63	68	63	64	60	56	61	67	59	53	57	63	62	66	69	69	59	57	63	62	58	51	56	62.4
Oregon	Maximum	96	93	73	78	87	97	97	85	95	94	96	95	90	92	97	92	96	84	86	74	83	82	86	75	87	88	72	82	76	82	85	86.9
	Minimum	72	70	61	63	60	70	77	67	67	72	65	71	64	61	67	69	61	52	58	65	65	67	68	68	60	59	63	62	59	53	58	64.3
St. Joseph	Maximum	93	91	73	75	83	93	92	81	94	89	93	92	85	89	92	88	93	82	82	74	79	83	89	81	84	84	72	78	73	80	83	84.5
	Minimum	74	66	62	65	65	70	75	67	69	72	69	71	66	60	67	69	64	59	59	65	64	68	69	68	66	62	63	63	60	54	58	65.5
Trenton	Maximum	89	90	84	78	84	88	91	91	93	91	92	88	82	84	92	90	91	84	81	75	73	87	89	83	85	88	86	78	76	82	85	85.5
	Minimum	72	67	66	64	59	65	76	68	66	68	70	64	59	64	64	66	58	55	55	62	63	65	64	66	66	60	64	63	58	56	64	63.8

*, †, °, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

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CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

MISSOURI SECTION

R. NUNN
ST. LOUIS, MO.

VOL. XXXVII SEPTEMBER 1933 No. 9

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

One of the strongest and most persistent periods of late-summer heat ever recorded in Missouri characterized the month of September 1933. Its severity was probably the more noticeable because it followed an August of comparatively pleasant (nearly normal) temperature. The heat and the very uneven distribution of rainfall were the principal characteristics of the month.

The average temperature for the State, 74.6°, was only 0.4° lower than the highest September average of record, which was 75.0° in 1931, and it was equal to the second highest of record, which was 74.6° in 1925. The excess of heat was somewhat greater in the northeastern quarter of the State than elsewhere, and St. Louis had an average of 77.4°, which equaled the previous highest average, 77.4° in 1897. In this St. Louis comparison the Dr. Engelmann records are used, which, with the Weather Bureau records, cover the 96-year period, 1838 to 1933, inclusive. The principal peak of the hot spell occurred about the 9th, but very high temperatures occurred as late as the 30th. There were only about four days in the month with temperatures below normal.

As in the preceding three months, the rainfall this month was very irregularly distributed. Severe drought persisted in some east-central counties, especially the St. Louis area, until late in September, while in several localities the rainfall was excessive. Generally speaking, the rainfall was decidedly deficient in the northeastern quarter and slightly deficient in the northwest, but it was quite excessive in the southeastern counties and much greater than normal in the Ozark Plateau.

River stages at Kansas City were near normal, but they were unusually low all the month in the lower Missouri and the middle Mississippi. One strong rise occurred in the Grand River, with a minor flood at Gallatin and Chillicothe on the 27-28th.

Over most of the State crops made fair to very good progress, but large areas in central and eastern Missouri suffered severely from drought and heat until about the end of the third week of the month, and it was then too late for material improvement, except for pastures, forage crops, and garden truck. The corn crop for the State was unusually short, although good to excellent in some parts of the northwestern and southwestern sections. By the end of the month, corn and sorghum grain were practically all safe from frost, and cotton (a good crop) was opening rapidly. The apple crop was fair to very good. Plowing and preparations for seeding winter grains were fairly well up.

TEMPERATURE

The monthly mean temperature for the State, 67 stations reporting, was 74.6°, or 5.4° above normal. The highest monthly mean was 78.2° at Caruthersville, and the lowest monthly mean was 68.6° at Tarkio. The highest temperature recorded was 102° at Louisiana and St. Charles on the 9th, and the lowest was 36° at Grant City on the 27th. The greatest daily range was 51° at Fayette on the 17th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 4.38 inches, or 0.32 inch more than normal. The greatest local monthly amount was 12.02 inches at Dexter, and the least local monthly amount was 0.73 inch at Bowling Green. The greatest amount in any twenty-four hours was 6.65 inches at Oregon on the 26th. The average number of days with 0.01 inch or more of precipitation was 9.

MISCELLANEOUS PHENOMENA

Auroras.—On 9th at Kansas City.

Floods.—On 27th-28th in Grand River at Chillicothe and Gallatin.

Fogs.—Dense, 3d, 4th, 5th, 14th, 15th, 27th, 29th.

(Continued on page 45)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.91	30.13	4	29.61	11	7.1	24	sw.	25	89	54	57	73
Kansas City...	29.89	30.18	20	29.64	11	7.2	24	nw.	19	76	53	53	79
St. Joseph	29.88	30.16	20	29.54	25	7.5	23	nw.	19	84	53	60	74
St. Louis....	29.92	30.12	5	29.66	11	10.5	31	sw.	25	79	53	58	62
Springfield	29.93	30.16	20	29.71	11	8.2	22	w.	28	87	64	68	62
Cairo, Ill.....	29.94	30.14	4	29.70	11	6.3	31	sw.	27	89	63	74	73
Keokuk, Iowa.	29.92	30.15	5	29.61	11	7.1	21	sw.	25	80	50	57	75

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	65.2	− 4.0	97	28	1.11	−2.95	2.59	0.20	0	4	..	..	..
1889....	64.7	− 4.5	94	32	4.66	+0.60	9.28	0.93	0	11	..	..	..
1890....	63.7	− 5.5	98	30	3.98	−0.08	14.41	1.75	0	9	..	..	..
1891....	70.6	+ 1.4	104	34	0.63	−3.43	1.85	T.	0	6	..	..	..
1892....	67.8	− 1.4	97	32	2.39	−1.67	5.20	0.00	0	4	19	6	5
1893....	69.9	+ 0.7	107	26	3.92	−0.14	8.10	0.89	0	6	17	7	6
1894....	68.5	− 0.7	101	34	4.93	+0.87	9.21	1.90	0	8	13	11	6
1895....	71.8	+ 2.6	104	24	2.45	−1.61	11.24	0.26	0	4	19	8	3
1896....	65.0	− 4.2	101	28	4.17	+0.11	8.17	1.65	0	10	11	10	9
1897....	74.3	+ 5.1	105	27	0.74	−3.32	2.70	0.00	0	2	23	5	2
1898....	70.9	+ 1.7	103	37	6.74	+2.68	14.67	3.60	0	9	15	9	6
1899....	67.4	− 1.8	108	21	2.04	−2.02	4.40	0.50	0	4	20	6	4
1900....	71.1	+ 1.9	100	29	4.81	+0.75	10.57	1.18	0	10	13	10	7
1901....	68.9	− 0.3	103	27	2.31	−1.75	7.31	0.11	0	6	18	8	4
1902....	63.2	− 6.0	95	30	4.78	+0.72	10.92	1.81	0	10	15	6	9
1903....	66.6	− 2.6	98	32	4.41	+0.35	8.58	0.72	0	8	17	6	7
1904....	69.6	+ 0.4	96	34	3.85	−0.21	9.72	0.53	0	7	16	8	6
1905....	69.6	+ 0.4	98	41	7.67	+3.61	16.34	0.55	0	10	15	6	9
1906....	71.9	+ 2.7	98	36	4.15	+0.09	9.81	0.27	0	11	15	8	7
1907....	68.9	− 0.3	101	31	1.93	−2.13	4.05	0.70	0	6	18	7	5
1908....	71.6	+ 2.4	99	28	1.80	−2.26	4.42	T.	T.	4	18	8	4
1909....	68.7	− 0.5	105	28	4.62	+0.56	12.04	0.69	0	8	18	6	6
1910....	69.5	+ 0.3	97	34	5.58	+1.52	11.41	0.88	0	10	14	6	10
1911....	73.7	+ 4.5	105	39	7.13	+3.07	14.95	2.09	0	11	13	7	10
1912....	68.6	− 0.6	105	27	3.06	−1.00	5.93	0.56	T.	6	17	5	8
1913....	69.4	+ 0.2	109	27	4.63	+0.57	10.82	1.26	0	9	13	7	10
1914....	69.6	+ 0.4	99	35	6.27	+2.21	16.17	2.20	0	9	15	8	7
1915....	70.6	+ 1.4	98	34	5.25	+1.19	12.24	0.71	0	7	16	7	7
1916....	67.8	− 1.4	101	27	2.94	−1.12	5.69	1.14	0	6	19	7	4
1917....	67.9	− 1.3	101	33	2.78	−1.28	5.23	0.05	0	5	19	6	5
1918....	62.3	− 6.9	96	29	4.73	+0.67	9.69	1.73	0	7	17	6	7
1919....	71.4	+ 2.2	104	38	3.29	−0.77	8.66	0.30	0	5	20	6	4
1920....	70.0	+ 0.8	100	31	4.81	+0.75	9.06	0.96	0	9	17	7	6
1921....	73.4	+ 4.2	104	34	7.03	+2.97	14.95	0.95	0	13	13	9	8
1922....	71.7	+ 2.5	107	31	3.31	−0.75	8.22	0.15	0	5	21	5	4
1923....	68.7	− 0.5	98	33	4.47	+0.41	11.83	1.23	0	11	12	9	9
1924....	64.0	− 5.2	96	29	3.77	−0.29	8.92	1.55	0	8	14	8	8
1925....	74.6	+ 5.4	110	45	6.46	+2.40	14.55	2.39	0	10	14	6	10
1926....	69.3	+ 0.1	97	27	8.79	+4.73	18.04	1.80	0	13	12	7	11
1927....	71.6	+ 2.4	102	29	3.71	−0.35	9.82	1.57	0	8	17	7	6
1928....	65.0	− 4.2	95	28	2.61	−1.45	9.04	0.00	0	5	20	7	3
1929....	67.4	− 1.8	98	33	3.20	−0.86	7.32	0.88	0	8	18	10	7
1930....	71.3	+ 2.1	105	37	4.18	+0.12	12.87	0.74	0	8	16	7	7
1931....	75.0	+ 5.8	104	36	4.16	+0.10	10.80	0.46	0	7	19	7	4
1932....	67.8	− 1.4	99	33	2.36	−1.70	11.06	0.24	0	6	17	8	5
1933....	74.6	+ 5.4	102	36	4.38	+0.32	12.02	0.73	0	9	16	8	6
Period.	69.2	.....	110	21	4.06	.....	18.04	0.00	T.	8	16	7	7

Climatological Data for September 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	75.0	+ 8.0	97	8†	46	27	39	1.83	−2.66	0.45	0	11	15	9	6	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	75.4	+ 6.8	98	11	45	27	40	1.67	−2.78	0.45	0	8	21	5	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	74.4	+ 6.2	96	8	49	27	37	3.92	−0.43	1.21	0	10	15	10	5	sw.	U. S. Weather Bureau
Downing	Schuyler	876	12	73.0	+ 5.4	97	9	41	27	37	2.69	−2.91	1.89	0	9	18	7	5	sw.	James Taylor
Elsberry	Lincoln	449	2	73.0	.....	97	9†	38	21	47	2.68	.....	0.86	0	6	13	10	7	s.	Ray E. Mills
Fayette	Howard	661	53	73.5	+ 5.4	100	9†	45	27†	51	0.76	−3.99	0.33	0	8	..	..	..	.....	J. D Settle
Fulton	Callaway	818	45	74.5	+ 5.6	98	11	46	21	43	3.83	−0.46	1.67	0	9	17	10	3	sw.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	2.01	−2.65	0.90	0	7	15	5	10	sw.	J. W. Pulliam
Hannibal	Marion	759	41	75.6	+ 7.9	98	8†	46	27	38	2.38	−1.59	0.71	0	8	17	5	8	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	43	75.4	+ 6.1	98	9†	50	21†	40	3.20	−0.33	1.70	0	9	13	11	6	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	72.5	+ 6.2	96	9†	40	27	39	1.31	−3.15	0.64	0	6	20	2	8	s.	Prof. J. S. Stokes
Louisiana	Pike	469	39	74.6	+ 6.6	102	9	39	21	47	2.59	−1.49	1.10	0	5	18	9	3	s.	Stark Bro's Nurseries
Macon	Macon	875	34	73.6	+ 5.7	99	9	42	27	39	1.68	−2.62	0.67	0	9	17	9	4	w.	W. C. Brown
Mexico	Audrain	800	44	74.6	+ 6.1	100	8†	46	21†	43	2.35	−2.25	1.47	0	6	19	5	6	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	.. .	.....	...	..	..	..	..	1.81	−2.20	0.57	0	7	17	6	7	ne.	J. S. Conway
St. Charles	St. Charles	431	45	77.6	+ 9.3	102	9	55	27	40	5.66	+2.35	2.95	0	10	9	16	5	sw.	Martin L. Comann
St. Louis	**St. Louis City**	568	60	77.4	+ 6.9	99	10	56	27	26	2.60	−0.86	0.74	0	9	16	5	9	s.	**Section Center**
St. Louis University	St. Louis City	578	21	76.6	+ 6.4	97	8†	56	21†	29	3.16	−1.08	0.85	0	10	18	7	5	s.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	1.80	−2.28	0.62	0	9	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	35	72.4	+ 3.4	96	10	42	27	42	2.24	−2.13	0.90	0	8	19	7	4	s.	Frank Hall
Unionville	Putnam	1,062	40	73.2	+ 6 1	100	9	38	27	39	7.37	+2.44	5.60	0	6	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	76.5	+ 7.5	98	8†	51	27	34	4.11	+0.09	1.30	0	8	12	11	7	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	73.7	+ 6.1	97	9	46	27	36	2.25	−1.59	1.14	0	8	14	8	8	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**74.6**	**+ 6.4**	**102**	**9**	**38**	**21†**	**51**	**2.61**	**−1.48**	**5.60**	**0**	**8**	**16**	**8**	**6**	**sw.**	
Southeast Lowlands																				
Campbell††	Dunklin	314	7	75.5	.....	98	10	47	21	41	4.98	.....	1.65	0	10	15	6	9	s.	Jeff. King
Caruthersville	Pemiscot	265	37	78.2	+ 3.7	94	10†	54	20	32	8.39	+5.25	1.70	0	13	13	4	13	.....	Sam Smith
Doniphan	Ripley	344	29	76.6	+ 5.4	98	9	48	22	40	6.49	+2.77	1.40	0	13	12	7	11	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	76.4	+ 6.3	99	10	45	21	40	5.36	+1.58	1.91	0	10	11	3	16	s.	John G. Putz
Marble Hill	Bollinger	470	38	77.1	+ 6.4	100	9	44	21	43	6.95	+3.21	1.70	0	9	13	12	5	w.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	11.12	+6.36	3.84	0	10	18	4	8	s.	John A. Spence
Poplar Bluff	Butler	339	28	76.0	+ 4.3	95	9	47	21	41	6.86	+3.07	1.38	0	12	16	5	9	s.	J. H. Wolpers
Sikeston	Scott	318	26	77.1	+ 6.0	94	7†	47	21	38	11.23	+7.90	3.15	0	11	14	12	4	s.	John A. LaFont
Cairo, Ill	Alexander, Ill	358	61	77.1	+ 5.6	93	9	54	21	26	7.81	+4.92	2.41	0	10	14	7	9	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**76.9**	**+ 5.4**	**100**	**9**	**44**	**21**	**43**	**7.54**	**+4.16**	**4.08**	**0**	**11**	**14**	**7**	**9**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	52	73.2	+ 5.6	92	10	46	21	36	7.57	+3.83	2.49	0	11	12	7	11	s.	Arcadia College
Birchtree (near)	Shannon	1,000	38	74.2	+ 4.4	92	8†	49	21	35	5.53	+1.90	1.62	0	13	15	7	8	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	2.77	.....	1.39	0	7	19	7	4	.....	C. M McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	3.93	.....	1.35	0	9	14	10	6	sw.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	29	73.2	+ 2.2	95	17	42	20	43	4.47	+0.54	0.95	0	8	16	4	10	sw.	H. E. Dean
Eldon	Miller	934	38	74.0	+ 4.6	95	11†	50	21†	41	9.42	+5.33	3.80	0	10	11	10	9	s.	E. H. Shepherd
Farmington	St. Francois	918	22	77.6	+ 8.0	98	7	40	21	45	8.68	+5.31	6.08	0	6	18	8	4	sw.	H. O. Miller
Goodland	Iron	1,000	40	76.9	+ 9.1	95	8†	52	21	33	3.87	+0.05	2.15	0	5	14	8	8	s.	F. M. Adams
Greenville	Wayne	381	24	74.4	+ 3.6	95	8†	41	21	42	5.85	+2.71	1.83	0	9	14	8	8	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	4.60	+0.48	1.37	0	9	15	8	7	e.	A. W. Madison
Koshkonong	Oregon	958	32	75.8	+ 4.4	91	9†	58	20	26	5.20	+1.52	1.10	0	11	10	9	11	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	74.0	+ 4.6	95	7†	45	19	39	8.17	+3.92	1.80	0	7	16	6	8	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	74.4	+ 3.5	92	23	51	20	34	5.99	+1.43	2.06	0	7	17	9	4	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	73.9	+ 5.0	92	9	50	21	30	4.06	−0.18	0.79	0	13	16	10	4	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	74.6	+ 4.1	93	17	44	20	40	6.69	+2.30	2.44	0	9	18	7	5	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	75.4	+ 6.7	96	25	50	21	35	3.99	+0.08	1.75	0	8	13	7	10	se.	F. H. Lane
Salem	Dent	1,173	29	74.2	+ 5.0	96	18	44	21	39	3.62	−0.46	1.37	0	8	13	10	7	s.	E. E. Martin
Seligman	Barry	1,542	32	75.0[a]	+ 5.4	90	10†	52	21	31	6.40	+2.03	1.22	0	11	17	5	8	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	27	71.8	+ 3.0	91	17	45	20	36	5.89	+1.42	1.26	0	10	17	5	8	sw.	A. L. Hailey
Springfield	Greene	1,324	45	74.4	+ 5.5	91	18	54	27	27	7.02	+3.50	2.36	0	11	15	7	8	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	75.8	.....	98	9	49	20†	36	8.09	.....	3.96	0	13	16	6	8	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**74.6**	**+ 5.0**	**98**	**7†**	**40**	**21**	**45**	**5.75**	**+1.90**	**6.08**	**0**	**9**	**15**	**8**	**7**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	74.8	+ 4.4	95	18	48	27	36	3.41	−0.71	1.14	0	7	10	17	3	sw.	W. G. Bigelow
Clinton	Henry	765	40	77.0	+ 6.2	100	17†	47	27	38	6.39	+2.33	2.30	0	10	15	11	4	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	74.0	+ 5.5	99	10	43	27†	40	2.30	−2.28	0.84	0	8	16	5	9	s.	John H. Patterson
Lamar	Barton	980	45	75.0	+ 4.2	94	17†	50	20†	39	5.48	+0.96	1.62	0	6	18	4	8	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	74.8	+ 4.6	98	10†	46	27	39	5.81	+1.19	3.53	0	8	20	5	5	se.	J. E. Wheeler
Marshall	Saline	779	46	75.8	+ 7.0	97	8†	45	27	37	1.34	−3.80	0.61	0	6	20	7	3	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	75.0	+ 5.5	94	23	48	20†	33	4.58	+0.28	1.55	0	8	16	8	6	s.	George A. Kaupp
Warrensburg	Johnson	878	46	75.1	+ 4.9	100	9	44	27†	38	6.21	+2.42	3.93	0	11	20	6	4	sw.	E. A. Markey
Warsaw	Benton	687	32	75.8	+ 5.3	97	18	48	20	42	5.47	+0.75	1.90	0	12	15	7	8	s.	Everett Martin
Division means	**and extremes**	.....	..	**75.3**	**+ 5.3**	**100**	**9†**	**43**	**27†**	**42**	**4.30**	**−0.07**	**3.93**	**0**	**8**	**17**	**8**	**5**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	72.1	+ 5.0	96	9	40	27	41	5.32	+1.16	4.66	0	5	21	6	3	s.	A. S. Cumming
Chillicothe	Livingston	779	24	72.8	+ 4.2	99	9†	39	27†	49	2.07	−3.61	0.61	0	9	21	6	3	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	73.0	+ 5.8	96	9	40	27	31	5.22	+1.10	4.55	0	7	16	10	4	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	73.0[a]	+ 5.1	95	9†	41	27	38	2.70	−1.10	0.85	0	8	21	3	6	s.	Fred L. Stiff
Grant City	Worth	1,134	29	69.6	+ 2.6	92	8†	36	27	35	4.28	+0.02	2.96	0	9	11	12	7	sw.	Howard Rybolt
Kansas City	Jackson	963	44	75.7	+ 6.8	95	11	47	27	26	2.69	−1.87	1.78	0	6	15	10	5	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	72.2	+ 4.9	96	11	40	27	36	2.81	−1.76	1.05	0	7	19	6	5	s.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	5.34	+0.72	3.79	0	7	12	12	6	sw.	John M. Martin
Lexington	Lafayette	688	48	76.0	+ 7.2	100	10†	44	27	38	3.71	−1.03	2.55	0	6	20	7	3	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	72.6	+ 7.0	99	9	38	27	41	5.21	+0.71	2.94	0	10	18	7	5	s.	J. R. Brink
Oregon	Holt	1,048	77	74.4	+ 7.3	100	9	39	27	36	8.50	+4.59	6.65	0	7	22	4	4	sw.	Mina Wright
St. Joseph	Buchanan	987	23	73.4	+ 4.4	96	11	43	27	36	3.44	−1.56	1.49	0	12	15	11	4	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	30	68.6	+ 2.3	94	9†	39	27	33	4.55	+0.71	1.81	0	7	18	7	5	se.	Albert Volker
Trenton	Grundy	822	37	73.6	+ 6.4	97	8†	40	27	41	2.85	−1.68	1.29	0	7	17	10	3	s.	W. H. Estes
Division means	**and extremes**	.....	..	**72.8**	**+ 5.3**	**100**	**9†**	**36**	**27**	**49**	**4.15**	**−0.30**	**6.65**	**0**	**8**	**18**	**8**	**4**	**s.**	
State means	**and extremes**	.....	..	**74.6**	**+ 5.4**	**102**	**9**	**36**	**27**	**51**	**4.38**	**+0.32**	**6.65**	**0**	**9**	**16**	**8**	**6**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for September 1933

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi													.42		.09				.10			.03				.03	.87					1.54
Boonville	Missouri		.24											.12	.09					.25	.01		T.	.12	.12			.68					1.63
Bowling Green	Mississippi															.13								.08	.10			.40		.02			0.73
Brunswick	Grand		.04											.30	.06	.03	.05			.45			.20	.02	.38			.25	.05				1.83
Canton	Mississippi		.05										.70	.07	.45		.02			.07			.07	.03			.54	.88		.01			2.89
Clifton Hill	Chariton		.15											.30		.06				.45				.29			.25	.15			.02		1.67
Columbia***	Missouri		.18										.70	.53	T.	.01				.15			.38	.57		T.	1.21	T.	.01	T.	.18		3.92
Downing	Mississippi		.22										.13	.18		.03	.05			.08			.09		T.		1.89				.02		2.69
Edina	....do		.57											.14	.21	T.				.10				T.			.17	.48					1.67
Elsberry	....do	.17	.08										T.		.85					T.			T.	.43			.29	.86	T.				2.68
Farber	....do														.27									.83	T.			.86					1.96
Fayette	Missouri		.03											.03	.07					.33	.02		.02				.02	.24					0.76
Fulton	....do		.18											.02	.95	.03				.13				.61	.02		T.	1.67	.22				3.83
Gorin	Mississippi		.33										.16	.21						.13			.20				.90				.08		2.01
Hannibal	....do		.71											T.	.06				.05	.02			.10	T.		T.	.50	.58			.36		2.38
Hermann	Missouri		.27	.13	T.									.40	.41	.30	.02				.12			.69	.43		.02	1.72	.05				4 56
Jefferson City	....do		.20											.21	.17	.04				.04	.03			1.70	.72			.09					3.20
Kahoka	Mississippi		.28									.33				.18				.04			.17					1.10					2.70
Kirksville	....do												.06	.07									.36				.64	.15			.03		1.31
LaBelle	....do	*.32											1.53	.08	.03					.05			.40	.04			.05		.48				2.98
Linneus	Grand											T.	1.40	.16	.07	T.			.53				.10	T.	.10	.19					.01		2.56
Louisiana	Mississippi													.37									.22	.50			1.10				.40		2.59
Lucerne	Grand		.16											.40	.06	.08				.07							2.25	2.10					5.12
Macon	Chariton		.05											.67	.05	.02				.27			.04	.06	.04			.48					1.68
Memphis	Mississippi		.46											.14	T.	T.	T.			T.			.31	T.			.70	.66					2.27
Mexico	....do		.11											T.	T.	.02				.15			.13	.47				1.47					2.35
Milan	Grand		.21											.23	T					.34					.20		.44	.47		.08			1.97
Monroe City	Mississippi			.51										.05	.17					.03						T.	.26	.57			.22		1.81
New London	....do		.09	.41										T.	T.	T.				T.				.22			.04	1.24					2.00
Palmyra	....do		.07	.03										.07	.14	.03				.19				T.			.35	.65					1.53
Paris	....do													.84						.12								1.00					1.96
Perry	....do		.08											.08	T.									.55	.12			.64					1.47
Philadelphia	....do																										1.28	.05					1.33
St. Charles	Missouri	T.	.20	T.									T.	.69	.54	.02				.27				.43			.50	2.45	.10		.46		5.66
St. Louis*	Mississippi		.11	T.									T.	T	.50	T.			T.	T.			.13	.64		T.	.73	.01	.16	.01	.31		2.60
St. Louis University*	....do		.06	.01									T.		.71	.01			T.	T.			.18	.70		T	.85		.12	.01	.51		3.16
Shelbina	....do		.23										T.	.32	.08		T.			.14			.22	.05		.01	.13	.62			T		1.80
Steffenville	....do		.35										T.	.25						.10			.05	.10		.14	.35	.90					2.24
Troy	....do		.20	.14										.10	.85	.14								.59	.18		.03	1.98	.02	.07			4.30
Union	Meramec		.32	.16	.09								.35	.16	.11	.03	.04			.13				.85	.28		.01	.60	.71	.04			3.88
Unionville	Chariton		.75										T.	.80	.02	.05				.15							5.60						7.37
Valley Park	Meramec		T.		.10								.10	.05	.10	.10	.02			T.	T.			.70	.14	T.	T.	.70	.30	T.			2.31
Warrenton	Mississippi		.54										.15		1.30					.04				.60		T.	.10	1.16	.22				4.11
West Ely	....do		.16	T.										.09	.34					.04							T.	1.12					1.75
Winfield	....do		.30												.50	.18								.50	.16			1.45					3.09
Keokuk, Ia.***	....do		.18										T.	.05	.05	T.	.01	T.		.05			.28			.73	.95			T.		2.25
Southeast Lowlands																																	
Bragg City	St. Francis		.73	.90	1.30								.61														.37	.90	.60					5.41
Campbell	....do		.63	1.65									.17	.10	.16	.17	.76												.62	.36	.36			4.98
Cape Girardeau	Mississippi			.12	.86									1.97	.02	.02											.12	.01	.81	1.19	.74			5.86
Caruthersville	....do	.33	.54	.82	1.70								.90	.40	.55	.37				.07							1.00	1.15	.47		.09		8.39
Dexter	St. Francis			1.77	4.08	.88								.14	.60						T.						.25	2.00	.30	2.00			12.02
Doniphan	Black	.15	1.40	.35	.38									.71	.25	.62	.07		.62								.62		.22	.80	.30	T		6.49
Fisk	St. Francis		.04	.08	.21	T.									.73	.14	T.			.17	T.						.63		1.13	.43	.64			4.20
Jackson	Mississippi		.08	.22	.20								1.54		.33	.66											.15		.18	1.91	.09			5.36
Marble Hill	....do		.26	.36	.22									1.70	.98	.26											.85		.74	1.58				6.95
Morehouse	....do		.98	1.90	.70									.04	.92	.01			T.								.98		3.84	1.70	.05			11.12
New Madrid	....do			.70	1.45	.97									.30	.45	.36			.02		.06					.40		.84	.56	1.16			7.27
Parma	St. Francis			.18	2.97	.65									.92	.15				.10									.90		.78			6.65
Poplar Bluff	Black		.10	.90	1.38									1.05	.11	T.				.82		.12					1.09	.06	.30	.08	.85			6.86
Sikeston	Mississippi		.55	.12	3.15										.65				.17								.74	.02	2.80	.15	2.38		.50		11.23
Cairo, Ill.***	.. .do		.28	1.81	.61								.12	.07		T.				T.							.70	.04	.01	1.93	2.24				7.81
Ozark Plateau																																	
Arcadia	St. Francis		.19	.40	.68	.22								T.		1.63	.09		T.	.02		T.				T.		.05	T.	1.80	1.18	1.31			7.57
Birchtree (near)	Black	.46	.65	.54	.32							.32	.12	.14	.15	.15		1.62	.03						.25					.78				5.53
Buffalo	Osage		.41	.25	.09									.19															1.39		.37	.07		2.77
Caplinger Mills	....do	.15	1.35	T.										.10	.15	.04				.20							.63		1.16	T.		.15		3.98
Dean	Neosho	.85	.95	.70											.32												.09	.12	.74	T.	.70			4.47
Eldon	Missouri		.67	.82	.05									2.59	.61	.06								3.80	.38				.91		.03			9.42
Farmington	St. Francis	T.	.06	.31	.88								.11	1.24														T.	T.	6.08					8.68
Fredericktown	....do			.32	1.05	.10								.98	.68	1.15													.18	**	2.42	.10		6.98
Galena	White		.52	.65	.25																							.15	.20		1.25			3.02
Goodland	Black		.35	.26	1.06																										2.15	.05			3.87
Greenville	St. Francis	.44	.35	.45	.78								.26	.43															1.83	1.22	.09			5.85
Hailey	White	.20	1.37	.69									.44	T.						.21							.07	.37	.63	.62		T.		4.60
Koshkonong	Black	.65	1.00	.10	.10								1.10	.42	.74													.37		.05	.28	.39			5.20
Lakeside	Osage		1.00	.07	.04								.02	.05	.31	.01	T.	.12		.03	.01			1.96	.10		.05	.79	.01	.04			4.61
Lebanon	....do		1.41		1.23							1.36	.94	.90	T.								T.					1.80	T.	.53			8.17
Leeper	Black		.53	.12	1.21	T.							.16	1.55	.24	.49			.28								.32	.02	2.03	.19	.67			7.81
Lockwood	Osage	.40	2.06	.23									T.	T.	.15					T.							T.	.50	1.10	1.55				5.99
Mountain Grove	White		.69	.79	.03							.30	.33	.05	.09				.72								.08	.29	.11	.42	.16			4.06
Neosho	Neosho	.47	1.25	.53	T.									.94	T.						T.						.27	.13	2.44	.05	.61			6.69
Owensville	Gasconade			.10	.45									.77	.11												1.20	.17	.20		.25			3.25
Rolla	Meramec		1.75		.45								T.	.12	.48									1.20						.69	.19	.16			3.99
St. Thomas (near)	Osage		1.50											.98	.30						.11			3.68						.39	.06				7.02
Salem	Meramec			.41	.25	1.37							T.	.08														.20	.34	.95	.02			3.62
Seligman	Neosho	.57	.95	1.22									.64	.22	.63												.14	.05	1.16	.06	.76			6.40
Seymour (near)	White	.05	1.26	.19	.19							.97		.69	.47													.27		1.22	.58			5.89
Springfield***	....do	T.	2.36	.25	.03							.37		.80	.08												.01	.02	1.66	T.	1.39		.05		7.02
Stover	Missouri		1.11		.10									.17	.43	.02				.13			T.	2.42	.10			.48	.83				5.79
Versailles	Osage		.96	.14									1.71	.15	.15	.04	T			.17			T.	3.96		.04	.52	.16	.07	.02			8.09
Williamsville	Black		.15	.17	1.87	.06							.22	.69	.42	.04	.01		.43							.52	.03	1.50		1.44	.04			7.59
Willow Sprgs. (near)	White	.32	.89		1.14	.10									.37	.18			.76		T.					.06		.23		.63				4.68
Southwest Plain																																	
Appleton City	Osage	T.	.36											.07	T.	T.				.35				.92			.52	.05	1.14					3.41
Clinton	.... do	.10	.80	.05										.28	.03					.08			.02	2.30			1.63		1.10					6.39
Concordia	Missouri													1.45	.35					.32				.22				.53						2.87
Harrisonville	Osage		.20											.61	.03					.30				.84	.07			.15		.10				2.30

Continued on next page

Daily Precipitation for September 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													To
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																	
Joplin‖‖	Neosho	1.11	1.60	.11										.43	.07											T.	1.50	T.	.15	.03	.09		5
Lamar‖‖	do		1.62	1.55										.35	.41													.95	T.	.60			5
Lamonte	Missouri		.10										1.06	.46	.04					.18				3.53			.40		.04			5
Marshall	do			T.									T.	.61	T.					.32				.05			.04	.27			.05	1
Nevada	Osage	.23	1.34											.44						.24				T.			1.55	.02	.69	.07			4
Warrensburg	Missouri		.02										.40	.78						.18				3.93	.05		.20	.24	.09	.02	.30		6
Warsaw	Osage		1.15		.06									.12	.48		.01	T.		.10	.07			1.90	.25	T.		.52	.01	.80			5
Waverly ‖‖	Missouri		.18											1.60	.05	.07				.27				.10			T.	.35	.05				2
Northwest Plateau																																	
Bethany	Grand												.19		.03					.35					.09		4.66						5
Chillicothe‖‖	do													.60	.08	.09				.61				.09	.11	.19	.03	.27					2
Conception	Missouri		.15	T.									.06	.14	T.		.11			.16					.05		4.55						5
Edgerton	do												.75	.53	.01	T.				.85			.10		.05		.38				.03		2
Gallatin ‖	Grand												1.21	.52	.03	.03				.36						.40	.35	.68					3
Grant City	do	.04											.63	.14	.01	.03	.06			.11					.30		2.96						4
Kansas City***	Missouri		T.	T.									1.55	.24	.01	T.				.68			.12			T	.09	T.	T.				2
Kidder	Grand												1.05	.07	.02					.55			T.		.25	.15	.72				T.		2
King City	Missouri		T.									.11		.40	.10	.05				.38					.51		3.79						5
Lexington ‖	do													2.55	.25					.38				.06			.02	.45					3
Maryville‖‖	do		.18										.62	.86	.06	.08	.08			.08						.09	2.94	.22					5
Oregon	do		.22										.97	.13			.03			.32					.18		6.65						8
St. Joseph***	do	T.	.06	T.									.21	.01	.02	.01	.05			.68			.05		.85	.05	1.44				.01		3
Tarkio	do	.31											.76	1.05			.34			.15					.31		1.63						4
Trenton	Grand		.13									T.		.70	.03	.06	T.			.62			T.		.02		1.29						2

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of obs
vation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of f
not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for September 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.186	.176	.038	.030	.204	.185	.210	.223	.207	.195	.219	.224	.131	.128	.055	.084	.225	.180	.242	.200	.228	.310	.320	.190	.284	.154	.219	.123	.040	.067	....	5.
	Mean temperature	74	73	70	76	76	77	78	78	78	78	79	80	77	70	72	78	82	82	77	66	68	76	80	78	78	80	65	65	68	75	..	7
	Wind movement	39	62	45	42	48	35	39	38	35	34	41	51	48	75	55	39	61	34	50	77	72	68	97	75	89	102	97	48	43	73	..	1,

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from Page 42

Frosts.—Light, locally on the 27th in Northwestern Plateau.

Hail.—Light, on 24th at St. Joseph and 26th at Oregon.

Halos.—Solar, 2d, 28th, 29th; lunar, 28th, 29th.

Thunderstorms.—Local, 1st, 2d, 3d, 16th, 18th, 19th, 24th, 25th; more or less general, 11th, 12th, 13th, 22d, 23d, 26th, 27th, 28th, 30th.

Windstorms.—No damaging winds reported.

SPECIAL STORM NOTES

An electric storm at Warrensburg on the 23d burned several buildings. A severe electric storm on the 26th at Oregon did some minor damage to transformers, etc. Creeks out in bottoms at Bethany on the 26th.

ERRATA

August 1933, page 37, Pressure, Humidity, Sunshine, and Wind data table; date lowest reduced pressure at Springfield should be 24.

RETIREMENT OF MR. LOUIS C. SAEGER

The Weather Bureau Climatological Service loses one of i most valued Cooperative Observers in the retirement of M Louis C. Saeger, who has kept a faithful and unbroken dai record of the weather at St. Charles, Mo., for the last 45 year Mr. Saeger gave up the work reluctantly, and only because change of residence and removal to another State. He has ke his records in excellent and permanent form, carefully copie into three bound volumes, and he turned over these valuab volumes to his successor, Mr. Martin L. Comann, editor of th St. Charles Cosmo-Monitor, who took up the work on Septen ber 12, 1933. For faithful and long-continued service, M Saeger's career as Cooperative Observer is outstanding, not on in Missouri but in the United States.

Daily Temperatures for September 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	90	94	85	90	93	94	96	97	96	97	96	87	77	68	75	86	94	96	87	79	88	85	87	91	87	83	71	78	78	90	..	87.2
	Minimum	63	66	65	62	65	65	66	68	65	65	68	65	66	58	60	67	55	66	71	54	53	64	66	71	73	56	46	57	53	69	..	62.9
Columbia	Maximum	91	83	80	90	93	94	94	96	95	96	96	79	84	66	76	89	92	95	84	78	88	90	83	89	85	84	71	77	76	90	..	86.1
	Minimum	65	65	65	62	65	67	66	66	64	65	70	65	65	60	63	68	57	67	63	52	51	65	66	70	71	55	49	61	59	59	..	62.7
Fayette	Maximum	94	86	83	95	96	97	97	99	100	99	100	86	84	65	79	91	99	99	86	83	91	92	89	93	87	81	77	81	80	93	..	89.4
	Minimum	55	62	61	56	58	60	59	59	59	61	64	63	63	59	60	62	48	53	63	49	46	48	66	66	68	70	45	45	49	50	..	57.6
Hannibal	Maximum	90	87	81	91	95	97	96	98	98	98	98	89	86	73	73	89	94	96	84	80	89	90	85	94	88	87	70	77	76	92	..	88.0
	Minimum	62	70	66	65	64	68	68	68	69	67	69	62	67	59	60	65	58	59	73	55	51	64	67	70	70	57	46	56	54	65	..	63.1
Jefferson City §§	Maximum	90	83	80	90	91	94	94	95	98	97	98	83	89	70	80	95	95	97	87	84	89	96	88	90	87	87	77	77	79	90	..	88.3
	Minimum	60	66	65	62	61	67	67	66	65	66	68	69	68	63	63	63	59	65	71	53	50	56	64	65	69	73	50	51	56	58	..	62.6
Kirksville	Maximum	91	86	84	90	91	91	93	94	96	95	95	80	75	60	70	81	92	96	89	79	88	80	85	82	88	84	73	80	81	87	..	85.2
	Minimum	60	61	63	63	62	65	63	66	66	64	69	59	59	55	57	62	57	57	71	50	50	63	61	63	66	54	40	53	51	65	..	59.8
Louisiana	Maximum	93	90	87	95	96	97	100	100	102	100	100	86	88	72	75	90	92	95	85	86	85	86	85	90	89	88	75	78	75	75	..	88.5
	Minimum	55	70	63	58	60	60	60	62	60	60	68	62	69	62	62	64	48	48	75	54	39	64	67	70	72	70	50	52	47	66	..	60.6
Macon §§	Maximum	92	89	84	92	94	95	97	97	99	97	98	80	78	62	73	88	93	97	83	78	88	87	85	93	88	80	72	80	80	92	..	87.0
	Minimum	59	62	62	62	63	66	63	68	66	65	68	62	62	57	57	60	54	59	59	51	51	59	65	68	70	72	42	46	50	54	..	60.1
Mexico §§	Maximum	90	86	89	92	95	97	98	100	98	99	100	86	85	73	79	90	94	98	85	78	89	89	90	91	85	87	75	79	79	92	..	88.9
	Minimum	60	64	63	59	62	62	63	61	63	67	68	63	65	60	60	62	52	60	65	50	46	58	65	67	69	72	46	47	52	57	..	60.3
St. Louis	Maximum	87	83	81	90	91	93	96	97	98	99	94	86	92	74	78	93	95	92	89	80	86	89	78	91	86	81	73	70	77	91	..	87.0
	Minimum	68	71	72	71	69	72	73	75	76	76	74	67	70	66	64	68	70	70	68	61	60	63	66	69	72	60	56	60	59	66	..	67.7
Unionville	Maximum	90	88	89	90	92	94	94	95	100	98	98	86	76	66	70	85	90	95	86	80	86	80	86	87	88	92	90	84	74	80	..	86.8
	Minimum	60	60	64	62	61	67	65	65	67	66	70	58	56	52	60	60	60	56	65	50	50	65	60	62	70	55	38	50	50	68	..	59.7
Warrenton	Maximum	90	83	81	90	92	92	95	98	95	98	95	91	85	83	73	91	92	94	90	80	87	91	88	92	86	83	77	72	77	90	..	87.7
	Minimum	63	69	66	64	66	70	69	71	70	70	71	65	69	63	63	67	63	66	73	55	53	66	65	68	69	73	51	58	57	67	..	65.3
Southeast Lowlands																																	
Campbell	Maximum	93	85	89	80	88	90	95	93	96	98	89	89	91	88	81	95	92	94	95	83	83	85	86	94	84	85	78	74	74	86	..	87.8
	Minimum	61	66	67	64	65	64	64	63	66	67	67	67	69	65	67	67	71	64	69	55	47	51	56	53	67	69	60	60	64	61	..	63.2
Caruthersville	Maximum	88	85	88	74	87	89	92	92	93	94	91	88	91	91	88	94	93	92	93	86	81	88	87	91	90	87	79	71	76	90	..	87.6
	Minimum	70	70	71	71	70	70	71	73	72	74	73	73	70	74	73	73	72	73	61	54	60	60	62	70	73	70	65	66	68	66	..	68.9
Doniphan	Maximum	82	83	81	81	83	93	95	97	98	95	95	91	95	91	89	92	95	94	95	85	86	88	90	92	88	88	82	70	80	90	..	88.8
	Minimum	63	69	65	67	64	68	65	68	64	67	66	69	69	68	70	68	69	65	69	56	54	48	54	62	61	68	64	64	64	62	..	64.3
Jackson	Maximum	88	86	82	83	91	94	92	98	98	99	91	89	89	89	81	93	93	93	92	86	85	89	92	92	88	86	82	71	76	89	..	88.6
	Minimum	65	66	72	71	65	68	67	65	64	65	65	64	70	63	63	65	71	66	72	55	45	55	64	57	66	73	60	59	64	65	..	64.3
Poplar Bluff	Maximum	87	81	84	86	91	92	93	93	95	94	91	86	90	90	85	94	93	91	91	85	88	85	88	90	83	86	76	69	70	89	..	87.2
	Minimum	63	70	72	69	67	65	64	65	67	66	67	68	68	68	69	68	67	65	70	56	47	52	63	58	68	69	62	64	65	64	..	64.9
Sikeston	Maximum	89	82	81	82	89	92	94	94	94	94	92	89	90	92	84	94	94	93	94	84	85	88	89	93	87	87	80	70	74	90	..	88.0
	Minimum	64	71	69	62	69	76	67	68	70	70	70	70	70	70	69	69	72	67	72	56	47	55	60	58	69	72	62	62	66	65	..	66.2
Cairo, Ill	Maximum	87	82	80	78	86	88	91	90	93	92	89	85	87	88	83	91	90	90	91	80	80	84	86	89	85	84	77	69	73	87	..	85.2
	Minimum	67	71	71	72	72	70	73	72	73	73	73	72	71	71	70	78	74	72	75	62	54	61	65	64	69	74	61	62	65	67	..	69.0
Ozark Plateau																																	
Arcadia §§	Maximum	79	78	79	80	84	84	89	89	89	92	87	87	86	81	84	90	84	89	85	80	82	85	87	89	84	85	73	66	73	87	..	83.6
	Minimum	60	63	68	68	66	60	61	61	62	63	64	67	70	69	66	66	69	64	67	57	46	50	64	63	67	69	57	57	57	60	..	62.7
Birchtree	Maximum	85	78	75	80	87	90	91	92	92	92	90	87	84	84	86	90	92	91	86	82	84	86	86	88	80	83	77	70	68	78	..	84.5
	Minimum	64	65	70	70	67	63	64	63	64	65	66	67	66	69	68	71	68	65	62	56	49	58	62	60	58	72	60	57	65	66	..	64.0
Eldon §§	Maximum	88	79	74	86	90	90	92	92	94	94	95	90	85	70	77	86	94	95	83	82	87	93	89	91	85	85	75	75	76	90	..	86.1
	Minimum	58	62	65	63	63	65	65	65	65	66	68	69	68	63	62	62	62	66	70	54	50	52	63	64	64	72	50	50	55	56	..	61.9
Farmington	Maximum	87	84	84	83	95	93	98	95	96	96	94	93	91	87	94	94	94	92	89	81	85	89	90	89	87	87	78	80	86	88	..	89.3
	Minimum	62	64	65	70	70	72	76	75	75	77	73	64	70	72	72	70	70	72	72	50	40	50	60	61	60	73	65	60	60	60	..	66.0
Koshkonong	Maximum	83	78	75	82	84	87	90	90	91	91	88	88	85	85	84	89	90	91	91	78	74	85	85	86	82	87	78	74	71	86	..	84.3
	Minimum	67	66	70	70	68	68	70	67	71	71	69	68	69	67	71	71	72	71	72	58	59	59	63	62	68	72	60	65	65	68	..	67.2
Lebanon §§	Maximum	90	76	73	85	91	94	95	95	95	94	93	89	78	84	92	95	95	86	81	86	93	92	93	86	87	76	75	79	90	79	..	87.2
	Minimum	53	63	63	59	60	61	61	62	65	65	65	65	65	61	63	66	67	67	45	47	59	63	62	66	69	51	50	60	60	65	..	60.9
Mountain Grove	Maximum	82	72	72	80	86	88	88	90	92	91	86	86	86	82	86	90	91	90	82	80	80	84	85	84	83	83	79	69	72	86	..	83.5
	Minimum	67	65	65	67	65	63	64	64	64	66	65	67	66	67	67	69	69	67	71	52	50	58	66	62	66	70	54	62	64	68	..	64.3
Neosho	Maximum	84	75	77	83	88	90	90	89	89	90	89	86	85	83	85	90	93	92	89	83	85	90	89	92	87	87	81	75	85	89	..	86.3
	Minimum	63	66	63	63	65	61	61	58	58	61	67	64	66	65	60	67	65	67	70	44	45	64	72	64	70	70	54	68	65	59	..	62.8
Rolla	Maximum	84	81	78	84	86	90	91	91	92	92	89	79	86	80	76	90	92	93	87	79	85	90	88	91	96	83	75	71	74	88	..	85.4
	Minimum	64	67	67	66	64	65	65	64	66	67	69	70	69	70	67	67	69	67	72	53	50	65	65	66	70	75	53	61	61	66	..	65.3
Springfield	Maximum	80	71	71	80	83	88	87	88	89	89	86	85	84	73	84	89	91	91	82	79	83	88	90	87	83	80	74	70	76	86	..	82.9
	Minimum	68	64	66	68	66	68	67	68	71	70	70	69	69	66	62	71	72	72	63	55	56	65	70	67	70	57	54	63	65	65	..	65.9
Southwest Plain																																	
Appleton City	Maximum	85	76	75	86	88	91	91	93	93	90	92	85	84	76	79	93	91	95	87	84	88	93	93	88	87	83	73	69	78	89	..	85.8
	Minimum	64	67	63	63	62	66	66	65	65	65	67	69	67	62	59	58	69	71	70	55	52	67	66	67	71	58	48	64	59	70	..	63.8
Clinton	Maximum	91	91	85	90	92	95	95	97	98	98	99	95	85	78	84	95	100	100	85	85	91	98	95	92	88	85	85	70	80	90	..	90.4
	Minimum	61	67	62	62	62	63	64	64	65	63	65	68	68	62	60	70	68	70	68	52	60	68	68	64	70	60	47	60	56	68	..	63.5
Harrisonville §§	Maximum	85	83	83	88	92	94	97	95	98	99	97	92	78	64	80	91	97	96	84	84	90	90	92	90	88	77	72	74	75	90	..	87.2
	Minimum	59	63	61	62	63	64	65	62	64	63	65	66	65	58	58	59	65	69	70	48	50	55	65	67	69	72	43	43	54	55	..	60.7
Lamar §§	Maximum	82	72	77	84	89	89	91	91	92	93	90	92	83	69	81	89	94	94	84	82	88	91	94	91	85	82	74	71	83	90	..	85.6
	Minimum	57	67	65	65	67	65	66	64	64	65	68	69	69	65	62	63	71	72	72	50	50	52	69	69	70	73	54	54	65	66	..	64.3
Lamonte	Maximum	92	86	83	90	93	95	96	97	96	98	98	90	81	70	79	80	91	96	81	79	90	91	91	90	88	80	71	74	77	91	..	87.1
	Minimum	63	67	62	61	63	65	65	64	63	64	67	67	68	59	61	65	70	60	70	50	51	69	63	69	69	55	46	62	55	64	..	62.6
Marshall	Maximum	91	87	89	90	92	94	96	97	96	96	97	94	81	79	77	94	94	95	93	79	89	89	88	92	92	86	71	78	78	92	..	88.9
	Minimum	64	65	63	61	64	67	68	68	66	68	68	65	68	58	57	59	59	59	72	53	52	71	67	71	70	56	45	59	53	69	..	62.8
Nevada	Maximum	84	74	79	84	85	88	90	89	90	91	89	89	84	74	80	89	93	93	85	80	87	91	94	91	89	85	72	71	80	90	..	85.3
	Minimum	65	66	64	62	64	66	68	65	65	68	70	69	64	62	60	71	69	73	70	48	54	67	68	69	71	55	48	63	62	71	..	64.6
Warrensburg	Maximum	91	85	85	94	97	95	97	98	100	97	99	89	82	75	82	92	99	96	84	85	90	94	94	89	84	82	72	73	78	89	..	88.9
	Minimum	64	67	62	59	63	66	65	66	65	66	68	64	66	58	59	62	61	69	70	51	53	62	63	68	71	54	44	44	54	56	..	61.3
Warsaw	Maximum	90	79	79	88	90	93	94	95	95	96	95	95	88	78	80	92	96	97	87	83	91	95	94	93	87	85	76	71	75	91	..	88.3
	Minimum	62	66	63	64	62	63	63	63	61	61	66	69	68	61	61	66	68	69	73	48	49	70	65	67	71	59	49	62	57	69	..	63.2
Northwest Plateau																																	
Chillicothe §§	Maximum	92	91	89	93	94	96	98	98	99	98	98	99	74	61	78	88	95	95	82	81	89	79	89	91	89	74	79	88	83	86	..	88.2
	Minimum	59	62	62	58	60	64	64	61	60	60	66	68	62	54	54	56	50	55	64	47	49	59	60	62	65	66	39	39	46	49	..	57.3
Grant City	Maximum	85	83	84	85	86	85	86	92	91	91	81	75	68	58	68	82	83	92	83	75	85	77	74	85	81	81	65	76	75	77	..	80.3
	Minimum	62	63	65	60	60	66	65	67	63	64	67	59	57	53	56	63	51	60	66	45	50	65	62	59	73	51	36	48	50	64	..	59 0
Kansas City	Maximum	87	85	85	88	91	91	92	92	94	94	95	86	76	61	79	86	90	94	82	80	87	80	89	91	87	79	69	76	77	86	..	85.0
	Minimum	67	68	67	67	68	72	73	72	73	74	74	66	60	57	59	73	65	73	66	59	63	71	70	75	74	53	47	64	60	62	..	66.4
Kidder	Maximum	88	81	86	89	91	92	94	95	90	95	96	85	71	60	76	84	90	95	87	78	86	78	85	88	86	83	69	78	80	82	..	84.6
	Minimum	60	63	63	61	60	65	65	63	66	67	69	62	59	54	57	65	56	65	69	51	51	67	62	62	71	52	40	54	51	46	..	59.9
Lexington §§	Maximum	92	90	88	96	97	96	99	99	99	100	100	91	79	62	83	90	96	97	85	83	89	86	92	91	89	74	75	79	81	93	..	89.0
	Minimum	63	68	65	62	65	67	67	67	69	72	65	68	58	59	61	59	67	72	54	54	58	68	70	73	73	44	46	54	54	55	..	63.0
Maryville	Maximum	89	87	86	90	92	92	95	96	99	97	94	81	67	67	75	85	93	94	80	81	87	79	85	85	87	78	74	83	81	78	..	85 2
	Minimum	61	63	66	62	61	65	67	67	63	64	67	61	64	53	56	61	52	62	69	47	52	67	62	61	72	51	38	49	52	63	..	59.9
Oregon	Maximum	90	90	87	91	92	93	95	97	100	98	98	74	70	60	80	86	95	95	86	84	89	84	90	89	89	82	74	84	84	77	..	86.8
	Minimum	63	63	68	66	63	68	71	67	67	68	68	63	59	54	57	61	59	67	68	49	60	68	65	61	73	51	39	54	55	66	..	62.0
St. Joseph	Maximum	88	87	83	89	91	92	94	94	95	95	96	79	70	59	78	85	93	95	81	80	87	77	88	90	87	68	71	82	81	82	..	84.6
	Minimum	64	65	67	63	63	69	72	71	70	68	71	65	57	55	59	61	57	70	62	52	58	67	67	64	68	49	43	56	56	56	..	62.2
Trenton	Maximum	90	88	87	91	89	93	94	97	97	97	97	89	74	61	75	86	93	95	90	80	86	80	85	90	93	87	73	82	82	83	..	86.8
	Minimum	60	62	63	61	63	66	65	64	66	63	69	61	61	55	58	64	52	62	72	54	48	66	62	62	71	53	40	52	49	67	..	60 4

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 10-19-33—900.

MS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVII OCTOBER 1933 No. 10

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

For the most part the month was rather cool, with temperatures decidedly subnormal about the 7-9th and 25-27th; but the last three days were very warm for so late in the season, and on the 31st maximum temperatures were around 80°, or slightly higher, and equaled the highest of record for October. This late warm period brought the monthly average at most stations almost up to normal.

The first general killing frosts occurred in the northern half of the State between the 22d and 25th, mostly on the 25th. Over most of the southern half killing frost did not occur until after the end of October, although light to heavy frost occurred on several dates. There was but little damage to crops from frost, as crops generally had matured.

The rainfall averaged slightly less than normal for the State as a whole, but it was decidedly deficient in most parts of the northern third, while in the Ozark region generally more than normal amounts were received, with some unusually heavy amounts locally. In the Southwest Plain and the Southeast Lowlands the rainfall averaged near normal. The rainfall was well distributed through the month, the principal dates of occurrence being the 1st, 9-12th, 15-16th, 19th-22d, and the 26-27th.

River stages were unusually low, especially in the Mississippi at St. Louis and above.

Weather conditions were favorable during a large part of the month for outdoor work, harvesting crops, etc. Wheat and other winter grains were in fair to good condition; but rain was beginning to be badly needed towards the end of the month in much of the northern third of the State.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 56.4°, or 0.9° below normal. The highest monthly mean was 61.3° at Caruthersville, and the lowest monthly mean was 52.2° at Tarkio. The highest temperature recorded was 86° at Sikeston on the 1st, and at Fayette on the 11th, and the lowest was 23° at Downing on the 25th. The greatest daily range was 44° at Fayette on the 4th, 10th, and 11th, and at Lebanon on the 8th and 11th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 2.68 inches, or 0.18 inch less than normal. The greatest local monthly amount was 6.59 inches at Hailey, and the least local monthly amount was 0.74 inch at Bethel. The greatest amount in any twenty-four hours was 2.74 inches at Arcadia on the 12th. The average number of days with 0.01 inch or more of precipitation was 7. There was no snowfall anywhere in the State.

MISCELLANEOUS PHENOMENA

Fogs.—Dense, 9th, 18th, 24th, 26th, 27th.

Frosts.—Light, 2d, 5th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 17th, 18th, 22d, 25th, 26th, 27th; heavy, 18th, 25th; killing, 8th, 18th, 22d, 25th.

Hail.—Light at Seymour and Warrensburg on 19th, and at Versailles on 21st; also near Lebanon but date was not given; heavy at Fulton on 22d, but no damage reported.

Halos.—Solar, 3d, 15th, 18th, 19th, 22d, 26th, 27th; lunar, 2d.

Thunderstorms.—Local, 1st, 11th, 12th, 20th; more or less general on 10th, 15th, 16th, 19th, 21st, 22d, 26th.

Windstorms.—No damaging winds reported.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.10	30.46	2	29.77	7	7.9	28	nw.	7	82	52	60	64
Kansas City ...	30.10	30.48	2	29.74	21	9.1	32	W.	7	70	45	49	74
St. Joseph	30.08	30.47	2	29.71	21	8.0	24	nw.	7	77	44	53	77
St. Louis	30.09	30.44	2	29.69	7	11.7	38	sw.	21	74	52	62	64
Springfield	30.09	30.43	2	29.82	7	9.7	33	s.	21	79	51	60	74
Cairo, Ill.....	30.10	30.39	2	29.70	7	7.6	34	n.	24	85	54	64	67
Keokuk, Iowa.	30.11	30.50	2	29.74	8	7.6	26	nw.	16	75	49	60	67

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	53.6	− 3.7	89	24	2.65	−0.21	5.07	0.57	....	6	..	..	..
1889....	53.8	− 3.5	91	22	2.50	−0.36	6.03	0.73	....	5	..	..	..
1890....	54.8	− 2.5	91	20	2.24	−0.62	5.19	0.40	....	7	..	..	..
1891....	55.7	− 1.6	92	20	1.11	−1.75	1.98	0.30	....	5	..	..	..
1892....	57.5	+ 0.2	95	16	2.28	−0.58	5.15	0.21	0	5	16	7	8
1893....	56.7	− 0.6	95	16	0.99	−1.87	6.26	0.00	....	3	20	8	3
1894....	57.6	+ 0.3	94	18	1.74	−1.12	5.18	0.45	T.	6	17	8	6
1895....	51.2	− 6.1	89	14	0.35	−2.51	1.56	0.00	T.	2	21	6	4
1896....	54.1	− 3.2	90	19	2.48	−0.38	4.51	1.20	0	5	19	6	6
1897....	62.5	+ 5.2	99	23	0.71	−2.15	1.84	0.00	0	3	22	6	3
1898....	53.5	− 3.8	95	19	4.23	+1.37	8.73	2.22	1.4	8	11	7	13
1899....	62.4	+ 5.1	100	24	2.93	+0.07	6.33	0.47	0	5	20	6	5
1900....	62.4	+ 5.1	92	25	4.18	+1.32	8.38	1.33	0	7	17	7	7
1901....	60.1	+ 2.8	96	24	1.64	−1.22	3.93	0.47	0	6	18	8	5
1902....	59.5	+ 2.2	88	23	2.52	−0.34	4.72	0.87	0	5	21	5	5
1903....	57.3	0.0	90	19	2.85	−0.01	6.38	1.11	0	6	19	6	6
1904....	57.6	+ 0.3	90	19	0.90	−1.96	2.20	T.	0	3	20	7	4
1905....	55.1	− 2.2	90	20	4.64	+1.78	10.81	1.24	0.3	10	15	7	9
1906....	56.3	− 1.0	94	17	0.87	−1.99	2.99	0.19	0	5	17	6	8
1907....	56.7	− 0.6	94	18	2.90	+0.04	6.44	0.99	0	7	17	6	8
1908....	56.3	− 1.0	92	21	2.74	−0.12	9.33	0.00	0.8	5	18	6	7
1909....	57.2	− 0.1	96	20	2.77	−0.09	6.69	0.37	T.	6	19	5	7
1910....	59.4	+ 2.1	94	15	2.71	−0.15	14.03	T.	0	5	22	4	5
1911....	56.9	− 0.4	96	25	3.30	+0.44	7.47	0.30	0.2	8	11	7	13
1912....	59.1	+ 1.8	97	21	3.83	+0.97	8.67	2.09	0.7	6	20	5	6
1913....	54.7	− 2.6	93	11	4.46	+1.60	8.84	0.63	3.3	9	15	6	10
1914....	59.2	+ 1.9	88	19	4.54	+1.68	10.68	1.20	0	7	14	6	11
1915....	59.3	+ 2.5	95	22	1.19	−1.67	3.05	0.10	0	3	23	5	3
1916....	58.0	+ 0.7	95	20	2.17	−0.69	4.86	0.48	0.3	6	18	5	8
1917....	49.8	− 7.5	93	12	1.16	−1.70	2.50	0.04	0.2	6	16	8	7
1918....	60.6	+ 3.3	95	28	3.37	+0.51	7.95	0.80	0	7	14	6	11
1919....	58.4	+ 1.1	98	17	6.74	+3.88	14.87	1.15	0	11	10	7	14
1920....	61.3	+ 4.0	93	18	2.89	+0.03	6.09	0.90	T	7	17	6	8
1921....	57.9	+ 0.6	92	24	2.19	−0.67	5.28	0.36	0	5	21	5	5
1922....	59.9	+ 2.6	97	18	2.00	−0.86	5.12	0.51	0	5	20	5	6
1923....	53.0	− 4.3	89	17	3.39	+0.53	9.54	0.94	0.1	9	15	5	11
1924....	61.8	+ 4.5	92	21	1.22	−1.64	4.17	0.00	0	4	22	5	4
1925....	48.6	− 8.7	92	− 3	4.85	+1.99	11.44	1.56	2.4	10	8	8	15
1926....	57.3	0.0	93	21	4.67	+1.81	8.66	1.35	0	9	14	6	11
1927....	60.9	+ 3.6	93	26	4.72	+1.86	10.59	1.49	0	5	22	5	4
1928....	60.9	+ 3.6	94	22	3.83	+0.97	8.97	0.79	0	8	15	8	8
1929....	57.2	− 0.1	91	23	5.54	+2.68	8.58	0.90	T.	10	15	6	10
1930....	55.3	− 2.0	92	11	3.06	+0.20	7.09	0.48	T.	6	16	6	9
1931....	61.7	+ 4.4	95	27	3.45	+0.59	6.82	0.99	0	8	15	7	9
1932....	55.7	− 1.6	90	22	3.45	+0.59	7.32	0.99	0	5	18	5	8
1933....	56.4	− 0.9	86	23	2.68	−0.18	6.59	0.74	0	7	17	8	6
Period.	57.3	.....	100	− 3	2.86	.....	14.87	0.00	0.2	6	17	6	8

Climatological Data for October 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	56.1	+ 0.8	81	11†	28	25	37	1.59	−1.33	0.60	0	8	18	6	7	.....	O. K. Benecke
Clifton Hill	Randolph	731	34	55.4	− 1.3	83	11	27	25	42	1.85	−0.71	0.84	0	9	21	1	9	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	55.8	− 0.8	80	31	30	25	32	2.97	+0.36	0.88	0	9	17	6	8	s.	U. S. Weather Bureau
Downing	Schuyler	876	12	53.4	− 2.5	81	30†	23	25	35	1.32	−1.53	0.72	0	7	20	4	7	s.	James Taylor
Elsberry	Lincoln	449	2	53.2	.....	83	1	28	25	39	4.17	.....	1.28	0	8	10	16	5	se.	Ray E. Mills
Fayette	Howard	661	53	55.8	− 0.6	86	11	28	25	44	2.14	−0.54	0.61	0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	55.8	− 1.6	83	11†	29	25	37	4.50	+1.41	2.22	0	10	18	7	6	se	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	0.92	−1 88	0.37	0	7	18	2	11	se.	J. W. Pulliam
Hannibal	Marion	759	41	55.2	− 0.8	82	11†	29	25	32	1.23	−1.16	0.36	0	10	18	5	8	n.	Hannibal Water Dept.
Jefferson City	Cole	557	43	56.4	− 0.4	85	31	29	25†	36	4 56	+1.77	1.50	0	8	14	14	3	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	44	54.5	− 0.2	80	4†	24	25	35	1.37	−1.61	0.70	0	5	19	2	10	n.	Prof. J S. Stokes
Louisiana	Pike	469	39	54.4	− 1.8	85	31	29	25	43	3.02	+0.13	1.05	0	5	18	8	5	e.	Stark Bro's Nurseries
Macon	Macon	875	34	55.0	− 1.3	83	30	25	25	34	1.47	−1.53	0.97	0	7	17	7	7	w.	W. C. Brown
Mexico	Audrain	800	44	53.5	− 2.8	80	11†	27	25	40	2.10	−0.57	0.75	0	7	19	2	10	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	1.17	−1.51	0.35	0	6	9	9	13	s.	J. S. Conway
St. Charles	St. Charles	520	45	55.6	− 2.6	82	30†	32	25†	37	2.82	+0.10	1.53	0	7	16	13	2	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	60	57.4	− 1.4	82	31	34	25	34	2.97	+0.25	1.71	0	11	14	11	6	s.	**Section Center**
St. Louis University	St. Louis City	578	21	56.8	− 2.1	80	30†	34	25	33	2.76	−0.59	1.59	0	11	21	7	3	w.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	1.47	−1.43	0.41	0	9	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	35	53.9	− 3.5	81	30†	24	25	35	1.30	−1.14	0.60	0	6	21	3	7	n.	Frank Hall
Unionville	Putnam	1,062	40	53.6	− 1.6	82	31	25	25	38	1.65	−1.18	1.20	0	3	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	56.8	+ 0.8	85	1	30	25	34	2.75	−0.25	1.00	0	9	13	12	6	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	54.2	− 1.2	80	30	30	25	29	1.07	−1.19	0.54	0	9	16	6	9	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**55.1**	**− 1.3**	**86**	**11**	**23**	**25**	**44**	**2.08**	**−0.66**	**2.22**	**0**	**8**	**17**	**7**	**7**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	57.5	.....	81	11	30	26	38	2.56	.....	0.85	0	7	19	5	7	n.	Jeff. King
Caruthersville	Pemiscot	265	37	61.3	− 0.9	82	11†	37	24	31	3.98	+0.88	2.00	0	7	21	5	5	.....	Sam Smith
Doniphan	Ripley	344	29	58.7	+ 0.2	82	11†	33	26	40	2.66	−0.46	1.33	0	6	15	8	8	n.	W. W. Martin
Jackson	Cape Girardeau	428	42	59.6	+ 1.7	83	1†	35	25†	35	3.12	−0.12	1.10	0	7	16	1	14	n.	John G. Putz
Marble Hill	Bollinger	470	38	58.6	+ 0.4	84	11†	32	26	39	3.92	+1.00	1.53	0	5	16	10	5	n.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	3.24	−0.28	1.11	0	6	15	8	8	n.	John A. Spence
Poplar Bluff	Butler	339	28	57.8	− 2.3	82	31	33	26	37	2.26	−0.88	0.78	0	6	21	6	4	w.	J. H. Wolpers
Sikeston	Scott	318	26	60.2	+ 0.9	86	1	34	26	34	3.13	+0.31	0.78	0	9	17	5	9	.....	John A. LaFont
Cairo, Ill	Alexander, Ill	358	61	59.6	− 0.8	83	31	38	25	27	2.75	−0.01	1.10	0	9	13	6	12	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**59.2**	**− 0.1**	**86**	**1**	**30**	**26**	**40**	**2.99**	**−0.17**	**2.00**	**0**	**7**	**17**	**6**	**8**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	52	54.7	− 1.3	81	11	33	25	39	5.21	+2.09	2.74	0	7	17	9	5	s.	Arcadia College
Birchtree (near)	Shannon	1,000	38	57.0	− 1.4	83	11	34	25	36	3.94	+0.95	1.15	0	7	20	6	5	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	6.21	.....	1.94	0	7	20	9	2	.....	C. M McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	3.15	.....	0.79	0	8	13	7	11	n.	Ozark Utilities Co.
Dean ††	McDonald	1,000	29	59.4¶	+ 0.7	..	..	..	..	..	5.30	+1.49	2.25	0	6	13	9	9	sw.	H. E. Dean
Eldon	Miller	934	38	57.0[a]	− 0.4	85	4	30	25†	42	4.50	+1.24	1.10	0	9	11[a]	13[a]	6[a]	s.	E. H. Shepherd
Farmington	St. Francois	918	22	56.8	0.0	84	11†	30	26	39	2.70	−0.24	1.70	0	5	22	7	2	nw.	H. O. Miller
Goodland	Iron	1,000	40	56 9	+ 1.0	84	11	29	25	41	3.11	−0.28	1.63	0	6	16	10	5	s.	F. M. Adams
Greenville	Wayne	381	24	56.2	− 1.4	83	11	31	26	39	3.45	+0.58	1 25	0	5	20	7	4	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	6.59	+2.99	1.54	0	8	13	11	7	e.	A. W Madison
Koshkonong	Oregon	958	32	58.8	− 0.8	83	11	34	25	34	2.14	−1.05	0.95	0	6	20	6	5	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	57.1[a]	− 0.6	85	11†	27	25	44	5.38	+2.05	1.50	0	9	19[a]	3[a]	8[a]	n.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	58.6	− 0.1	80	11	33	25	31	3 92	+0.40	1.30	0	7	19	10	2	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	58.0	+ 0.4	83	11	30	25	38	2.47	−0.78	1.01	0	9	22	6	3	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	59.4	+ 0.2	84	1	33	8†	40	4.18	+0.70	0.97	0	8	19	10	2	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	58.0	+ 1.5	84	1	31	25	32	3.74	+0.69	0.87	0	8	10	8	13	se.	F. H. Lane
Salem	Dent	1,173	29	56.2	− 1.4	82	11	29	25	34	3.34	−0.39	1.25	0	9	15	10	6	n.	E. E. Martin
Seligman	Barry	1,542	32	59.4[d]	+ 0.4	79	31	33	9	30	4.74	+1.39	2.02	0	5	22[a]	4[a]	4[a]	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	27	57.0	− 0.4	80	11	30	25	35	4.07	+0.77	1.02	0	8	18	9	4	sw.	A. L. Hailey
Springfield	Greene	1,324	45	57.6	− 0.6	79	11	34	25	32	3.17	+0.12	1.45	0	10	19	9	3	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	57.2	.....	82	1†	29	25	35	4.45	.....	1.57	0	8	18	7	6	s.	I. M. Wilson
Division means	**and extremes**	.....	..	**57.5**	**− 0.2**	**85**	**4†**	**27**	**25**	**44**	**4.08**	**+0.52**	**2.74**	**0**	**7**	**18**	**8**	**5**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	57.9	− 1.0	81	11	31	25	35	3.51	+0.94	0.95	0	8	10	19	2	sw.	W. G. Bigelow
Clinton	Henry	765	40	58.0	− 3.5	82	11	31	25	37	3.31	+0.26	0.94	0	8	11	14	6	se	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	55.8	− 0.3	83	11	28	25	41	2.84	+0.01	1.32	0	6	13	9	9	nw.	John H. Patterson
Lamar	Barton	980	45	58.6	− 0.3	82	11	35	25†	37	3.81	+0.65	0.95	0	7	17	10	4	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	56.4	− 1.6	82	30	28	25	36	2.60	−0.08	0.70	0	6	15	7	9	nw	J. E. Wheeler
Marshall	Saline	779	46	55.0	− 1.6	80	4†	29	25	39	1.70	−1.16	0.88	0	6	23	4	4	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	58.1	+ 0.5	82	11	31	25	33	1.37	−1.62	0.71	0	6	15	7	9	s.	George A. Kaupp
Warrensburg	Johnson	878	46	57.3	− 0.7	85	11	28	25	37	3.24	+0.52	1.00	0	6	18	8	5	ne.	E. A. Markey
Warsaw	Benton	687	32	57.9	− 1.1	83	11	30	25	40	4.68	+1.21	0.88	0	8	16	5	10	w.	Everett Martin
Division means	**and extremes**	.....	..	**57.2**	**− 1.1**	**85**	**11**	**28**	**25**	**41**	**2.93**	**−0.03**	**1.32**	**0**	**7**	**15**	**9**	**7**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	54.0	− 0.8	80	4†	28	25	39	1.80	−0.65	1.45	0	3	20	7	4	nw.	A. S. Cumming
Chillicothe	Livingston	779	24	53.2	− 3.6	82	4†	25	25†	43	1.47	−2.26	0.68	0	5	23	4	4	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	54.4	− 1.0	79	4†	25	25	38	0.59	−2.11	0 50	0	3	18	8	5	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	54.8[a]	− 1.5	82	4	25	25	40	0.73	−1.92	0.64	0	2	24	2	5	s.	Fred L. Stiff
Grant City	Worth	1,134	29	52.2	− 2.9	77	4†	26	25	39	0.95	−1.87	0.57	0	3	7	20	4	se.	Howard Rybolt
Kansas City	Jackson	963	44	58.0	+ 0.3	80	4	32	25	30	0.58	−2.34	0.29	0	5	16	11	4	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	53.0	− 2.8	80	30	25	24	39	1.13	−1.78	0.57	0	4	21	4	6	s.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	0.64	−2.20	0.32	0	3	12	17	2	n.	John M. Martin
Lexington	Lafayette	688	48	56.4	− 1.1	85	11	29	25	38	1.60	−1.38	0.78	0	4	23	8	0	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	54.6	+ 1.1	83	4	27	25	40	1.11	−1.70	0.56	0	4	18	8	5	n.	J. R. Brink
Oregon	Holt	1,048	77	57.0	+ 1.9	82	4†	32	25	40	0.83	−1.82	0.37	0	4	23	7	1	sw.	Mina Wright
St. Joseph	Buchanan	967	23	55.8	− 0.9	80	4	30	25	36	0.79	−2.03	0.33	0	3	19	9	3	s.	U. S. Weather Bureau
Tarkio	Atchison	916	30	52.2	− 2.6	79	30†	25	25	43	2.64	+0.04	2.27	0	3	16	10	5	sw.	Albert Volker
Trenton	Grundy	822	37	54.5	− 1.4	80	31	28	25	37	1.54	−1.38	0.76	0	6	20	7	4	s.	W. H. Estes
Division means	**and extremes**	.....	..	**54.6**	**− 1.2**	**85**	**11**	**25**	**24†**	**43**	**1.18**	**−1.68**	**2.27**	**0**	**4**	**18**	**9**	**4**	**s.**	
State means	**and extremes**	.....	..	**56.4**	**− 0.9**	**86**	**1†**	**23**	**25**	**44**	**2.68**	**−0.18**	**2.74**	**0**	**7**	**17**	**8**	**6**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for October 1933

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi									.04						.41						.12						.17					0.74
Boonville	Missouri	.20								.01						.74	.68			.40	.15	.11						.83					3.12
Bowling Green	Mississippi	.45								.35		.03					.25			.07	.50	.89	.83					.21					3.58
Brunswick	Grand									.02		.03				.60	.53			.06		.13					.02	.20					1.59
Canton	Mississippi								.06	.08		.03				**	.14	T.	.02	.03		.10	.14				T.	.24					0.84
Clifton Hill	Chariton								.05		.04					.84	.43			.06	.17	.01					.24	.01					1.85
Columbia***	Missouri	.02						T.	.01		.01					.26	.17			.88	.23	.58					.81						2.97
Downing	Mississippi						.01		.06		.05					.38	.05				.05						.72						1.32
Edina	do								T.	T.		.08				T.	.56	T.				T.					.15						0.79
Elsberry	do	1.01							.14	.15		T.				T.	.44			.79	.24		1.28				.12						4.17
Ewing	do								.12	.08		.02					.20					.22		.04				.25					0.93
Farber	do	.50							T.	.11							.24				.50	.52	.68					.58					3.13
Fayette	Missouri	.08								.02						.60	.61			.06		.26						.51					2.14
Fulton	do	.17							T.	.01		.04				.02	.37			.58	.17	.32	2.22					.60					4.50
Gorin	Mississippi						.06		.16		.11					.37		.07				.06					.09						0.92
Hannibal	do								.09	.09	.01					.24	.03	.01		.02	.35	.03					.36						1.23
Hermann	Missouri	.68							.02	.02		.03	.01				.72			.03	.47	T.	.98					.24					3.20
Jefferson City	do	.52								.04							.75			.20	.50	.17	1.50					.88					4.56
Kahoka	Mississippi								.01	.26		.09			.29			T.		T.		.20					T.	.20					1.05
Kirksville	do								.04		.07					.33					.23						.70						1.37
Linneus	Grand								.05		.11					1.29			.03		.08	T.				18	.04						1.78
Louisiana	Mississippi								.60							.37					1.05	.60					.40						3.02
Lucerne	Grand																1.14										.25	.20					1.59
Macon	Chariton									.04						.97	.30			.05			.04				.02	.05					1.47
Memphis	Mississippi								T.	T		T.				.40	.29	T.				T.					.28						0.97
Mexico	do									.08							.20			.19	.75	.05	.23					.60					2.10
Milan	Grand															.61	.66				.06						.23						1.56
Monroe City	Mississippi								.11		.06					.29	.07				.29	T.					.35						1.17
New London	do	.16							**	.44		.07						.04	T	T	.24	.37						.23					1.55
Palmyra	do								.09	.10							.30	.11	.04			.26	.11					.35					1.36
Paris	do	.18														.41	.09				.11	.36						.28					1.43
Perry	do	.23							.07		T.					.10	.03			.17	.20	.38	.10					.43					1.71
Philadelphia	do																																
St. Charles	Missouri								T.	.12						.54				.10	.34	.18	1.53					.01					2.82
St. Louis***	Mississippi					T.	.04		.01	.02		.12				.04	.38			.61	.03	1.50	.21				.01						2.97
St. Louis University*	do						.01		.11	.03		.01				.07	.32			.59	.02	1.46	.13				.01						2.76
Shelbina	do	.28							T.	.01		.02				.41	.05				.04	.26	.08					.32					1.47
Steffenville	do							T.	.10		T					.60		.10			.25	T.					.20	.05					1.30
Troy	do	.70							T.	.22		.01	T.				.23			.10	.70	.17	1.22					.13					3.48
Union	Meramec	.45							.03	.04			.13				.43				.73	.26	1.59					.08					3.74
Unionville	Chariton										T.					.80	.40										.45						1.65
Valley Park	Meramec	.30						T.	T.	.08	T.		T.				.60	T		T.	.76	.13	1.49					T.					3.36
Warrenton	Mississippi	.63							.05	.04						.03	.38			.44	.08	T.	1.00				.10					2.75
West Ely	do	.05							.05	.33		.03				.21	.15						.21					.31					1.34
Winfield	do	.59								.34		.06					.34																1.33
Keokuk, Ia.***	do					T.	.06	.51	.03	.05						.07	T.	.02		T.	.05	.06					.22						1.07
Southeast Lowlands																																	
Bragg City	St. Francis												.85				.97																
Campbell	do	.22											.63				.85			.03			.72				.02	.09					1.82
Cape Girardeau	Mississippi	.13							.06	.02			.47	.24			.79	.01			.09			.71				.06					2.56
Caruthersville	do											.05	.39			2.00	.40					.70	.30				.14					2.58
Dexter	St. Francis													.44			1.60							.80									3.98
Doniphan	Black	.12											.39			.32	.35		.15				1.33				T.						2.84
Fisk	St. Francis	.45											.43	.09			1.01				.08		.79	.51				.11					2.66
Jackson	Mississippi	.14						.02					.58				1.03			.12			1.10					.13					3.47
Marble Hill	do												.87			1.14			.12				1.53					.26					3.12
Morehouse	do	.39							T				.90				.57			.25			1.11					.02					3.92
New Madrid	do	.35							.04				.26	.45			1.31	.23			.02		.13	.25				.17					3.24
Parma	St. Francis												.42	.48			1.60							.85									3.21
Poplar Bluff	Black												.46				.51				.26		.78	.17				.08					3.35
Sikeston	Mississippi												.48	.36		.53	.53	03		.23		.18	.78				.01					2.26
Cairo, Ill.***	do	.31					.06	T.	.03		T.	1.10				.49	.56			.14		T.	.05				T.	.01					3.13
Ozark Plateau																																	2.75
Arcadia	St. Francis	.35							T.	T.			2.74				.74				.21	T.	1.07	.02				.08					
Birchtree (near)	Black	.40											.60			.60	.55			.55	.42		.82										5.21
Buffalo	Osage												.62				1.90			.41	1.94	.42	.46					.46					3.94
Caplinger Mills	do											.25	.13			.79	.49			.14	.36	.46					.53					6.21
Dean	Neosho												.42		T.	.38				.32	1.25		2.25				.68					3.15
Eldon	Missouri	.37					.02									.04	.94			.13	1.03	.30	1.10					.57					5.30
Farmington	St. Francis												.40		.05	T.	.45			.10			1.70				T.						4.50
Fredericktown	do												.22				1.91				.10		1.10					.10					2.70
Galena	White	.12											.37			.32	1.24			.34	.30	.34	.78					.32					3.43
Goodland	Black												1.63			.21	.62			.18	.20		.27										4.13
Greenville	St. Francis												.96			.26	.88			T.			1.25					.10					3.11
Hailey	White	1.50										.18				1.46	.41			.52	1.54		.54				.44						3.45
Koshkonong	Black	.03											.44			.34	.28						.95				.10						6.59
Lakeside	Osage	.82								T			T.			.03	.93	T.		1.24	.16	.36	.98					.42					2.14
Lebanon	do	.22											.40		.32		1.50			.64	.62	.42	.98				.28						4.94
Leeper	Black	.38											1.05				1.80				.12		.90	.51				.02					5.38
Lockwood	Osage	.36					T.						.55			.37	.40				1.30	T.	.22				.72						4.84
Mountain Grove	White	.48	.02										.48			.35	.66			.08	.03		.21				.16						3.92
Neosho	Neosho	.18											.28			.64	.12			.62	.88		.97				.49						2.47
Owensville	Gasconade							.12		.64							.60				.80		1.55					.12					4.18
Joila	Meramec	.66								.10			.31				.82			.05	.87		.77				.16						3.83
St. Thomas (near)	Osage																1.21			.55	.83	.34	1.90					.50					3.74
Salem	Meramec	.36								T.		.02	.38			.18	1.25			.43	.03		.58				.11						5.33
Seligman	Neosho												.76			1.15					.43		2.02			38							3.34
Seymour (near)	White	1.02											.25			.30	.96			.27	.50		.60				.17						4.74
Springfield***	do	.11					T.					.11	.18			1.38	.07			.05	.68	.06	.25				.28						4.07
Stover	Missouri	.43															1.27			.33	.13	.17	.72					.48					3.17
Versailles	Osage	.24					T.		T.							.46	.56			.43	.36	.89	.68				.83						3.53
Williamsville	Black	.39											.92	.02			.80				.03		.62	.86				.02					4.45
Willow Sprgs. (near)	White	.22											.70				1.63				.16	.04	.53					.09					3.16
Southwest Plain																																	3.37
Appleton City	Osage	.14					T.		T.				.11			.95	.93			.66	.02	T.	.13				.57						3.51
Clinton	do	.41											.05			.94	.50			.55	.15	.10					.61						3.31
Concordia	Missouri	.23														1.24	.45			.19	.05							.40					2.56
Harrisonville	Osage	.30														.64	1.32				.14						.02	.42					2.84

Continued on next page

Daily Precipitation for October 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho	.33										.03	.05			.04	.97				.52	.63	.15				.60						3.32
Lamar ‖‖	....do	.66											T.			.34	.95				.45	.10	.75					.56				3.81
Lamonte	Missouri								.15							.70	.35			.60	.10						.70						2.60
Marshall	.... do	.08							T.	T.						.88	.32			.07	02	T.					.33						1.70
Nevada	Osage	.32											.02				.04			.23	.05						.71						1.37
Warrensburg	Missouri	.40					T.									1.00	.30			.93	.07						.54						3.24
Warsaw	Osage	.47							T.							.88	.50			.87	.37	.57	.60				.42						4.68
Waverly ‖‖	Missouri	.26														1.00	.47					.21					T.	.30					2.24
Northwest Plateau																																	
Bethany	Grand									.04	T					.74	.71										.35						1.80
Chillicothe ‖‖	....do											.14				.56	.68					T.					T	.05					1.47
Conception	Missouri										T.					.26	.24										.09						0.59
Edgerton	....do															.09					T.	T.					.64						0.73
Gallatin ‖‖	Grand															.41	.70										.16						1.27
Grant City	.... do										T.					.30	.57										.08						0.95
Kansas City***	Missouri						T.				T.				.17	.28	.01			T.	.02	T.					.10						0.58
Kidder ‖‖	Grand										.13				.33	.57	T.									.10							1.13
King City	Missouri										T.					.03	.32										.29						0.64
Lexington ‖‖	....do											T.			T.	.78	.62				.05							.15					1.60
Maryville ‖‖	....do										.01					.07	.56					.18					.30						1.11
Oregon	....do										.15					.14	.31					T.					.37						0.83
St. Joseph***	....do															.33		T.			T.	T.					.31						0.79
Tarkio	....do															.25	2.27										.12						2.64
Trenton	Grand								.07		.06					.46	.76	T.			.04						.15						1.54

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for October 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.304	.166	.156	.120	.134	.141	.122	.236	.083	.120	.138	.152	.160	.150	.129	.156	.145	.143	.140	.036	.011	.118	.130	.090	.146	.114	****	.047	.095	.095	.110	3.886
	Mean temperature	66	58	58	64	62	61	56	50	58	58	63	60	57	62	67	58	56	50	53	60	64	54	54	56	44	44	47	54	60	64	67	57.6
	Wind movement	83	55	56	47	44	51	62	171	117	52	64	59	62	49	88	144	69	44	67	62	88	92	70	59	88	85	63	38	73	45	45	2,192

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report. **** —.001

Daily Temperatures for October 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	73	72	73	80	77	71	64	55	66	77	81	68	68	75	74	71	65	61	69	61	74	62	61	61	53	49	47	71	76	81	80	68.3
	Minimum	48	40	45	46	46	47	43	40	43	40	44	49	36	50	59	48	40	35	49	42	54	36	35	43	28	42	32	43	48	55	56	43.9
Columbia	Maximum	71	70	70	78	69	72	65	49	65	74	80	62	66	74	74	61	66	59	65	62	75	57	58	62	51	47	49	67	77	80	80	66.3
	Minimum	52	47	45	46	50	48	42	41	46	44	50	45	42	51	58	42	41	34	47	46	51	42	37	36	30	42	36	41	52	58	60	45.2
Fayette	Maximum	75	77	77	84	78	73	68	50	70	78	86	66	71	78	76	64	67	62	69	63	76	61	62	77	54	47	49	71	80	82	84	70.2
	Minimum	52	36	39	40	46	40	37	39	45	34	42	50	34	47	57	49	37	30	45	44	56	38	37	42	28	41	30	31	38	48	50	41.4
Hannibal	Maximum	70	71	74	81	70	72	65	54	62	75	82	68	62	74	71	66	60	62	65	58	74	56	56	60	50	45	45	64	76	80	82	66.1
	Minimum	52	44	47	50	47	45	43	42	47	44	50	48	36	49	55	50	40	35	47	39	48	37	36	42	29	40	31	37	51	56	56	44.3
Jefferson City §§	Maximum	75	73	75	81	74	78	69	50	68	76	83	67	69	74	75	64	70	62	66	68	81	62	60	67	54	47	53	67	79	82	85	69.5
	Minimum	55	47	45	46	48	45	44	40	44	43	47	50	39	44	49	50	39	34	35	45	46	42	37	42	29	29	35	39	44	54	56	43.3
Kirksville	Maximum	70	72	79	80	74	68	63	48	62	72	78	70	69	76	73	68	55	61	68	56	70	57	58	54	50	49	45	69	76	80	80	66.1
	Minimum	46	42	46	48	40	45	41	41	42	42	46	41	34	49	58	46	39	32	46	36	51	31	33	43	24	38	39	34	50	64	63	42.9
Louisiana	Maximum	75	70	73	80	77	72	67	52	65	75	80	74	76	75	77	68	65	60	65	61	66	64	60	56	50	51	49	65	80	82	85	68.2
	Minimum	55	36	37	42	40	37	36	43	44	36	46	31	45	46	46	57	38	32	35	38	48	36	36	38	29	36	32	40	47	48	50	40.6
Macon §§	Maximum	72	73	74	80	72	72	65	51	64	75	81	61	67	75	75	61	62	61	68	70	76	58	58	60	50	46	56	68	77	83	81	67.5
	Minimum	54	44	44	48	42	46	40	42	43	44	49	46	35	46	60	47	41	33	36	38	42	33	33	45	25	34	31	36	51	55	56	42.5
Mexico §§	Maximum	68	72	70	79	68	74	56	48	59	75	80	60	66	73	72	71	62	58	58	64	76	56	59	64	49	54	50	63	76	80	79	65.8
	Minimum	51	54	41	45	44	45	42	42	43	41	45	49	34	34	54	49	37	32	34	40	43	35	34	38	27	29	32	36	36	52	58	41.2
St. Louis	Maximum	68	71	70	78	68	76	67	49	61	73	81	63	64	72	73	65	64	58	59	65	78	57	59	67	52	59	52	64	78	81	82	66.9
	Minimum	58	52	52	57	52	52	44	45	49	47	58	49	44	48	56	51	44	41	46	46	44	44	41	40	34	40	40	42	51	59	61	48.0
Unionville	Maximum	70	75	78	77	76	70	65	54	60	70	70	64	70	70	72	67	55	56	67	65	57	55	58	55	50	57	55	70	73	80	82	65.9
	Minimum	45	44	45	52	38	38	45	40	40	42	40	36	35	46	50	42	40	33	46	44	50	30	34	44	25	42	28	33	47	50	55	41.3
Warrenton	Maximum	85	71	67	76	73	76	70	57	61	73	78	74	64	72	72	65	63	61	60	60	79	76	58	63	53	52	49	66	77	82	82	68.2
	Minimum	54	46	45	50	48	46	44	42	44	45	54	50	38	47	54	52	42	36	45	44	57	42	37	43	30	39	35	39	48	56	57	45.5
Southeast Lowlands																																	
Campbell	Maximum	80	69	71	77	68	75	73	64	63	75	81	73	69	73	77	70	62	60	68	76	78	75	64	71	63	62	56	69	77	80	76	70.8
	Minimum	60	48	46	45	50	39	45	39	43	37	49	50	43	39	49	58	37	40	37	49	55	44	42	38	34	30	44	37	47	47	50	44.2
Caruthersville	Maximum	79	70	73	74	72	70	75	67	66	73	82	69	66	72	76	74	68	66	74	79	81	72	64	68	64	62	59	69	80	81	82	71.8
	Minimum	55	53	54	53	49	49	45	47	46	59	60	48	46	55	64	46	45	43	55	64	58	50	44	37	38	49	44	51	56	55	58	50.8
Doniphan	Maximum	80	70	72	72	75	72	70	67	70	77	82	77	72	73	72	72	70	67	75	80	76	73	76	75	72	65	68	70	82	80	79	73.6
	Minimum	62	44	42	43	45	41	43	41	41	37	51	57	43	40	45	48	38	39	50	53	52	46	42	40	38	33	34	35	48	46	42	43.8
Jackson	Maximum	83	71	73	77	71	75	72	61	62	73	80	75	68	73	74	74	66	68	67	74	79	74	62	71	65	62	59	67	78	79	83	71.5
	Minimum	60	45	46	47	49	40	56	39	49	40	55	55	43	63	55	58	41	40	50	52	62	44	41	48	35	35	48	40	46	51	52	47.7
Poplar Bluff	Maximum	72	72	76	79	75	75	72	61	68	75	79	69	69	71	73	72	68	58	66	75	79	64	63	75	65	61	59	69	81	81	82	71.1
	Minimum	54	46	45	46	47	42	44	40	42	38	49	50	45	40	48	50	38	40	38	50	59	46	44	40	35	33	46	37	46	49	52	44.5
Sikeston	Maximum	86	72	75	76	72	75	74	65	66	75	83	74	68	75	76	72	68	62	65	78	82	75	65	71	66	65	59	70	83	81	85	72.9
	Minimum	63	48	48	47	50	43	46	43	47	42	52	60	47	41	52	58	40	41	42	54	62	45	44	40	35	34	49	39	50	55	56	47.5
Cairo, Ill	Maximum	75	69	71	75	67	72	71	56	62	70	80	65	65	72	73	70	66	59	66	77	81	70	62	70	52	62	57	68	78	81	83	69.2
	Minimum	58	52	51	55	52	50	48	45	48	47	56	52	48	50	55	53	48	43	47	59	65	49	45	43	38	39	47	42	53	58	58	50.1
Ozark Plateau																																	
Arcadia §§	Maximum	68	68	69	75	66	75	68	51	60	70	81	62	64	67	65	64	65	59	65	67	75	54	58	69	51	57	58	65	77	79	80	66.2
	Minimum	58	43	40	43	47	38	41	44	45	38	42	52	45	42	45	55	37	40	41	45	52	43	43	38	33	35	40	36	38	49	51	43.2
Birchtree	Maximum	75	70	71	75	73	74	71	61	60	73	83	73	67	69	66	66	63	62	73	68	76	69	64	71	61	55	60	64	77	80	80	69.4
	Minimum	56	45	44	45	47	46	44	38	40	37	50	50	45	45	54	55	37	38	42	52	58	42	42	42	34	35	38	38	43	52	54	44.7
Eldon §§	Maximum	74	74	76	85	82	79	76	62	69	78	83	..	74	75	76	68	70	63	65	69	82	60	60	67	53	48	55	68	79	83	82	*71.2
	Minimum	56	42	42	43	48	47	45	38	46	43	42	51	..	39	58	52	39	35	34	46	46	44	38	37	30	30	36	36	40	48	54	*42.8
Farmington	Maximum	79	71	70	82	72	78	70	68	64	73	84	76	70	75	72	68	67	70	64	72	75	72	58	70	62	58	58	68	79	84	83	71.4
	Minimum	55	34	40	50	53	40	38	40	45	36	45	52	38	38	50	50	35	40	38	45	55	42	40	38	32	30	42	35	40	45	50	42.3
Koshkonong	Maximum	74	68	68	72	73	76	73	66	72	65	83	74	65	70	68	67	67	63	74	65	75	68	62	71	68	57	58	68	77	78	79	69.8
	Minimum	59	48	47	50	54	48	49	40	45	43	52	56	47	46	54	55	42	41	43	57	57	44	43	46	34	36	45	44	49	46	59	47.7
Lebanon §§	Maximum	73	72	74	79	79	81	76	78	77	76	85	65	76	..	77	65	69	65	75	68	82	59	60	68	57	50	70	65	78	85	82	*72.2
	Minimum	57	41	39	45	42	47	41	34	36	36	41	49	39	43	..	42	36	33	34	45	56	43	41	42	27	33	38	43	46	55	56	*42.0
Mountain Grove	Maximum	78	72	75	80	82	78	68	59	65	72	83	69	68	70	72	65	68	63	72	68	78	70	63	70	60	50	63	61	75	79	80	70.2
	Minimum	54	51	40	42	46	49	42	36	44	44	53	52	46	47	55	55	37	36	43	53	59	42	41	46	30	36	42	40	49	55	57	45.9
Neosho	Maximum	84	70	72	76	80	79	77	70	73	77	79	77	69	77	78	64	70	70	78	75	77	73	78	67	67	58	68	72	78	81	83	74.1
	Minimum	54	40	40	40	41	45	39	33	33	39	53	52	42	49	58	51	34	35	47	57	63	43	47	51	33	40	34	42	46	49	55	44.7
Rolla	Maximum	84	67	68	72	70	78	66	59	61	73	80	75	64	69	68	62	66	65	69	70	80	74	59	66	56	54	57	63	77	81	83	68.9
	Minimum	61	50	44	48	50	46	43	41	45	44	51	53	44	50	57	53	39	39	47	50	62	44	40	45	31	40	45	40	49	54	55	47.1
Springfield	Maximum	67	67	68	74	76	76	65	56	63	74	79	63	66	72	73	60	68	62	74	65	78	56	62	65	53	47	60	64	74	78	77	67.2
	Minimum	55	48	51	53	53	53	41	37	41	46	59	51	49	53	58	49	42	42	48	58	46	42	46	41	34	40	39	45	52	60	60	48.1
Southwest Plain																																	
Appleton City	Maximum	76	70	71	80	79	71	67	56	69	77	81	72	69	77	71	62	71	62	68	68	69	60	61	66	54	53	55	72	77	79	80	69.1
	Minimum	54	47	46	48	50	51	43	36	40	42	57	50	43	52	59	48	40	38	48	48	55	42	46	52	31	41	36	42	49	55	58	46.7
Clinton	Maximum	68	72	72	79	75	72	68	63	70	78	82	70	70	78	75	63	70	64	70	72	75	72	64	67	50	50	53	70	75	80	80	69.9
	Minimum	52	45	46	46	48	50	41	36	39	41	52	52	41	50	62	50	38	36	46	46	60	53	46	50	31	40	35	40	48	53	55	46.1
Harrisonville §§	Maximum	73	70	74	82	79	73	66	61	70	79	83	65	69	78	72	62	69	62	70	70	74	58	60	66	52	52	53	71	77	79	80	69.3
	Minimum	48	45	46	46	48	48	42	34	46	38	47	50	39	44	56	44	38	34	37	43	45	39	40	42	28	31	32	37	42	49	54	42.3
Lamar §§	Maximum	68	71	72	76	81	78	71	60	69	78	82	66	72	78	76	62	71	67	76	71	78	63	62	67	67	53	62	72	77	79	80	71.1
	Minimum	54	47	45	46	47	47	45	37	37	41	45	51	47	48	58	50	40	40	41	56	59	47	48	48	35	35	38	38	47	54	57	46.1
Lamonte	Maximum	75	76	71	77	75	71	65	64	67	78	80	63	70	77	74	62	67	64	67	68	74	59	61	62	54	48	51	73	79	82	81	68.9
	Minimum	42	42	45	46	47	49	40	38	40	42	50	47	39	51	59	44	39	34	47	45	51	40	39	40	28	40	33	39	50	57	58	43.9
Marshall	Maximum	76	76	72	80	77	69	64	60	65	74	80	73	66	74	72	67	62	59	65	62	72	62	57	58	49	46	45	61	69	78	78	66.7
	Minimum	46	45	46	49	45	45	46	37	39	44	49	50	36	50	59	48	43	34	48	44	54	44	36	37	29	41	34	36	37	39	48	43.2
Nevada	Maximum	77	70	70	76	78	72	66	59	67	76	82	70	69	78	74	63	70	63	71	70	75	61	61	66	55	56	59	72	77	78	80	69.7
	Minimum	54	44	44	46	45	52	44	36	40	45	52	50	42	52	59	48	38	36	48	50	53	44	46	53	31	41	35	47	51	57	59	46.5
Warrensburg	Maximum	71	73	71	82	80	71	65	59	70	76	85	75	72	77	74	63	67	65	69	68	73	74	66	63	56	48	53	71	78	80	80	70.2
	Minimum	51	45	44	47	45	50	42	36	40	44	53	49	37	52	59	45	40	35	46	44	52	37	37	45	28	39	32	38	51	56	58	44.4
Warsaw	Maximum	80	72	75	79	78	73	67	60	68	80	83	73	72	78	78	62	69	64	68	68	79	63	64	67	56	49	54	72	80	81	82	70.8
	Minimum	55	42	43	45	45	47	39	36	41	40	58	51	42	52	56	48	38	34	47	47	51	41	44	50	30	40	33	40	48	55	56	45.0
Northwest Plateau																																	
Chillicothe §§	Maximum	72	77	73	82	76	73	59	50	68	72	79	62	70	78	74	61	65	63	70	67	70	57	62	58	58	56	45	48	77	81	82	67.3
	Minimum	44	35	36	39	38	46	38	35	39	35	39	41	31	45	57	44	39	29	48	38	56	31	31	41	25	39	29	33	35	48	52	39.2
Grant City	Maximum	69	57	73	77	72	66	52	51	64	68	68	60	67	72	70	66	48	62	64	67	65	48	60	55	50	52	52	73	74	76	77	63.7
	Minimum	42	37	41	43	43	48	39	36	37	39	41	37	34	48	61	42	39	31	49	38	50	30	34	42	26	40	30	34	45	54	55	40.8
Kansas City	Maximum	70	72	74	80	77	72	61	56	68	75	80	62	69	78	70	60	65	63	69	69	71	57	60	60	51	61	53	72	76	79	80	68.1
	Minimum	54	53	54	55	51	57	43	39	42	52	55	48	45	57	55	48	45	42	47	45	48	40	42	38	32	45	40	42	54	60	60	48.0
Kidder §§	Maximum	73	79	78	75	70	58	54	65	70	76	58	67	74	70	57	63	62	68	67	65	57	58	57	51	61	45	71	76	79	80	79	66.5
	Minimum	45	47	47	42	42	43	35	37	40	43	45	34	35	51	43	41	34	35	39	41	32	34	34	25	26	32	33	38	49	53	54	39.6
Lexington §§	Maximum	75	76	76	82	79	75	65	58	70	78	85	65	72	78	75	62	67	64	75	70	76	62	62	63	54	54	50	73	78	81	83	70.4
	Minimum	50	43	45	48	46	47	44	37	40	42	47	50	39	40	56	46	43	35	40	44	46	35	36	39	29	30	34	35	42	52	57	42.5
Maryville	Maximum	74	75	73	83	78	73	61	62	69	72	75	61	71	72	67	64	61	64	65	70	65	59	63	57	53	61	49	75	77	81	80	68.1
	Minimum	42	40	42	45	43	50	41	33	37	39	42	39	36	49	60	41	39	33	48	39	50	32	33	42	27	40	31	35	46	46	55	41.1
Oregon	Maximum	74	76	77	82	81	72	61	59	70	74	76	66	72	77	70	65	63	66	66	74	69	66	64	57	57	65	51	77	80	82	82	70.0
	Minimum	45	45	48	50	42	51	40	34	37	46	48	42	36	55	61	42	43	37	49	40	52	33	33	43	32	44	33	37	51	57	58	44.0
St. Joseph	Maximum	71	72	74	80	77	70	57	57	68	74	74	60	70	76	71	59	62	64	66	73	69	60	62	56	52	63	50	74	77	80	79	67.6
	Minimum	48	41	47	48	46	49	42	37	41	46	47	45	38	56	55	45	42	37	44	43	45	36	37	36	30	41	35	38	53	58	60	44.1
Trenton	Maximum	72	74	77	74	76	74	67	58	68	71	76	65	60	77	74	70	64	51	69	64	65	60	55	55	50	60	55	71	76	76	80	67.2
	Minimum	40	37	42	43	42	46	43	42	41	39	40	44	34	45	60	46	41	30	46	38	54	33	35	43	28	40	30	35	47	57	55	41.8

*, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 11-17-33—900.

MS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

19

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVII NOVEMBER 1933 No. 11

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

The most noteworthy occurrences in the weather of the month were the cold periods of the 6-10th and the 13-16th, the very high temperatures of the 1st, 20th, and 29th, the dust storm of the 12th, and the prevailing lack of precipitation. The cold spells and the several very warm days counterbalanced largely, but the average temperature for the month was somewhat higher than normal, in strong contrast with November of the preceding year, which was unusually cold.

It was the driest November since 1914 and the fourth driest in the whole period of extensive State records, 1888 to 1933, inclusive. In the northern fourth of the State, which was the driest section, the total precipitation for the month was less than 0.50 inch at most stations and as low as 0.06 inch in parts of Monroe and Marion counties. It was less than 0.50 inch also in the Kansas City-Warrensburg-Marshall area. Amounts were somewhat larger in the southern half of the State, but in these parts also it was much less than normal, with monthly amounts running from 1.00 to 2.00 inches. For the State as a whole the average total precipitation was only 34 per cent of the normal. Snowfall was very light, with none of any consequence except on the 23d in the northern part of the State.

The duststorm of the 12th affected most of the northern half of the State. It obscured the sun at some stations. A fine deposit of dust was noticed in many houses even where windows and doors were closed, and persons indoors experienced irritation of nasal passages.

River stages were very low, especially in the upper and middle Mississippi. At St. Louis the lowest stage of record for November occurred.

November was favorable for outdoor work and gathering of corn and cotton was almost finished. Plowing made good progress, where the ground was not too dry. Stock water became scarce in many localities. Wheat and other grains made fair growth generally, but suffered in some localities from lack of moisture.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 45.9°, or 1.5° above normal. The highest monthly mean was 50.9° at Caruthersville, and the lowest monthly mean was 41.7° at Kidder. The highest temperature recorded was 83° at Trenton on the 1st, and the lowest was 7° at Downing and Kirksville on the 16th. The greatest daily range was 50° at Brunswick on the 13th and at Greenville on the 19th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 0.84 inch, or 1.66 inches less than normal. The greatest local monthly amount was 2.09 inches at Seligman, and the least local monthly amount was 0.06 inch at Monroe City and West Ely. The greatest amount in any twenty-four hours was 1.50 inches at New Madrid on the 5th. The average number of days with 0.01 inch or more of precipitation was 4. The snowfall averaged 0.2 inch, or 0.7 inch below normal. The greatest monthly snowfall was 3.0 inches at Kidder and at Tarkio.

MISCELLANEOUS PHENOMENA

Duststorms.—12th, 13th, 16th, 17th, 25th.
Earthquake.—Reported at St. Charles on 16th.
Fogs.—Dense, 4th, 23d.
Frosts.—Light, 3d, 6th; heavy 7th, 8th; killing, 3d, 7th, 8th.
Hail.—None.
Halos.—Solar, 13th, 28th; lunar, 27th, 28th.
Sleet.—4th, 5th, 23d.

(Continued on page 55)

LIBRARY OF THE JAN 5 1934

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.10	30.66	16	29.67	21	10.0	34	nw.	12	76	49	56	69
Kansas City...	30.12	30.59	16	29.68	20	11.9	41	nw.	12	61	49	50	66
St. Joseph	30.10	30.58	16	29.63	20	10.2	41	nw.	12	66	46	52	66
St. Louis....	30.08	30.62	16	29.62	21	13.1	38	sw.	17	70	51	53	51
Springfield	30.12	30.55	16	29.70	21	10.8	34	nw.	25	77	57	60	62
Cairo, Ill.....	30.11	30.58	16	29.68	21	9.8	27	nw.	13	75	54	55	60
Keokuk, Iowa.	30.09	30.67	16	29.64	21	9.6	36	nw.	12	68	46	53	66

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	41.6	− 2.8	87	15	3.26	+0.76	6.54	1.00	....	7	..	..	..
1889....	39.9	− 4.5	76	6	3.43	+0.93	6.25	1.36	0.6	7	..	..	..
1890....	46.5	+ 2.1	80	14	2.31	−0.19	4.70	0.83	T.	5	..	..	..
1891....	39.6	− 4.8	82	− 7	3.60	+1.10	9.75	0.25	....	8	..	..	..
1892....	40.1	− 4.3	79	9	2.60	+0.10	6.21	0.18	1.0	6	11	7	12
1893....	40.9	− 3.5	79	− 1	1.59	−0.91	4.72	0.08	0.3	4	14	9	7
1894....	41.0	− 3.4	80	3	1.58	−0.92	5.40	0.20	T.	4	15	9	6
1895....	41.6	− 2.8	82	− 4	3.37	+0.87	7.06	0.52	3.2	8	10	7	13
1896....	42.3	− 2.1	82	− 5	2.18	−0.32	6.80	0.70	0.2	6	11	7	12
1897....	43.4	− 1.0	82	− 3	2.40	−0.10	6.21	0.27	T.	6	13	8	9
1898....	39.9	− 4.5	79	− 8	2.28	−0.22	4.31	0.85	2.3	6	14	8	8
1899....	49.5	+ 5.1	82	16	1.90	−0.60	5.29	0.69	0.2	7	11	9	10
1900....	43.7	− 0.7	84	7	2.58	+0.08	8.76	0.20	0.2	6	15	7	8
1901....	43.6	− 0.8	84	9	1.38	−1.12	4.34	0.32	0.3	4	17	7	6
1902....	50.1	+ 5.7	85	18	3.52	+1.02	6.21	1.51	0.4	9	8	9	13
1903....	40.9	− 3.5	79	2	1.24	−1.26	3.26	0.20	1.1	5	13	8	9
1904....	46.3	+ 1.9	83	11	0.22	−2.28	0.89	0.00	T.	2	21	5	4
1905....	45.8	+ 1.4	83	3	1.94	−0.56	3.58	0.65	T.	6	18	6	6
1906....	42.5	− 1.9	88	− 3	2.60	+0.10	10.07	1.13	5.0	8	12	6	12
1907....	43.8	− 0.6	88	11	2.52	+0.02	6.03	0.55	T.	4	19	4	7
1908....	47.6	+ 3.2	87	9	4.14	+1.64	9.41	1.50	0.2	8	15	7	8
1909....	53.6	+ 9.2	87	11	4.43	+1.93	12.52	1.20	0.4	8	12	7	11
1910....	42.0	− 2.4	83	11	0.38	−2.12	1.07	0.00	0.1	3	15	8	7
1911....	39.1	− 5.3	83	− 3	2.55	+0.05	4.63	0.37	1.1	7	13	6	11
1912....	45.9	+ 1.5	85	12	1.52	−0.98	4.27	0.11	0.1	3	20	5	5
1913....	51.7	+ 7.3	80	11	2.73	+0.23	4.82	0.25	T.	7	10	8	12
1914....	48.6	+ 4.2	89	2	0.65	−1.85	2.07	T.	0.1	3	19	6	5
1915....	49.5	+ 5.1	87	12	2.76	+0.26	5.25	0.82	0.1	5	16	7	7
1916....	46.9	+ 2.5	85	3	2.49	−0.01	5.60	1.45	0.1	4	19	4	7
1917....	46.1	+ 1.7	80	8	1.05	−1.45	7.75	0.00	T.	3	14	5	11
1918....	44.9	+ 0.5	85	12	3.18	+0.68	11.00	1.34	1.2	6	15	4	11
1919....	42.2	− 2.2	78	2	3.62	+1.12	7.96	1.17	1.0	6	15	5	10
1920....	40.9	− 3.5	82	6	1.21	−1.29	2.75	0.00	T.	6	12	6	12
1921....	45.6	+ 1.2	84	10	2.82	+0.32	11.78	0.00	0.4	5	13	7	10
1922....	47.8	+ 3.4	84	15	3.82	+1.32	6.75	1.11	T.	7	16	6	8
1923....	45.1	+ 0.7	79	14	2.15	−0.35	4.45	0.26	3.0	6	15	6	9
1924....	46.7	+ 2.3	88	4	1.72	−0.78	4.11	0.51	0.5	4	15	8	7
1925....	42.8	− 1.6	80	− 2	2.99	+0.49	7.75	0.40	2.0	6	16	6	8
1926....	39.6	− 4.8	78	0	2.98	+0.48	5.68	0.25	4.3	7	11	7	12
1927....	46.8	+ 2.4	89	12	3.55	+1.05	7.89	0.03	0.9	7	6	9	15
1928....	44.6	+ 0.2	79	9	5.10	+2.60	10.88	0.74	0.5	10	13	4	13
1929....	39.0	− 5.4	78	− 8	1.46	−1.04	4.47	0.11	2.1	6	11	8	11
1930....	45.8	+ 1.4	83	8	2.93	+0.43	6.10	1.27	T.	5	18	5	7
1931....	52.2	+ 7.8	87	17	5.46	+2.96	9.72	2.58	1.4	11	10	5	15
1932....	39.5	− 4.9	75	− 9	1.82	−0.68	3.93	0.59	4.5	5	16	5	9
1933....	45.9	+ 1.5	83	7	0.84	−1.66	2.09	0.06	0.2	4	16	6	8
Period.	44.4	.....	89	− 9	2.50	.....	12.52	0.00	0.9	6	14	7	9

Climatological Data for November 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	46.2	+ 4.6	80	1	15	16	50	0.81	−1.23	0.28	2.0	3	17	5	8	sw.	O. K. Benecke
Clifton Hill	Randolph	731	34	46.2[e]	+ 2.8	78	1	..	..	..	0.64	−1.50	0.28	1.0	7	17	5	8	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	44.8	+ 1.5	78	1	18	16	38	0.80	−1.40	0.26	T.	5	17	5	8	sw.	U. S. Weather Bureau
Downing	Schuyler	876	12	42.8	+ 1.2	80	1	7	16	40	0.29	−1.57	0.18	T.	5	15	7	8	sw.	James Taylor
Elsberry	Lincoln	449	2	43.6	.....	79	1	9	16	48	0.79	.....	0.35	0	5	10	12	8	nw.	Ray E. Mills
Fayette	Howard	661	53	44.4	+ 2.2	81	1	16	15†	46	0.91	−1.22	0.30	T.	4	.	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	44.4	+ 0.2	80	1	17	16	45	0.85	−1.51	0.34	T.	5	17	6	7	nw.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	0.23	−1.76	0.13	T.	3	10	6	14	sw.	J. W. Pulliam
Hannibal	Marion	759	41	44.2	+ 2.1	82	1	10	16	39	0.15	−1.91	0.05	0	7	15	5	10	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	43	45.0	+ 0.9	80	1	19	15†	45	1.44	−0.93	0.47	T.	6	11	13	6	w.	Mrs. Frank Kliegel
Kirksville	Adair	969	44	42.7	+ 2.1	80	1	7	16	40	0.28	−1.63	0.15	0.5	5	18	2	10	w.	Prof. J. S. Stokes
Louisiana	Pike	469	39	44.8	+ 0.7	80	1†	12	16	41	0.75	−1.67	0.50	0	3	16	10	4	w.	Stark Bro's Nurseries
Macon	Macon	875	34	42.6	− 0.2	80	1	9	16	45	0.35	−1.75	0.30	T.	2	19	3	8	w.	W. C. Brown
Mexico	Audrain	800	44	41.8	− 1.1	78	1	14	16	49	0.67	−1.71	0.25	T	5	21	1	8	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	0.06	−2.07	0.06	0	1	12	8	10	se.	J. S. Conway
St. Charles	St. Charles	520	45	44.0	− 1.3	80	1	17	16	43	0.62	−1.90	0.30	0	4	21	6	3	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	60	46.0	+ 0.6	79	1	20	16	33	1.64	−1.19	0.82	0	6	13	8	9	nw.	**Section Center**
St. Louis University	St. Louis City	578	21	45.5	− 1.0	78	1	20	15†	32	1.60	−1.02	0.79	0	7	16	9	5	w.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	0.51	−1.68	0.31	0	3	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	35	43.4	− 0.1	80	1	9	16	43	0.42	−1.69	0.15	0	3	16	8	6	w.	Frank Hall
Unionville	Putnam	1,062	40	43.6	+ 3.3	79	1	9	16	40	0.40	−1.56	0.20	1.0	2	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	46.8	+ 3.6	80	1	17	15†	41	0.60	−2.09	0.23	0	6	11	9	10	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	41.8	+ 0.7	80	1	10	16	36	0.33	−1.61	0.33	T.	1	11	9	10	nw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**44.2**	**+ 1.2**	**82**	**1**	**7**	**16**	**50**	**0.58**	**−1.63**	**0.82**	**0.2**	**4**	**15**	**7**	**8**	**w.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	47.5	.....	75	1	18	10	42	1.35	.....	0.83	0	5	15	7	8	n.	Jeff. King
Caruthersville	Pemiscot	265	37	50.9	+ 0.5	74	30	25	9†	37	1.30	−2.66	0.95	0	3	14	8	8	.....	Sam Smith
Doniphan	Ripley	344	29	50.2	+ 2.9	80	1†	20	10	42	1.22	−2.31	0.82	0	5	14	6	10	n.	W. W. Martin
Jackson	Cape Girardeau	428	42	47.2	+ 0.6	80	1	19	10†	44	1.16	−2.27	0.62	0	4	15	2	13	n.	John G. Putz
Marble Hill	Bollinger	470	38	47.7	+ 2.5	81	1	17	15	48	1.18	−2.45	0.46	0	5	15	8	7	n.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	1.79	−2.28	1.31	0	3	16	4	10	sw.	John A. Spence
Poplar Bluff	Butler	339	28	46.8	− 0.9	79	1†	20	10†	47	1.68	−1.94	0.75	0	4	20	4	6	w.	J. H. Wolpers
Sikeston	Scott.	318	26	49.2	+ 2.0	81	1	21	10†	39	1.32	−2.42	1.00	0	3	16	6	8	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill.	358	61	48.4	+ 1.1	78	1	25	15	31	1.23	−2.45	1.09	0	7	12	7	11	nw.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**48.5**	**+ 1.2**	**81**	**1**	**17**	**15**	**48**	**1.30**	**−2.51**	**1.50**	**0**	**4**	**15**	**6**	**9**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	52	44.8	+ 0.9	77	1	18	10	43	1.27	−2.35	0.53	0	4	18	5	7	s.	Arcadia College
Birchtree (near)	Shannon	1,000	38	49.6	+ 3.0	77	1	20	8†	39	1.28	−1.85	0.72	0	5	19	5	6	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	0.89	.....	0.76	0	2	18	2	10	.....	C. M. McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	0.68	.....	0.47	0	3	15	8	7	sw.	Ozark Utilities Co.
Dean ††	McDonald	1,000	29	48.9	− 0.4	81	1	23	8†	42	1.30	−2.04	0.52	0	6	17	6	7	nw.	H. E. Dean
Eldon	Miller	934	38	44.1[c]	− 0.7	82	1	21	10	41	1.13	−1.36	0.41	0	4	12[c]	9[c]	6[c]	s.	E. H. Shepherd
Farmington	St. Francois	918	22	46.6	+ 1.8	82	2	20	15†	44	1.71	−2.04	0.90	0	3	22	2	6	n.	H. O. Miller
Goodland	Iron	1,000	40	46.2	+ 1.5	78	1	12	10	49	1.41	−1.51	0.45	0	5	17	5	8	n.	F. M. Adams
Greenville	Wayne	381	24	47.5	+ 2.1	79	1	16	10	50	1.57	−2.11	0.68	0	4	18	6	6	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	1.47	−1.02	0.53	0	4	9	9	12	e.	A. W. Madison
Koshkonong	Oregon	958	32	50.4	+ 1.4	77	30	24	10	36	1.36	−1.94	0.87	0	4	16	4	10	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	46.5	+ 0.9	76	1	20	10	39	1.33	−1.29	0.72	T.	3	18	4	8	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	48.6	+ 1.6	78	1	27	10†	31	1.17	−1.28	0.90	0	4	21	3	6	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	48.0	+ 2.1	75	1†	20	10	37	1.42	−1.34	0.94	0	7	19	3	8	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	49.0	+ 1.7	80	1	24	10	41	1.06	−2.10	0.61	0	3	17	8	5	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	47.6	+ 2.6	78	1	21	10†	37	1.35	−1.17	0.82	0	4	14	7	9	nw.	F. H. Lane
Salem	Dent	1,173	29	46.5	+ 0.4	76	20	19	10	40	1.28	−1.34	0.65	0	5	12	9	9	n.	E. E. Martin
Seligman	Barry	1,542	32	50.3	+ 3.0	78	1	26	8†	46	2.09	−0.78	0.81	0	5	21	3	6	nw.	Floyd E. Fawver
Seymour(near)	Webster	1,642	27	47.2	+ 1.3	75	1	20	10†	39	1.13	−1.54	0.57	0	6	15	6	9	sw.	A. L. Hailey
Springfield	Greene	1,324	45	48.1	+ 2.4	75	1	28	10	30	1.01	−1.78	0.45	T	7	16	5	9	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	47.2	.....	79	1	20	16	38	0.95	.....	0.26	0	8	15	7	8	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**47.6**	**+ 1.5**	**82**	**1†**	**12**	**10**	**50**	**1.27**	**−1.70**	**0.94**	**T.**	**5**	**17**	**5**	**8**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	47.8	+ 1.8	75	19†	24	10	42	0.59	−1.65	0.21	T.	5	12	10	8	sw.	W. G. Bigelow
Clinton	Henry	765	40	47.0	0.0	80	1	22	16	35	1.11	−0.96	0.43	0	5	13	9	8	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	44.2	+ 1.7	77	1†	20	16†	43	0.41	−1.66	0.19	0	3	18	5	7	sw.	John H. Patterson
Lamar	Barton	980	45	47.4	+ 1.1	80	1	25	10	39	1.33	−1.00	0.90	0	3	19	5	6	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	45.2	+ 0.8	80	1	20	16	37	0.35	−1.81	0.15	0	5	12	9	9	sw.	J. E. Wheeler
Marshall	Saline	779	46	45.0	− 0.2	76	1	18	8†	38	0.35	−1.91	0.27	0	2	23	2	5	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	48.3	+ 3.5	78	1	24	10†	35	1.24	−0.79	0.68	0	4	18	3	9	sw.	George A. Kaupp
Warrensburg	Johnson	878	46	47.3	+ 2.3	79	1	18	16	42	0.29	−1.71	0.18	T.	2	17	6	7	sw.	E. A. Markey
Warsaw	Benton	687	32	48.0	+ 0.8	79	1	20	10	41	0.61	−1.98	0.25	0	6	16	5	9	sw.	Everett Martin
Division means	**and extremes**	.....	..	**46.7**	**+ 1.3**	**80**	**1**	**18**	**8†**	**43**	**0.66**	**−1.59**	**0.90**	**T.**	**4**	**16**	**6**	**8**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	43.5	+ 0.7	78	1	13	16	45	0.37	−1.46	0.18	1.8	3	17	5	8	nw.	A. S. Cumming
Chillicothe	Livingston	779	24	41.8	+ 0.1	82	1	12	16†	47	0.50	−1.84	0.27	T.	2	17	5	8	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	44.0	+ 2.6	79	1	13	16	40	0.41	−1.05	0.16	T.	4	16	9	5	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	45.4[b]	+ 3.6	80	1	19	10	43	0.56	−0.97	0.39	T.	4	18	4	8	s.	Fred L. Stiff
Grant City	Worth	1,134	29	41.9	0.0	75	1	12	16	39	0.46	−1.16	0.23	2.0	3	10	9	11	nw.	Howard Rybolt
Kansas City	Jackson	963	44	47.2	+ 3.5	80	1	22	16	33	0.31	−1.52	0.22	T.	4	15	6	9	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	41.7	− 0.1	79	1	14	16†	44	0.55	−1.36	0.30	3.0	2	16	5	9	nw.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	0.87	−0.87	0.54	2.0	3	12	10	8	nw.	John M. Martin
Lexington	Lafayette	688	48	44.8	+ 0.6	81	1	19	16	40	0.53	−1.54	0.20	T.	4	17	8	5	w.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	43.8	+ 4.4	81	1	16	16	43	0.32	−1.31	0.21	0.5	3	12	8	10	n.	J. R. Brink
Oregon	Holt	1,048	77	46.5	+ 6.0	82	1	18	16	40	0.52	−1.21	0.24	T.	3	21	5	4	sw.	Mina Wright
St. Joseph	Buchanan	987	23	45.1	+ 1.7	80	1	20	16	36	0.52	−1.50	0.23	T.	4	16	7	7	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	30	42.4	+ 2.3	79	1	15	16	42	0.52	−0.96	0.20	3.0	3	17	7	6	nw.	Albert Volker
Trenton	Grundy	822	37	43.0	+ 0.8	83	1	14	16	38	0.34	−1.54	0.22	0	3	15	8	7	s.	W. H. Estes
Division means	**and extremes**	.....	..	**43.9**	**+ 2.0**	**83**	**1**	**12**	**16†**	**47**	**0.49**	**−1.31**	**0.54**	**0.9**	**3**	**16**	**7**	**7**	**nw.**	
State means	**and extremes**	.....	..	**45.9**	**+ 1.5**	**83**	**1**	**7**	**16**	**50**	**0.84**	**−1.66**	**1.50**	**0.2**	**4**	**16**	**6**	**8**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for November 1933

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Bethel	Mississippi			.18																					.11							0.29
Boonville	Missouri			.12	.04	.24	.02																		.20								0.62
Bowling Green	Mississippi			.15		.12																.09			.13								0.49
Brunswick	Grand			.25		.28																			.28								0.81
Canton	Mississippi			.28																				.02	.02								0.32
Clifton Hill	Chariton		.15	.10	.01	.07																		.02	.28						.01		0.64
Columbia***	Missouri		.11	T.	.22	.01	T.														T.	.26	T.	.20								0.80
Downing	Mississippi		.18	.02				T.															T.	.02	.05		.02						0.29
Edina	do			.33																				T.	.13								0.46
Elsberry	do			.35	.10	.20																.03		T.	.11								0.79
Ewing	do			.28																					.08								0.36
Farber	do			.21		.20																T.			.32								0.73
Fayette	Missouri			.18		.19																			.24						.30		0.91
Fulton	do			.14		.32	.02															.19		T.	.18								0.85
Gorin	Mississippi		.13																				T.	.02	.08								0.23
Hannibal	do		.01	.03	.01	T.																.05	.01	.01	.03								0.15
Hermann	Missouri			.15		.34																.14		.01	.15						.20		0.99
Jefferson City	do			.44		.42	.05															.12			.21						.20		1.44
Kahoka	Mississippi			.25																			T.		.01								0.26
Kirksville	do		.03	.12																			.01	**	.12								0.28
Linneus	Grand		.20		T	.02																	T.	.06					T.		T.		0.28
Louisiana	Mississippi		.15		.50																	.10											0.75
Lucerne	Grand			.16																					.02								0.18
Macon	Chariton			.30		.05																	T.		T.								0.35
Memphis	Mississippi			.20			T.																	T.	.20		T.			T.			0.40
Mexico	do		T	.11																		.11	.10	.10	.25					T.			0.67
Milan	Grand			.22																					.15								0.37
Monroe City	Mississippi				.06																												0.06
New London	do			.17																				.12		.07							0.36
Palmyra	do			.08																		.07											0.15
Paris	do			.14	.11																				.16								0.41
Perry	do					.20	.04															.10		T.	.15					T.			0.49
Philadelphia	do			.18																					.09								0.27
St. Charles	Missouri			.10		.30																.10			.12								0.62
St. Louis***	Mississippi		.82	T.	.32																	.18	T.	.12	.02						.18		1.64
St. Louis University*	do		.79		.32																	.17	.01	.11	.04						.16		1.60
Shelbina	do			.31																			.08		.12					T.			0.51
Steffenville	do		.15	.15																				T.	.12								0.42
Troy	do			.39		.22																.02		.03	.15								0.81
Union	Meramec			.11		.44																.27		.02	.35						.25		1.44
Unionville	Chariton		.20																				T.		.20								0.40
Valley Park	Meramec			T.		.75																.23		.03	.05					T.	T.		1.06
Warrenton	Mississippi			.10	.11	.12																.03			.16						.08		0.60
West Ely	do			T.		T.	T.		T.													.02		T.	.04								0.06
Winfield	do			.30		.23																			.13								0.66
Keokuk, Ia.***	do		.33		T.	T.	T.	T.	T.		T.					T.						T.	T.	T.		T.			T.			0.33
Southeast Lowlands																																	
Bragg City	St. Francis																																
Campbell	do		.04		.81	.02																.28			.20								1.35
Cape Girardeau	Mississippi					.72																.18			.06								0.96
Caruthersville	do				.95																.20			.15									1.30
Dexter	St. Francis					.12																.26											0.38
Doniphan	Black			.22	.60																	.25			.12						.03		1.22
Fisk	St. Francis			.06	T.	.72																.06	T.		.12								0.96
Jackson	Mississippi				.62	.05																.29			.20								1.16
Marble Hill	do		.06	.22	.46	.18																.26											1.18
Morehouse	do		T.		1.31	.11																T			.37								1.79
New Madrid	do					1.50																.15			.30								1.95
Parma	St. Francis			.10		1.30																			.40								1.80
Poplar Bluff	Black			.25		.75																.44			.24								1.68
Sikeston	Mississippi				1.00																.11			.21									1.32
Cairo, Ill.***	do		.01	T.	.99	.01		T.										T.				.06	T.	.05	.10						.01		1.23
Ozark Plateau																																	
Arcadia	St. Francis			.08		.53																.40			.26								1.27
Birchtree (near)	Black			.27	.72	.04																.10			.15								1.28
Buffalo	Osage					.76															T.										.13		0.89
Caplinger Mills	do		.17		.47	.04															T.			T.	T.						T.		0.68
Dean	Neosho		.03	.42	.06	.02															.25			.52									1.30
Eldon	Missouri			.41		.31																.09			.32								1.13
Farmington	St. Francis			T.	.70																	.90	T.		.11								1.71
Fredericktown	do			.19		.70																.18			.25								1.32
Galena	White			.15	.59	.37																.15			.04								1.30
Goodland	Black			.12	.45	.16																.38				.30							1.41
Greenville	St. Francis			.11	.68																	.36			.42								1.57
Hailey	White		.53	.50																	.27			.17									1.47
Koshkonong	Black			.06	.87																	.26			.17						T.		1.36
Lakeside	Osage			.15	.01	.48																.15		.01	.16						.11		1.07
Lebanon	do			.42		.72																.19		T.	T.								1.33
Leeper	Black			.03		.60																.22			.33								1.18
Lockwood	Osage		T.	.10	.90																T.	.10		T.						.07		1.17
Mountain Grove	White		T.	.02	.94	.06	.02															.24			.10					.04			1.42
Neosho	Neosho		.13		.61																	.32									T.		1.06
Owensville	Gasconade					.58																.78								.25	.22		1.83
Rolla	Meramec			.16		.82																.22		T.	.15								1.35
St. Thomas (near)	Osage			.09		.50																.35			.16						.04		1.14
Salem	Meramec		T	.14	.65	.03																.28			.18								1.28
Seligman	Neosho		T.	.81	.73	.03																.41		T.	.11								2.09
Seymour (near)	White		.07	.31	.57																	.11		T.	.05						.02		1.13
Springfield	do		.44	.02	.39	.01	T.														.04	.08	T.	.03	T.						T.		1.01
Stover	Missouri					.30																			.14						.23		0.67
Versailles	Osage		.05	.23	.26	.05																.02	.02	T.	.15						.17		0.95
Williamsville	Black			.16		.78	.01															.31			.29								1.55
Willow Sprgs. (near)	White			.05	.20	.63																.17			.12								1.17
Southwest Plain																																	
Appleton City	Osage		.05	.19	.21	T.																.01	T.	T.							.13		0.59
Clinton	do		.24		.29	.05																.10									.43		1.11
Concordia	Missouri			.18																													0.18
Harrisonville	Osage			.19	.10	.12																											0.41

Continued on next page

Daily Precipitation for November 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																
Joplin ‖‖	Neosho		.12	.20	.63																.18			T.								1.13
Lamar ‖	do			.43	.50	.40																T			T.								1.33
Lamonte	Missouri				.15	.05																		.10	.03						.02		0.35
Marshall	do		.08		.27																												0.35
Nevada	Osage		.30	.09	.68	T.																									.17		1.24
Warrensburg	Missouri			.18	.11																		T.	T.									0.29
Warsaw	Osage		T.	.20	.25	.05																.02	T.	T.	.02						.07		0.61
Waverly ‖	Missouri			.23		.04																											0.27
Northwest Plateau																																
Bethany	Grand		.16			.03																		.18									0.37
Chillicothe ‖‖	do			.23		T.	T.							T.										T.	.27							0.50
Conception	Missouri		.16			.11				T.														.07						.07			0.41
Edgerton	do		.39		.04	.04																		.09									0.56
Gallatin ‖	Grand			.27			.05																		.20								0.52
Grant City	do		.11		T.	12																	T.	.23	T.					T.			0.46
Kansas City***	Missouri		.22		.02	.06	.01															T.	T.	T.		T.				T.			0.31
Kidder ‖‖	Grand			.25		T.	T.																		.30					T.			0.55
King City	Missouri		.54			T.																		.31	.02								0.87
Lexington ‖	do			.19		.11																.03			.20								0.53
Maryville‖‖	do			.10		.01																			.21								0.32
Oregon	do		.16		T	.12																		.24									0.52
St. Joseph***	do		.23		T.	.05																	T.	.23							.01		0.52
Tarkio	do		.17			.15																		.20									0.52
Trenton	Grand		.22		T.	T.																	.02	.10						T.			0.34

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for November 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.130	.144	.155	.213	****	.033	.060	.092	.127	.118	.096	.103	.258	.112	.186	.059	.067	.107	.078	.079	.069	.134	.111	.008	.015	.122	.061	.114	.064	.111	....	3.018
	Mean temperature	68	55	45	40	42	43	40	42	36	42	51	54	42	44	34	38	46	44	51	54	48	46	39	39	44	44	50	52	55	52	..	46.0
	Wind movement	60	53	77	84	76	85	116	99	136	93	114	63	181	134	124	57	98	108	54	50	52	87	122	71	69	129	65	89	96	110	..	2,752

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report. **** —.008

Continued from Page 52

Thunderstorms.—None.

Windstorms.—Rather general high winds reported on the 12th but only minor damage, such as blowing down corn shocks and haystacks at Downing and the blowing over of the thermometer shelter at Clifton Hill, reported.

ERRATA

October 1933, page 48, greatest precipitation in twenty-four hours at Springfield should be 1.42.

Daily Temperatures for November 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	80	69	52	49	46	47	43	57	58	59	63	71	75	65	48	38	67	58	69	75	67	64	47	39	58	63	67	61	76	67	..	59.9
	Minimum	56	38	29	37	40	34	29	22	29	20	39	36	25	40	19	15	29	25	27	36	38	34	25	29	33	30	35	34	54	39	..	32.5
Columbia	Maximum	78	63	50	43	43	46	43	57	45	57	63	70	47	52	37	38	63	57	67	77	58	55	39	40	59	47	68	62	76	62	..	55.4
	Minimum	59	39	31	37	36	32	27	25	24	23	41	38	24	28	20	18	36	29	36	39	39	36	28	33	34	30	39	39	61	48	..	34.3
Fayette	Maximum	81	54	52	46	46	46	46	55	40	59	68	74	53	55	42	46	65	60	71	76	57	58	39	42	59	51	69	65	76	59	..	57.0
	Minimum	53	48	27	35	37	34	27	19	28	18	37	30	24	36	16	16	30	25	33	30	50	32	24	30	29	28	30	31	53	44	..	31.8
Hannibal	Maximum	82	68	48	47	44	41	42	55	50	52	60	70	61	51	37	34	60	53	64	73	66	54	42	40	58	54	67	62	75	71	..	56.0
	Minimum	58	40	29	35	39	34	30	23	25	21	34	36	22	28	14	10	27	29	38	36	43	34	26	33	33	29	33	39	51	40	..	32.3
Jefferson City §§	Maximum	80	62	55	42	42	47	45	59	39	62	66	72	51	55	38	45	64	60	69	78	58	60	42	39	61	53	70	76	52	..	..	57.1
	Minimum	55	56	30	32	37	34	32	25	26	23	27	39	26	26	19	19	19	30	32	40	44	36	32	31	30	31	33	38	38	47	..	32.9
Kirksville	Maximum	80	73	47	46	45	46	40	54	49	52	58	68	57	53	38	36	60	55	65	74	66	53	41	37	58	57	66	55	74	69	..	55.7
	Minimum	56	36	27	30	32	33	26	20	22	20	18	34	20	36	12	7	26	26	35	37	38	33	27	31	36	25	33	32	50	32	..	29.7
Louisiana	Maximum	80	78	61	51	42	45	45	42	38	37	63	66	42	52	38	33	63	60	65	70	68	57	47	60	62	55	60	65	80	77	..	56.7
	Minimum	52	53	30	35	36	33	33	28	27	17	35	30	26	36	17	12	26	30	32	29	54	30	27	30	34	30	35	32	54	43	..	32.9
Macon §§	Maximum	80	54	49	47	41	42	42	54	34	55	61	69	52	49	37	53	62	57	66	75	52	56	38	44	57	45	66	67	75	59	..	54.6
	Minimum	55	45	27	33	37	33	29	21	25	20	30	36	22	29	14	9	17	28	35	39	46	34	27	28	33	26	31	34	39	36	..	30.6
Mexico §§	Maximum	78	74	49	44	42	41	42	50	35	46	60	72	48	51	34	45	59	59	64	74	56	54	41	40	55	42	63	62	71	65	..	53.9
	Minimum	55	54	28	31	36	33	30	23	21	20	24	23	24	26	15	14	15	29	29	35	35	34	27	27	32	28	29	35	37	44	..	29.8
St. Louis	Maximum	79	76	53	45	43	44	43	54	48	45	64	72	48	52	37	34	60	53	63	75	60	60	43	43	56	46	67	59	73	65	..	55.3
	Minimum	61	43	36	39	38	36	32	28	29	26	41	42	27	28	20	20	30	36	39	46	43	37	36	36	34	32	34	47	57	47	..	36.7
Unionville	Maximum	79	74	48	46	46	46	44	55	50	55	56	70	60	55	38	38	58	55	65	77	68	50	37	40	60	63	65	60	75	70	..	56.8
	Minimum	44	36	26	30	35	33	23	20	20	19	40	35	20	36	12	9	30	28	40	44	42	32	23	30	35	30	35	32	40	32	..	30.4
Warrenton	Maximum	80	76	57	47	41	42	42	56	53	52	62	72	66	50	46	40	62	61	65	77	69	59	53	41	61	58	69	63	73	78	..	58.9
	Minimum	57	57	31	35	37	32	31	25	29	21	37	38	25	35	17	17	28	31	36	44	50	33	30	33	31	30	31	41	51	45	..	34.6
Southeast Lowlands																																	
Campbell	Maximum	75	74	71	50	46	45	54	54	50	50	70	71	64	55	48	48	61	61	67	74	69	62	54	46	60	54	66	69	72	72	..	60.4
	Minimum	47	50	45	42	42	39	37	21	33	18	30	31	33	34	25	19	25	31	25	33	46	30	38	37	25	37	25	32	55	53	..	34.6
Caruthersville	Maximum	72	73	69	53	52	47	55	51	54	48	69	68	64	67	46	47	62	62	68	73	70	64	56	49	59	58	63	71	71	74	..	61.2
	Minimum	56	50	49	46	40	40	28	36	25	39	40	38	38	30	25	33	42	35	41	57	36	42	40	30	40	34	44	56	56	53	..	40.6
Doniphan	Maximum	80	76	70	55	55	55	52	56	50	52	55	80	76	60	50	42	60	65	70	71	70	68	70	57	55	51	68	65	72	75	..	62.7
	Minimum	48	49	48	45	45	43	38	21	31	20	31	40	34	44	27	22	33	35	35	30	53	48	44	40	28	24	26	35	60	55	..	37.7
Jackson	Maximum	80	69	67	48	46	44	45	50	47	44	70	69	66	59	59	40	55	59	69	70	65	59	59	45	56	56	63	66	71	75	..	59.0
	Minimum	50	51	44	41	41	40	39	22	33	19	34	31	32	36	23	19	23	35	25	33	54	32	38	37	28	36	25	34	52	56	..	35.4
Poplar Bluff	Maximum	79	71	65	46	46	46	50	47	52	48	79	79	67	60	41	44	56	62	69	63	61	56	56	46	58	51	63	67	64	75	..	58.9
	Minimum	49	51	44	43	43	40	34	22	28	20	33	32	34	38	24	20	25	31	26	32	38	31	33	35	25	35	26	33	58	55	..	34 6
Sikeston	Maximum	81	75	68	51	48	44	52	53	50	47	72	70	68	63	51	47	51	58	70	76	67	65	53	44	59	57	65	69	73	75	..	60.7
	Minimum	53	55	46	46	42	41	41	25	35	21	34	35	34	34	25	21	29	30	31	38	54	34	39	39	29	36	31	40	57	55	..	37.7
Cairo, Ill	Maximum	78	75	51	51	48	44	49	49	45	43	70	66	60	60	40	42	61	56	66	73	65	59	50	43	58	49	64	69	70	72	..	57.5
	Minimum	56	51	46	47	42	41	37	28	30	25	39	38	34	36	25	27	32	40	36	45	48	37	39	37	32	36	34	47	58	55	..	39.3
Ozark Plateau																																	
Arcadia §§	Maximum	77	73	50	42	41	42	47	53	42	51	68	71	53	57	39	45	57	57	70	73	62	64	44	40	57	49	67	64	70	72	..	56.6
	Minimum	48	50	41	40	39	38	38	21	26	18	26	31	30	29	22	23	26	32	27	34	36	32	36	33	30	32	27	34	37	56	..	33.1
Birchtree	Maximum	77	76	66	58	44	42	45	54	47	53	69	70	67	60	50	54	63	70	73	74	68	63	54	44	57	52	68	69	71	75	..	61.1
	Minimum	51	54	50	40	40	36	38	20	36	20	33	34	31	40	28	24	36	31	34	48	41	31	36	35	25	38	44	54	60	54	..	38.1
Eldon §§	Maximum	82	62	53	43	42	47	42	58	41	60	67	71	49	56	39	..	..	..	70	64	54	60	40	39	58	50	41	78	62	53	..	[c]54.9
	Minimum	55	54	31	31	39	36	33	25	26	21	28	40	26	26	24	22	22	..	..	41	41	36	33	32	29	32	32	37	31	49	..	[b]33 3
Farmington	Maximum	80	82	70	47	45	47	45	49	55	53	68	65	65	55	40	43	67	57	60	58	75	64	54	44	52	46	69	67	73	73	..	58.9
	Minimum	47	43	40	34	35	35	35	33	31	32	35	29	29	32	20	20	23	28	37	39	40	40	38	37	39	30	37	35	39	37	..	34.3
Koshkonong	Maximum	76	73	66	52	48	52	45	54	48	53	60	73	68	63	49	53	63	61	74	76	68	63	56	43	59	54	68	66	73	77	..	61.1
	Minimum.	56	57	47	43	41	39	39	26	37	24	39	48	32	38	29	27	35	37	38	47	49	37	38	35	30	39	35	43	52	57	..	39.8
Lebanon §§	Maximum	76	71	65	42	42	45	44	56	41	59	66	73	55	57	55	53	64	58	69	74	56	59	46	46	59	50	68	67	74	67	..	58.6
	Minimum	52	54	35	35	36	35	31	23	28	20	28	38	24	26	25	22	26	30	31	46	37	33	44	36	26	36	33	36	45	60	..	34.4
Mountain Grove	Maximum	75	68	60	50	42	44	45	55	49	56	70	73	57	61	43	54	64	61	72	75	62	61	58	49	57	52	71	65	70	72	..	59.7
	Minimum	54	48	39	37	38	36	31	23	29	20	39	41	27	36	25	24	34	30	37	45	44	35	34	34	28	35	34	43	55	53	..	36.3
Neosho	Maximum	80	75	47	51	50	47	45	58	55	63	63	66	66	63	58	59	63	69	70	75	61	60	56	61	58	56	69	66	73	70	..	61.8
	Minimum	51	47	38	43	39	37	33	25	33	24	34	34	32	38	27	25	41	28	32	39	48	31	28	29	30	34	34	45	51	60	..	36.8
Rolla	Maximum	78	71	52	47	42	43	43	54	52	57	64	71	64	55	46	44	64	60	66	74	65	57	51	41	59	56	68	68	72	68	..	58.4
	Minimum	53	52	37	39	39	36	33	24	33	21	42	39	27	37	21	22	35	33	37	43	52	37	35	34	31	33	35	37	51	53	..	36.7
Springfield	Maximum	75	63	51	46	42	43	41	55	42	58	65	71	53	57	42	52	65	55	69	73	55	57	43	47	59	51	67	66	72	68	..	56.8
	Minimum	58	41	39	38	40	38	32	29	31	28	46	45	28	39	29	29	42	35	41	48	42	39	35	34	34	36	41	50	60	56	..	39.4
Southwest Plain																																	
Appleton City	Maximum	74	71	51	47	42	42	42	55	51	56	67	71	62	57	54	55	66	72	75	75	66	57	50	41	55	52	66	69	72	71	..	59.5
	Minimum	56	41	31	39	38	36	31	25	33	24	42	39	26	41	29	28	25	30	40	41	45	37	29	34	32	33	38	39	57	48	..	36.2
Clinton	Maximum	80	64	49	45	47	48	45	55	50	58	68	70	60	56	46	40	65	58	61	74	68	60	58	43	54	53	65	70	75	70	..	58.5
	Minimum	54	42	30	38	38	38	32	25	32	23	40	37	25	40	27	22	35	28	36	40	45	35	28	36	30	32	35	40	56	48	..	35.6
Harrisonville §§	Maximum	77	48	50	40	42	41	45	53	43	62	70	72	53	58	40	51	61	61	74	75	56	59	40	41	61	56	70	69	77	54	..	56.6
	Minimum	55	41	27	30	36	33	27	24	27	23	27	37	22	24	27	20	20	28	32	38	39	36	28	30	32	30	36	38	38	46	..	31.7
Lamar §§	Maximum	80	53	53	44	44	42	46	59	47	59	69	71	47	61	44	57	67	61	68	75	59	62	47	48	58	56	68	70	76	70	..	58.7
	Minimum	56	52	37	38	39	38	32	27	29	25	31	42	29	28	30	26	29	29	29	40	43	36	28	31	36	32	33	43	52	62	..	36.1
Lamonte	Maximum	80	60	50	44	43	42	43	56	47	59	65	70	60	54	39	46	63	58	69	74	56	57	38	38	58	51	67	69	76	60	..	56.4
	Minimum	57	38	30	37	38	35	30	24	26	22	43	38	25	31	24	20	34	29	36	39	37	35	25	32	34	32	37	38	48	48	..	34.1
Marshall	Maximum	76	70	52	42	40	39	40	46	53	58	64	69	50	51	40	39	62	57	71	75	67	57	47	52	57	62	68	61	75	73	..	57.1
	Minimum	56	40	29	36	36	37	30	18	26	24	43	34	24	24	25	18	33	30	35	37	35	37	25	28	32	31	31	40	46	43	..	32.8
Nevada	Maximum	78	69	52	49	42	42	42	55	48	53	68	71	61	58	45	52	67	59	71	75	58	61	46	44	58	62	66	72	76	68	..	58.9
	Minimum	58	40	31	40	38	36	32	26	35	24	43	42	26	43	29	24	43	29	39	45	45	40	27	34	36	34	41	42	58	50	..	37.7
Warrensburg	Maximum	79	74	63	56	44	42	45	56	51	60	68	71	61	57	46	47	64	64	78	74	65	56	48	38	59	59	67	69	75	70	..	60.2
	Minimum	56	32	28	38	36	35	28	26	29	23	41	41	24	39	24	18	35	29	36	42	43	36	24	30	32	31	38	35	57	46	..	34.4
Warsaw	Maximum	79	72	55	49	43	45	44	57	52	59	68	72	63	56	48	49	66	59	70	76	68	59	53	43	60	57	70	70	76	72	..	60.3
	Minimum	54	50	30	38	38	37	32	24	32	20	45	35	26	40	26	23	38	25	38	35	47	33	31	33	29	33	35	36	60	48	..	35.7
Northwest Plateau																																	
Chillicothe §§	Maximum	82	46	49	46	42	42	43	58	37	60	60	69	56	52	41	47	59	59	69	68	51	56	34	40	61	52	68	77	61	65	..	55.0
	Minimum	54	42	25	25	35	35	25	23	24	25	29	37	20	23	15	12	12	24	31	33	34	34	20	25	34	26	26	35	38	37	..	28.6
Grant City	Maximum	75	71	47	42	42	40	38	54	52	49	49	67	55	47	40	33	54	50	68	74	67	49	37	43	55	45	59	59	67	52	..	52.7
	Minimum	57	35	34	33	33	31	22	20	23	18	42	37	19	37	15	12	30	24	34	35	40	36	32	29	36	27	29	35	50	28	..	31.1
Kansas City	Maximum	80	67	49	43	41	42	42	58	43	61	65	69	54	58	40	46	57	58	69	76	57	55	40	44	63	53	68	67	77	54	..	56.5
	Minimum	61	36	32	38	36	33	29	34	32	32	46	36	25	36	28	22	42	35	44	51	47	38	34	34	42	35	44	44	50	44	..	38.0
Kidder §§	Maximum	79	46	47	43	39	41	41	57	35	59	62	69	57	50	39	47	58	58	69	77	50	56	34	42	62	51	65	62	77	55	..	54.2
	Minimum	54	43	26	27	35	34	23	23	25	20	32	37	21	21	18	14	14	26	27	36	38	36	24	26	32	29	30	34	36	34	..	29.2
Lexington §§	Maximum	81	49	52	44	44	39	45	58	40	62	68	72	53	56	41	49	60	59	72	75	54	58	37	42	61	54	70	67	77	56	..	56.5
	Minimum	57	45	29	30	38	37	27	27	29	24	34	45	24	24	24	19	20	31	32	39	43	41	27	30	33	32	33	41	42	40	..	33.2
Maryville	Maximum	81	70	50	43	40	45	41	57	51	62	62	68	58	48	40	42	55	59	68	76	66	52	39	47	61	55	66	56	65	58	..	56.0
	Minimum	56	36	24	34	36	31	24	20	26	19	40	37	20	39	19	16	31	24	32	33	40	36	32	31	37	29	34	36	48	30	..	31.7
Oregon	Maximum	82	72	57	44	41	47	44	61	53	65	66	68	57	53	43	46	57	63	74	77	65	53	39	51	63	58	68	57	71	61	..	58.5
	Minimum	61	35	27	35	32	30	26	27	28	25	40	46	21	41	23	18	35	29	39	45	42	38	30	31	40	31	39	36	52	34	..	34.5
St. Joseph	Maximum	80	47	50	44	41	45	41	58	42	62	63	68	59	59	39	42	55	60	71	76	56	53	37	50	63	56	65	63	74	58	..	55.9
	Minimum	47	32	29	36	36	31	28	29	27	29	44	32	23	32	25	20	38	29	40	41	43	37	32	33	40	33	42	39	44	39	..	34.3
Trenton	Maximum	83	75	48	43	43	41	41	53	38	54	62	71	56	46	40	35	52	58	63	69	69	47	37	36	57	57	58	58	74	64	..	54.3
	Minimum	55	37	26	34	36	35	26	19	25	19	34	34	22	26	15	14	30	34	39	34	44	37	23	33	35	28	34	35	54	33	..	31.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 12-21-33—900.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

JUN 28 1934

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVII DECEMBER 1933 No. 12

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GENERAL SUMMARY

Although not without some cold days, and one severe cold wave, December was, on the whole, unusually mild. There were rather frequent changes in temperature. Notably mild days were the 2d, 4th, 14th, 15th, 16th, 22d, and 23d. The highest temperature for the month occurred at most stations on the 4th or 23d. Days with subnormal temperatures came about the 6th, 8th, 11th, 12th, 18th, and 25th to 29th, the one severe cold wave occurring on the 25-27th, and bringing zero or somewhat lower to northern stations on the 27th, and as low as 1° above zero in the Ozark Plateau. The average temperature for the month, 39.1°, was the second highest December average since 1923.

Much needed precipitation occurred the first three days of the month (November having been very dry), but this was followed by another dry spell, lasting until the 17th, when fairly good rains again occurred (17-20th). Some light rain or snow occurred on the 25-26th, and scattered light rains fell on the 30-31st. But the monthly precipitation was slightly deficient for the State as a whole and considerably deficient in the Ozark Plateau and the Southeast Lowlands. It averaged somewhat more than normal in the Northwest Plateau. Snowfall was very light, most stations having less than 1.0 inch and a large number having none or only traces.

No severe storms occurred.

Wheat and other winter crops made fair progress, but suffered at times, especially the second week of the month, from lack of moisture. The subsoil became very dry, due to the drought in November and the light precipitation in the first half of December. Mild weather was favorable for livestock and not much feeding was necessary where stock was on range.

River stages were unusually low in the St. Louis river district, but especially in the Mississippi from Hannibal to below St. Louis. The lowest stages of record occurred at Hannibal and St. Louis, due partially to the formation of ice gorges in the cold period of December 25-27th. The lowest at Hannibal was 2.7 feet below zero and at St. Louis, 4.6 feet below zero.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 39.1°, or 5.0° above normal. The highest monthly mean was 47.6° at Caruthersville, and the lowest monthly mean was 32.0° at Tarkio. The highest temperature recorded was 78° at Warsaw on the 16th, and the lowest was 7° below zero at Downing on the 27th. The greatest daily range was 48° at Warsaw on the 16th.

PRECIPITATION

The average precipitation for the State, 116 stations reporting, was 1.82 inches, or 0.25 inch less than normal. The greatest local monthly amount was 4.65 inches at New Madrid, and the least local monthly amount was 0.76 inch at Lucerne. The greatest amount in any twenty-four hours was 2.25 inches at Doniphan on the 17th. The average number of days with 0.01 inch or more of precipitation was 5. The snowfall averaged 0.4 inch, or 3.0 inches below normal. The greatest monthly snowfall was 4.0 inches at Farmington.

MISCELLANEOUS PHENOMENA

Fogs.—Dense, 1st, 6th, 13th, 14th, 17th, 19th, 30th, 31st.

Hail.—Light, at Brunswick on 2d, Campbell on 3d, and Neosho on 17th.

Halos.—Solar, 5th, 9th, 16th, 27th, 28th; lunar, 1st, 4th, 5th, 7th, 23rd, 24th.

Haze.—Dense, 15th.

Sleet.—2d, 25th, 26th.

Smoke.—Dense, 22d, 28th.

Thunderstorms.—Local, 3d, 15th, 16th; more or less general, 2d, 17th.

(Continued on page 60)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.11	30.72	28	29.60	15	9.2	25	sw.	15	79	63	62	54
Kansas City ...	30.10	30.67	28	29.50	14	10.1	31	nw.	24	69	58	56	57
St. Joseph	30.09	30.73	26	29.43	14	8.9	27	nw.	24	75	57	58	65
St. Louis	30.11	30.74	28	29.64	23	12.3	36	sw.	2	72	62	64	30
Springfield	30.08	30.59	28	29.70	14	10.8	24	sw.	31	81	63	65	50
Cairo, Ill.....	30.12	30.69	28	29.76	10	10.7	26	n.	5	79	66	66	48
Keokuk, Iowa.	30.13	30.83	28	29.53	15	8.4	24	w.	15	74	63	67	39

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	35.9	+ 1.8	70	0	2.29	+0.22	3.70	0.70	....	6	..	..	..
1889....	46.8	+12.7	80	2	0.96	−1.11	4.60	0.00	0.1	3	..	..	..
1890....	36.0	+ 1.9	76	− 3	1.03	−1.04	2.65	T.	4.6	3	..	..	..
1891....	39.8	+ 5.7	72	− 1	1.90	−0.17	4.50	0.16	....	6	..	..	..
1892....	29.4	− 4.7	75	−22	2.38	+0.31	6.73	0.51	4.8	6	8	7	16
1893....	35.2	+ 1.1	76	− 7	0.95	−1.12	3.85	0.10	2.7	5	11	11	9
1894....	36.7	+ 2.6	75	− 7	2.13	+0.06	5.79	T.	1.3	5	14	8	9
1895....	34.3	+ 0.2	69	− 8	6.13	+4.06	13.67	1.28	3.4	8	9	8	14
1896....	38.6	+ 4.5	79	− 5	0.93	−1.14	3.90	0.02	T.	3	13	8	10
1897....	29.3	− 4.8	74	−14	2.80	+0.73	6.61	0.76	6.3	7	8	8	15
1898....	28.7	− 5.4	74	−20	1.69	−0.38	3.55	0.50	5.1	5	17	6	8
1899....	30.4	− 3.7	75	−13	2.11	+0.04	6.10	0.50	6.6	9	12	9	10
1900....	35.6	+ 1.5	68	− 3	0.69	−1.38	3.45	0.05	0.6	4	14	8	9
1901....	28.5	− 5.6	71	−29	2.93	+0.86	6.72	0.82	6.9	8	11	7	13
1902....	30.7	− 3.4	68	− 7	2.91	+0.84	9.31	0.94	3.1	8	10	4	17
1903....	30.2	− 3.9	65	−11	1.51	−0.56	4.62	0.13	2.3	5	16	7	8
1904....	32.9	− 1.2	75	−10	1.50	−0.57	4.52	0.12	6.0	5	16	7	8
1905....	33.3	− 0.8	66	− 2	1.45	−0.62	5.02	T.	1.7	4	18	6	7
1906....	36.1	+ 2.0	73	0	2.27	+0.20	8.87	0.56	0.6	8	8	6	17
1907....	37.7	+ 3.6	76	3	1.84	−0.23	4.52	0.14	3.7	7	11	7	13
1908....	38.4	+ 4.3	80	− 4	0.85	−1.22	1.82	0.00	T.	3	16	7	8
1909....	24.9	− 9.2	76	−17	2.86	+0.79	6.17	0.80	7.7	8	12	6	13
1910....	31.2	− 2.9	67	− 5	1.25	−0.82	5.38	0.43	2.4	4	16	5	10
1911....	36.7	+ 2.6	74	−11	2.80	+0.73	4.55	1.27	5.1	7	13	6	12
1912....	36.5	+ 2.4	72	2	0.59	−1.48	2.36	0.00	0.6	3	19	5	7
1913....	38.3	+ 4.2	74	− 3	2.27	+0.20	3.70	1.00	6.6	7	9	4	18
1914....	26.8	− 7.3	68	−18	2.48	+0.41	5.84	0.57	6.6	9	7	5	19
1915....	34.7	+ 0.6	68	−13	2.77	+0.70	9.38	0.35	7.8	6	12	6	13
1916....	31.3	− 2.8	82	−29	1.85	−0.22	7.08	0.19	4.4	6	15	6	10
1917....	25.5	− 8.6	82	−23	0.74	−1.33	2.84	0.07	7.3	5	11	7	13
1918....	40.0	+ 5.9	83	−12	3.21	+1.14	8.86	1.21	7.8	7	13	6	12
1919....	28.5	− 5.6	74	−22	0.69	−1.38	4.30	0.00	0.7	3	12	4	15
1920....	35.6	+ 1.5	77	−10	1.93	−0.14	6.76	0.40	2.3	5	13	7	11
1921....	36.9	+ 2.8	74	− 8	1.86	−0.21	3.74	0.13	1.9	6	13	7	11
1922....	36.3	+ 2.2	75	− 6	2.11	+0.04	5.25	0.00	0.2	6	15	6	10
1923....	41.0	+ 6.9	82	− 4	3.06	+0.99	7.27	0.25	0.8	8	11	6	14
1924....	27.7	− 6.4	80	−28	3.43	+1.36	6.70	0.67	4.6	7	13	6	12
1925....	31.6	− 2.5	69	−10	1.45	−0.62	3.69	0.30	4.8	4	13	7	11
1926....	32.6	− 1.5	75	−12	2.18	+0.11	6.74	0.55	2.4	6	11	5	15
1927....	29.9	− 4.2	74	−11	2.68	+0.61	7.84	0.52	2.9	6	15	5	11
1928....	36.2	+ 2.1	81	0	2.24	+0.17	5.04	0.23	1.4	5	14	6	11
1929....	35.2	+ 1.1	76	− 9	1.66	−0.41	5.46	0.15	3.7	6	13	5	13
1930....	34.2	+ 0.1	70	2	1.23	−0.84	3.78	0.18	1.9	5	15	6	10
1931....	42.7	+ 8.6	80	11	2.57	+0.50	9.32	0.42	1.7	8	11	6	14
1932....	31.2	− 2.9	77	−21	4.46	+2.39	9.87	1.01	5.7	7	12	6	13
1933....	39.1	+ 5.0	78	− 7	1.82	−0.25	4.65	0.76	0.4	5	12	7	12
Period.	34.1	.....	83	−29	2.07	.....	13.67	0.00	3.4	6	13	6	12

Climatological Data for December 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	52	38.2	+ 7.6	66	4†	3	27	40	1.86	+0.21	0.75	0.5	8	18	1	12	sw.	O. K. Benecke
Clifton Hill	Randolph	731	34	37.8	+ 6.3	66	4	− 1	27	36	1.45	−0.18	0.72	1.0	6	14	3	14	.....	Dr. A. J. Bradsher
Columbia	Boone	784	43	38.0	+ 4.8	70	4	4	26	35	1.94	+0.08	0.56	0.2	6	12	6	13	sw.	U. S. Weather Bureau
Downing	Schuyler	876	12	32.9	+ 3.3	67	23	− 7	27	42	1.15	−0.35	0.82	0.3	8	12	7	12	sw.	James Taylor
Elsberry	Lincoln	449	2	37.5	.....	71	23	1	27	39	1.70	.....	0.94	1.0	6	3	11	17	s.	Ray E. Mills
Fayette	Howard	661	53	36.4	+ 5.3	70	4	3	27	39	1.58	−0.10	0.75	0.6	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	45	37.2	+ 3.7	72	4	2	27	39	1.70	−0.33	0.79	0.2	7	8	7	16	e.	Clyde C. Herring
Gorin	Scotland	700	46	....	.....	..	..	..	..	..	1.04	−0.62	0.71	0.5	5	16	5	10	ne.	J. W. Pulliam
Hannibal	Marion	759	41	36.6	+ 5.1	67	4†	− 3	27	40	1.65	+0.11	0.74	0.3	7	12	5	14	se.	Hannibal Water Dept.
Jefferson City	Cole	557	43	38.6	+ 5.7	75	4	5	27	38	1.48	−0.46	0.77	T.	6	7	18	6	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	44	33.3	+ 3.7	65	4	− 6	27	41	1.50	−0.11	0.95	0.8	5	11	2	18	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	39	37.1	+ 5.3	70	4†	0	27	35	1.66	−0.10	0.60	0.5	4	13	6	12	n.	Stark Bro's Nurseries
Macon	Macon	875	34	34.0	+ 3.9	68	23	− 4	27	38	1.33	−0.21	0.68	1.6	5	17	2	12	w.	W. C. Brown
Mexico	Audrain	800	44	36.9	+ 5.1	70	23	0	27	38	2.13	+0.13	0.53	1.0	7	12	1	18	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	12	....	.....	..	..	..	..	..	2.02	+0.35	1.12	0.5	6	7	11	13	ne.	J. S. Conway
St. Charles	St. Charles	520	45	38.9	+ 4.0	74	24	3	28	37	1.77	−0.11	0.94	0.8	6	9	17	5	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	60	40.2	+ 5.3	72	23	4	27	32	1.70	−0.51	0.84	2.2	5	6	9	16	s.	**Section Center**
St. Louis University	St. Louis City	578	21	39.4	+ 5.1	72	23	3	27	35	1.62	−0.86	0.97	2.0	4	12	5	14	se.	St. Louis University
Shelbina	Shelby	779	40	....	.....	..	..	..	..	..	1.65	+0.02	0.82	1.0	6	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	35	35.0	+ 4.4	65	23	− 3	27	42	1.84	+0.21	0.80	1.0	6	14	6	11	s.	Frank Hall
Unionville	Putnam	1,062	40	33.1	+ 5.5	66	23	− 5	26†	45	1.52	−0.10	0.67	T.	5	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	51	39.4	+ 7.0	72	23	1	27	42	2.09	−0.05	0.79	1.0	7	10	6	15	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	62	34.2	+ 4.6	67	23	− 4	27	32	1.74	+0.29	1.12	0.4	7	5	7	19	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**36.7**	**+ 5.0**	**75**	**4**	**− 7**	**27**	**45**	**1.54**	**−0.18**	**1.20**	**0.8**	**6**	**11**	**7**	**13**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	7	44.0	.....	70	15	9	27	38	3.28	.....	1.30	0	11	11	8	12	s.	Jeff. King
Caruthersville	Pemiscot	265	37	47.6	+ 6.7	72	1	14	26	42	3.78	−0.50	1.15	0	8	9	3	19	n.	Sam Smith
Doniphan	Ripley	344	29	44.3	+ 6.5	76	15	12	27†	38	3.06	−0.51	2.25	0	2	12	9	10	s.	W. W. Martin
Jackson	Cape Girardeau	428	42	42.6	+ 6.0	72	15	7	27	36	2.09	−1.13	1.19	1.0	7	9	4	18	n.	John G. Putz
Marble Hill	Bollinger	470	38	43.0	+ 6.3	75	15	6	27	41	2.88	−0.63	1.82	T.	6	11	7	13	n.	R. A. DeWitt
Morehouse	New Madrid	289	22	....	.....	..	..	..	..	..	3.15	−0.62	1.91	T.	9	12	4	15	sw.	John A. Spence
Poplar Bluff	Butler	389	28	42.2	+ 4.4	73	15	10	27	35	3.21	−0.73	1.60	0	8	19	0	12	n.	Mrs. J. H. Wolpers
Sikeston	Scott.	318	26	44.8	+ 7.1	74	15	9	27	41	2.86	−0.99	1.05	0	7	13	11	7	.....	John A. LaFont
Cairo, Ill.	Alexander, Ill.	356	61	44.5	+ 6.7	72	15	8	27	32	2.60	−0.80	1.61	T.	8	4	12	15	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**44.1**	**+ 6.2**	**76**	**15**	**6**	**27**	**42**	**3.08**	**−0.75**	**2.25**	**0.1**	**7**	**11**	**7**	**13**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	52	39.6	+ 5.3	72	15	5	27†	42	2.17	−0.80	1.05	1.2	4	15	4	12	s.	Arcadia College
Birchtree (near)	Shannon	1,000	38	43.5	+ 7.1	73	15	10	27	38	2.86	+0.11	1.15	0	7	15	4	12	sw.	V. H. Kirkendall
Buffalo	Dallas	1,200	2	....	.....	..	..	..	..	..	0.86	.....	0.58	0	4	11	8	12	.....	C. M. McCallister
Caplinger Mills	Cedar	750	7	....	.....	..	..	..	..	..	1.15	.....	0.95	T.	3	13	10	8	sw.	Ozark Utilities Co.
Dean ††	McDonald	1,000	29	44.6[a]	+ 7.1	77	3	17	27†	38	2.20	−0.07	1.88	T	3	17	4	10	e.	H. E. Dean
Eldon	Miller	934	38	37.7[a]	+ 3.4	74	4	8	27	42	1.86	−0.22	0.68	0	6	8	15	8	s.	E. H. Shepherd
Farmington	St. Francois	918	22	41.1	+ 4.4	75	15	1	27	35	1.72	−1.04	0.75	4.0	5	12	9	10	n.	H. O. Miller
Goodland	Iron	1,000	40	40.7	+ 5.9	72	15†	4	27	44	1.62	−0.93	0.73	1.8	4	12	7	12	s.	F. M. Adams
Greenville	Wayne	381	24	42.2	+ 6.0	75	15	9	27	44	2.12	−0.91	1.22	T.	5	13	7	11	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	8	....	.....	..	..	..	..	..	1.32	−0.61	0.56	0	5	11	9	11	se.	A. W. Madison
Koshkonong	Oregon	958	32	45.1[b]	+ 6.7	74	4	12	27	35	3.19	−0.22	1.17	0	6	9[b]	7[b]	13[b]	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	45	40.0	+ 5.2	74	4	10	27†	45	1.64	−0.84	0.83	T.	4	14	7	10	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	27	43.1	+ 7.0	72	4	13	26	34	1.51	−0.55	1.16	0	3	18	7	6	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	32	42.8	+ 8.1	70	4†	9	27	34	2.23	−0.25	0.67	T.	9	18	4	9	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	46	45.0	+ 7.9	75	4	17	26†	38	2.58	+0.09	2.00	0	4	13	10	8	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	33	42.0	+ 7.4	71	4†	8	27	33	1.30	−0.86	0.75	0.5	5	6	8	17	se.	F. H. Lane
Salem	Dent	1,173	29	41.2	+ 5.8	73	4†	6	27	39	1.90	−0.48	0.78	0.5	5	10	4	17	s.	E. E. Martin
Seligman	Barry	1,542	32	45.8	+ 8.5	75	4	14	27	36	1.66	−0.84	0.98	T.	5	17	5	9	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	27	42.2	+ 6.8	70	4	10	27	36	1.54	−0.77	0.83	T.	7	10	8	13	se.	A. L. Hailey
Springfield	Greene	1,324	45	43.1	+ 6.9	74	4	12	27	32	0.84	−1.47	0.56	T.	5	13	8	10	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	1	41.0	.....	74	4	8	26†	39	1.43	.....	0.81	T.	4	10	5	16	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**42.3**	**+ 6.4**	**77**	**3**	**1**	**27**	**45**	**1.88**	**−0.56**	**2.00**	**0.4**	**5**	**13**	**7**	**11**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	38	40.3	+ 5.7	71	14	9	26	39	1.19	−0.47	1.02	T.	3	8	15	8	sw.	W. G. Bigelow
Clinton	Henry	765	40	40.2	+ 5.5	70	14	10	26†	38	1.71	−0.16	1.10	0	7	12	12	7	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	55	36.0	+ 4.7	69	14	5	26†	41	1.83	+0.14	1.05	0	5	12	7	12	sw.	John H. Patterson
Lamar	Barton	980	45	41.6	+ 6.4	72	4†	13	27	37	1.60	−0.38	1.45	0	2	17	4	10	sw.	Jesse A. Mann
Lamonte	Pettis	867	32	38.2	+ 4.3	69	16	5	26	37	1.19	−0.56	0.70	0	5	8	10	13	sw.	J. E. Wheeler
Marshall	Saline	779	46	39.3	+ 7.4	68	4	5	27	36	1.94	+0.26	0.87	T.	4	16	5	10	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	40	42.0	+ 6.7	71	16	10	26	37	1.50	−0.33	1.39	0	2	11	6	14	s.	George A. Kaupp
Warrensburg	Johnson	878	46	39.2	+ 5.8	70	23	5	26	41	1.34	−0.42	0.98	T	4	12	5	14	sw.	E. A. Markey
Warsaw	Benton	687	32	41.9	+ 6.2	78	16	9	26†	48	1.94	−0.34	1.10	0	4	15	3	13	s.	Everett Martin
Division means	**and extremes**	.....	..	**39.9**	**+ 5.9**	**78**	**16**	**5**	**26†**	**48**	**1.67**	**−0.15**	**1.45**	**T.**	**4**	**12**	**8**	**11**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	38	34.2	+ 4.1	66	22	− 2	27	34	1.02	−0.23	0.42	0.2	4	17	5	9	nw.	A. S. Cumming
Chillicothe	Livingston	779	24	33.1	+ 0.2	69	23	− 2	27	39	1.41	−0.05	0.79	0.3	5	14	6	11	.....	Wm. J. Olenhouse
Conception	Nodaway	980	44	34.0	+ 4.8	66	22†	− 3	26	45	1.61	+0.67	0.84	1.0	5	10	10	11	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	13	37.0[a]	+ 6.6	66	23	4	26†	37	1.65	+0.44	0.86	0.1	5	20	1	10	n.	Fred L. Stiff
Grant City	Worth	1,134	29	33.2	+ 5.2	67	22	− 3	26†	40	0.79	−0.28	0.39	0.3	3	2	18	11	se.	Howard Rybolt
Kansas City	Jackson	963	44	39.0	+ 6.5	67	14	6	26	37	1.80	+0.47	1.22	T.	3	8	12	11	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	41	32.7	+ 3.5	67	23	− 2	27	39	1.51	+0.25	0.57	0.5	5	6	11	14	sw.	Roscoe L. Terry
King City	Gentry	1,095	7	....	.....	..	..	..	..	..	1.02	−0.05	0.49	2.2	6	3	16	12	nw.	John M. Martin
Lexington	Lafayette	688	48	36.2	+ 4.2	68	23	5	27	37	2.06	+0.28	1.01	0.2	6	16	7	8	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	43	34.4	+ 7.6	68	22	− 2	26	37	1.64	+0.64	0.95	1.0	4	14	2	15	n.	J. R. Brink
Oregon	Holt	1,048	77	37.4	+ 8.7	71	22	1	26	43	1.66	+0.29	0.99	T.	3	20	3	8	nw.	Mina Wright
St. Joseph	Buchanan	967	23	36.4	+ 5.6	65	22	3	26	34	1.41	+0.27	0.79	0.1	4	18	4	9	se.	U. S. Weather Bureau
Tarkio	Atchison	916	30	32.0	+ 5.6	67	23	− 2	26	36	1.10	+0.22	0.94	0.5	4	14	8	9	nw.	Albert Volker
Trenton	Grundy	822	37	32.8	+ 3.2	61	22	− 2	26	33	1.44	+0.05	0.85	0.5	4	6	16	9	s.	W. H. Estes
Division means	**and extremes**	.....	..	**34.8**	**+ 5.1**	**71**	**22**	**− 3**	**26†**	**45**	**1.47**	**+0.28**	**1.22**	**0.5**	**4**	**12**	**8**	**11**	**nw.**	
State means	**and extremes**	.....	..	**39.1**	**+ 5.0**	**78**	**16**	**− 7**	**27**	**48**	**1.82**	**−0.25**	**2.25**	**0.4**	**5**	**12**	**7**	**12**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for December 1933

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi	....	.26	.91	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.61	....	....	....	....	....	.02	....	....	....	....	....	1.80
Boonville	Missouri	.40	.35	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	.04	....	.08	.74	....	....	....	....	....	T.	T.	....	....	....	....	1.64
Bowling Green	Mississippi	....	.10	.26	....	....	....	....	....	....	....	....	....	....	....	.01	....	.66	....	....	.30	....	....	....	....	....	.03	....	....	....	....	....	1.36
Brunswick	Grand	.40	.35	.25	.05	....	....	....	....	....	....	....	....	....	....	.02	....	....	....	.03	.75	....	....	....	....	....	.01	....	....	....	....	....	1.86
Canton	Mississippi	....	**	.96	....	....	....	....	....	....	....	....	....	....	....	.01	....	....	....	....	.69	....	....	....	....	....	.02	....	....	....	....	....	1.68
Clifton Hill	Chariton	.25	.40	.01	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.72	....	.01	....	....	....	....	.06	....	....	....	....	....	1.45
Columbia***	Missouri	.33	.53	T.	....	....	....	....	....	....	....	....	....	....	T.	....	.49	.07	T.	.50	T.	....	....	....	....	T.	.02	....	....	....	T.	....	1.94
Downing	Mississippi	.09	.15	.04	....	....	....	....	....	....	....	....	....	....	.02	....	....	....	....	.76	.06	....	....	....	....	....	T.	T.	....	....	.02	.01	1.15
Edina	....do	....	T.	.19	....	....	....	....	T.	....	....	....	....	....	....	T.	....	....	....	....	.85	....	....	....	....	....	.03	....	....	....	T.	T.	1.07
Elsberry	....do	T.	.05	.32	....	....	....	....	....	....	....	....	....	....	T.	....	....	.22	....	.94	.11	....	....	....	....	....	.06	....	....	....	....	....	1.70
Ewing	....do	....	.05	1.20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.60	....	....	....	....	....	.05	....	....	....	....	....	1.90
Farber	....do	....	.04	.42	....	....	....	....	....	....	....	....	....	....	....	....	....	1.05	....	.12	....	....	....	....	....	....	.06	....	....	....	....	....	1.69
Fayette	Missouri	....	.75	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.01	....	.06	.72	....	....	....	....	....	.04	....	....	....	....	....	1.58
Fulton	....do	.24	.08	.28	....	....	....	....	....	....	....	....	....	....	....	....	....	.29	....	.42	.37	....	....	....	....	....	.02	....	....	....	....	....	1.70
Gorin	Mississippi	.06	.24	....	....	....	....	....	....	....	....	....	....	....	.01	....	....	....	....	.71	....	....	....	....	....	....	.02	....	....	....	....	....	1.04
Hannibal	....do	.07	.24	.50	....	....	....	....	T.	....	....	....	....	....	....	....	....	.14	....	.66	.03	....	....	....	....	....	.01	....	....	....	....	T.	1.65
Hermann	Missouri	....	.23	.80	....	....	....	....	....	....	....	....	....	....	....	....	....	.21	....	.37	.43	....	....	....	....	....	.02	....	....	....	....	....	1.56
Jefferson City	....do	.10	.07	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	.49	....	.40	.37	....	....	....	....	....	T.	T.	....	....	....	....	1.48
Kahoka	Mississippi	.01	....	.33	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	.60	....	....	....	....	....	T.	....	....	....	....	T.	0.94
Kirksville	....do	.22	.25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.95	....	....	....	....	....	....	.06	....	....	....	.02	....	1.50
Linneus	Grand	**	.35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.46	....	....	....	....	....	....	.10	....	....	....	....	....	0.91
Louisiana	Mississippi	....	.53	....	....	....	....	....	....	....	....	....	....	....	....	....	.60	....	....	....	.50	....	....	....	....	....	.03	....	....	....	....	....	1.66
Lucerne	Grand	.02	.30	.12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.28	....	....	....	....	....	T	....	....	....	....	.04	0.76
Macon	Chariton	.02	.53	.01	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.68	....	....	....	....	....	.09	....	....	....	T.	T.	1.33
Memphis	Mississippi	....	.10	.26	T.	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	.85	....	....	....	....	....	.05	T.	....	....	T.	T.	1.26
Mexico	....do	.18	.20	.50	....	....	....	....	....	....	....	....	....	....	....	....	....	.53	....	.20	.42	....	....	....	....	....	.10	....	....	....	....	T.	2.13
Milan	Grand	.12	.43	.54	....	....	....	....	....	....	....	....	....	....	.08	....	....	....	....	....	.73	....	....	....	....	....	....	.08	....	....	.12	.06	2.16
Monroe City	Mississippi	.30	.67	.45	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.51	.06	....	....	....	....	....	.03	....	....	....	T.	....	2.02
New London	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	.14	....	....	.34	....	.19	.23	T.	....	....	....	....	.03	....	....	....	....	....	0.93
Palmyra	....do	....	.18	.71	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.65	....	....	....	....	....	.06	....	....	....	....	....	1.60
Paris	....do	....	.26	.86	....	....	....	....	....	....	....	....	....	....	....	....	....	.06	....	....	.66	....	....	....	....	....	.02	....	....	....	....	....	1.86
Perry	....do	T.	.17	.77	....	....	....	....	....	....	....	....	....	....	....	....	....	.22	....	....	.51	....	....	....	....	....	.06	....	....	....	....	T.	1.73
Philadelphia	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
St. Charles	Missouri	.09	....	.36	....	....	....	....	....	T.	....	....	....	....	T.	....	....	.32	....	....	.54	.40	....	....	....	....	.06	....	....	....	....	....	1.77
St. Louis**	Mississippi	T.	.28	....	....	T.	....	....	....	T.	....	....	....	T.	T.	....	T.	.37	T.	.84	T.	....	....	....	....	.17	.04	....	....	....	....	T.	1.70
St. Louis University*	....do	....	.12	....	....	T.	....	....	....	....	....	....	....	T.	T.	....	....	.33	....	.97	....	....	....	....	....	.20	T.	....	....	....	....	....	1.62
Shelbina	....do	.02	.15	.82	....	....	....	....	....	....	....	....	....	....	....	....	....	.01	....	....	.59	....	....	....	....	....	.06	....	....	....	....	....	1.65
Steffenville	....do	.23	.60	.10	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	.80	....	....	....	....	....	....	.06	....	....	T.	.05	....	1.84
Troy	....do	....	....	.48	....	....	....	....	....	....	....	....	....	....	....	....	....	.20	....	.07	.62	....	....	....	....	....	.01	....	....	....	....	....	1.38
Union	Meramec	.05	.03	.19	....	....	....	....	....	....	....	....	....	....	....	T.	....	.48	....	.44	.21	....	....	....	....	....	.07	....	....	....	....	....	1.47
Unionville	Chariton	.35	.15	.52	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.30	.20	....	....	....	T.	T.	T.	....	....	....	....	....	1.52
Valley Park	Meramec	.13	....	.07	....	....	....	....	....	....	....	....	....	....	....	T.	....	.30	....	.36	.22	....	....	....	....	....	.25	....	....	....	....	T	1.33
Warrenton	Mississippi	.07	.12	.67	....	....	....	....	....	....	....	....	....	....	T.	....	....	.28	....	.75	.15	....	....	....	....	....	.05	....	....	....	....	....	2.09
West Ely	....do	....	.02	.42	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	.43	....	....	....	....	....	.04	....	....	....	....	....	0.91
Winfield	....do	....	....	.40	....	....	....	....	....	....	....	....	....	....	....	....	....	.29	....	.07	.69	....	....	....	....	....	T.	....	....	....	....	....	1.45
Keokuk, Ia.***	....do	.01	1.12	T.	....	....	....	....	....	....	....	....	....	T.	.01	....	....	T.	....	.56	.01	....	....	....	T.	.02	.01	T.	....	....	T.	T.	1.74
Southeast Lowlands																																	
Bragg City	St. Francis	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Campbell	....do	....	.25	.14	....	.03	.09	....	....	....	....	....	.02	....	.01	....	....	1.30	.73	.39	....	....	....	....	....	.02	.30	....	....	....	....	....	3.28
Cape Girardeau	Mississippi	.12	....	.12	....	....	.23	....	....	....	....	....	....	....	....	....	....	1.09	.48	.28	....	....	....	....	....	....	.12	....	....	....	....	.04	2.48
Caruthersville	....do	....	.23	....	....	.18	....	....	....	....	....	....	.30	....	....	.15	1.15	.75	1.00	....	....	....	....	....	....	.02	....	....	....	....	....	....	3.78
Dexter	St. Francis	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	.50	1.60	....	....	....	....	....	....	....	....	....	....	....	....	....	2.10
Doniphan	Black	....	.81	....	....	T.	....	....	....	....	....	....	....	....	....	....	....	2.25	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	3.06
Fisk	St. Francis	.19	T.	.51	....	....	....	....	....	....	....	....	....	....	T.	.11	....	1.97	.32	.19	.17	....	....	....	....	....	.07	....	....	....	....	....	3.53
Jackson	Mississippi	.11	.13	....	....	.21	....	....	....	....	....	....	....	....	....	....	....	1.19	.03	.37	....	....	....	....	....	....	.05	....	....	....	....	....	2.09
Marble Hill	....do	....	.16	....	....	.14	....	....	....	....	....	....	....	....	....	....	....	1.82	.12	.56	....	....	....	....	....	T.	....	....	....	....	....	.08	2.88
Morehouse	....do	....	.16	.15	....	.05	.01	....	....	....	....	....	....	....	T.	....	....	1.91	.20	.44	.02	....	....	....	....	....	.21	....	....	....	....	T.	3.15
New Madrid	....do	.35	.07	.46	....	....	.25	....	....	....	....	....	....	....	....	....	.20	.35	1.55	.92	.05	....	....	....	....	....	.45	....	....	....	....	....	4.65
Parma	St. Francis	.28	....	.25	....	....	.06	....	....	....	....	....	....	....	....	....	....	.59	.95	1.03	....	....	....	....	....	....	.33	....	....	....	....	....	3.49
Poplar Bluff	Black	.18	.10	.55	....	....	.05	....	....	....	....	....	....	T.	T.	T.	....	1.60	.12	.56	....	....	....	....	....	....	.05	....	....	....	....	....	3.21
Sikeston	Mississippi	....	.40	....	....	.11	....	....	....	....	....	....	....	....	....	.02	1.05	.45	.53	....	....	....	....	....	....	....	.30	....	....	....	....	....	2.86
Cairo, Ill.***	.. .do	T.	.16	T.	....	.21	....	....	....	....	....	....	....	T.	T.	T.	.27	1.35	.17	.19	....	....	....	....	....	.24	T.	....	....	....	.01	T.	2.60
Ozark Plateau																																	
Arcadia	St. Francis	T.	T.	.22	....	....	T.	....	....	....	....	....	....	....	....	T.	....	1.05	....	.61	T.	....	....	....	....	....	.29	....	....	....	....	T.	2.17
Birchtree (near)	Black	.15	.65	....	....	.03	....	....	....	....	....	....	....	....	....	....	....	1.15	.18	.67	....	....	....	....	....	....	.03	....	....	....	....	....	2.86
Buffalo	Osage	.08	.02	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.18	....	.58	....	....	....	....	....	....	....	....	....	....	....	....	0.86
Caplinger Mills	....do.	.20	T.	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	T.	.13	.82	T.	....	....	....	....	T.	....	....	....	....	T.	....	1.15
Dean	Neosho	....	....	T.	....	T.	....	....	....	....	....	....	....	....	....	....	....	.28	1.88	.04	....	....	....	....	....	T.	....	....	....	....	T.	T.	2.20
Eldon	Missouri	.05	.68	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	.53	....	.40	.15	....	....	....	....	....	....	....	....	....	....	....	1.86
Farmington	St. Francis	....	.47	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	.75	....	.15	....	....	....	....	....	**	.35	....	....	....	....	T.	1.72
Fredericktown	....do	....	....	.42	....	....	.12	....	....	....	....	....	....	....	....	....	....	1.68	....	.53	....	....	....	....	....	....	.19	....	....	....	....	....	2.94
Galena	White	....	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.23	....	1.47	.15	....	....	....	....	....	.18	....	....	....	....	....	2.13
Goodland	Black	....	.21	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.73	.50	....	....	....	....	....	....	.18	....	....	....	....	....	1.62
Greenville	St. Francis	.32	.39	....	....	.11	....	....	....	....	....	....	....	....	T.	....	....	1.22	.08	....	....	....	....	....	....	T.	....	....	....	....	....	....	2.12
Hailey	White	....	....	....	....	.05	....	....	.28	....	....	....	....	....	....	....	....	.28	.56	....	....	....	....	....	....	.15	....	....	....	....	....	....	1.32
Koshkonong	Black	....	.88	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.17	.21	.84	....	....	....	....	....	.06	.03	....	....	....	....	....	3.19
Lakeside	Osage	.42	.19	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	.51	....	.64	....	....	....	....	....	....	....	T.	....	....	....	T.	1.86
Lebanon	....do	....	.21	T.	....	....	T.	....	....	....	....	....	....	....	T.	....	....	.38	....	.83	....	....	....	....	....	....	.22	T.	....	....	....	....	1.64
Leeper	Black	.30	.04	.63	....	....	.16	....	....	....	....	....	....	....	....	....	....	.70	.03	.49	....	....	....	....	....	....	.02	....	....	....	....	T.	2.37
Lockwood	Osage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.35	.10	1.08	....	....	....	....	....	....	....	....	....	....	T.	....	1.51
Mountain Grove	White	....	.61	....	....	T.	.03	....	....	....	....	....	....	....	.06	.03	....	.55	.21	.67	.05	....	....	....	....	T.	.02	....	....	....	....	....	2.23
Neosho	Neosho	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.53	.65	1.35	....	....	....	....	....	....	....	....	....	T.	.05	T.	2.58
Owensville	Gasconade	....	.20	.22	....	....	....	....	....	....	....	....	....	....	....	....	....	.53	....	....	.25	....	....	....	....	....	T.	....	....	....	....	....	1.20
Rolla	Meramec	....	.25	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	.18	....	.75	....	....	....	....	....	....	.02	....	....	....	....	T.	1.30
St. Thomas (near)	Osage	.13	.04	.07	....	....	....	....	....	....	....	....	....	....	....	....	....	.34	....	.47	....	....	....	....	....	....	....	T.	....	....	....	....	1.05
Salem	Meramec	T.	.48	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	.57	.08	.70	....	....	....	....	....	....	.07	....	....	....	....	....	1.90
Seligman	Neosho	....	.12	....	....	.05	....	....	....	....	....	....	....	....	....	....	....	....	.41	.98	....	....	....	....	....	.10	....	....	....	T.	T.	....	1.66
Seymour (near)	White	.04	.29	....	.02	....	....	....	....	....	....	....	....	....	T.	....	....	.33	.13	.70	....	....	....	....	....	T.	.03	....	....	....	....	....	1.54
Springfield***	....do.	....	.08	....	....	....	....	....	....	....	T.	T.	....	....	....	....	....	.19	.20	.36	T.	....	....	....	....	T.	T.	....	....	....	.01	....	0.84
Stover	Missouri	....	.32	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.65	....	.92	....	....	....	....	....	....	....	....	....	....	....	....	1.89
Versailles	Osage	.26	.21	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	.15	....	.81	....	....	....	....	....	....	T.	....	....	....	....	....	1.43
Williamsville	Black	.16	.01	.39	....	....	.02	....	....	....	....	....	....	....	.01	.01	....	1.19	.37	.53	.01	....	....	....	....	....	.03	....	....	....	....	....	2.73
Willow Sprgs. (near)	White	.05	.32	.41	....	....	....	....	....	....	....	....	....	....	....	.03	....	.51	....	1.07	.03	....	....	....	....	....	.07	....	....	....	....	.07	2.56
Southwest Plain																																	
Appleton City	Osage	.15	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	.02	T.	1.02	T.	....	....	....	....	....	....	....	....	....	T.	T.	1.19
Clinton	.... do	.46	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.05	T.	1.05	.05	....	....	....	....	....	....	....	....	....	.05	.02	1.71
Concordia	Missouri	.60	.18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.02	.80	....	....	....	....	....	....	T.	....	....	....	....	....	1.60
Harrisonville	Osage	.31	.29	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.05	.17	....	....	....	....	....	....	....	....	....	....	.01	1.83

Continued on next page

Daily Precipitation for December 1933—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin ‖	Neosho																.08		.84	.93						T.							1.85
Lamar ‖	do																	.15		1.45	T.												1.60
Lamonte	Missouri	.23	.22																	.70											.02	.02	1.19
Marshall	do	.74	.80												T.					.87							T.				.03	T.	1.94
Nevada	Osage	.11																	T.	1.39											T.		1.50
Warrensburg	Missouri	.33																		.98	.02							T.			T.	.01	1.34
Warsaw	Osage	.40	.10															.34		1.10													1.94
Waverly ‖	Missouri	.78	.42																	.06	1.06						T.				T.		2.32
Northwest Plateau																																	
Bethany	Grand	.42	.27												T.					.30							T.				T.	.03	1.02
Chillicothe ‖	do		.43	.15												T.				T.	.79						.03				T.	.01	1.41
Conception	Missouri	.84	.60	.08											.03											T.	T.	.06	T.			T.	T.	1.61
Edgerton	do	.46	.32												T.			T.		.83	.03					T.		.01				T.	T.	1.65
Gallatin ‖	Grand	.35	.33	.39												.04					.85							.02					T.	1.98
Grant City	do	.34	.39	.06											T.	T.												T.	T.			T.	T.	0.79
Kansas City***	Missouri	.26	.32	T.											T.		T.			1.22						T.		T.				T.	T.	1.80
Kidder ‖	Grand	.37	.32	.22														T.		T	.57							.03				T.	T.	1.51
King City	Missouri	.49	.25												T.		T.			.20								.03				.02	.03	1.02
Lexington ‖	do	.62	.40		.02											T.				.05	.96								.01					2.06
Maryville ‖	do	.10	.95	.49												T.												.10	T			T.		1.64
Oregon	do	.99	.66					T.							.01																			1.66
St. Joseph***	do	.55	.31	T.											T.		T.	T.		.54					T		T.				T.	.01	1.41
Tarkio	do	.25	.69	.13																							.03	T.						1.10
Trenton	Grand	.17	.37												T.					.85						.05					T.	T.	1.44

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. T. Trace, or less than 0.01 inch.
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for December 1933

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.044	.056	.105	.038	.084	.034	.041	.127	.046	.027	.089	.071	.051	.000	.032	.079	.075	.055	****	.015	.054	.064	.051	.103								1.722
	Mean temperature	50	54	50	54	40	37	44	38	38	44	32	31	38	51	50	48	48	32	35	47	46	50	52	38	24	18	20	26	32	38	52	40.6
	Wind movement	50	88	163	73	51	91	57	84	64	46	92	77	80	56	150	44	58	89	62	92	66	52	48	88	91	92	100	81	80	69	78	2,412

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report. **** —.011

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Windstorms.—No damaging winds reported.

ERRATA

November 1933, page 53, Springfield mean temperature should be 48.2; departure should be +2.5. Page 56, Springfield maximum temperature on the 9th should be 45; mean maximum temperature should be 56.9.

MR. J. W. PULLIAM, OBSERVER FOR 42 YEARS

One of the most faithful and valued cooperative observers of the Weather Bureau in Missouri, Mr. J. W. Pulliam, was laid to rest on December 24, 1933. Mr. Pulliam became observer at Gorin, Scotland County, in June 1892, and continued the work without serious interruption until his death, a period of nearly 42 years. His name is an honored one in the climatological history of Missouri.

Daily Temperatures for December 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	60	63	60	66	57	43	55	52	48	58	57	33	39	49	66	60	57	39	38	49	58	63	65	59	23	24	23	32	32	47	50	49.2
	Minimum ...	40	45	45	36	35	24	34	26	22	31	17	18	29	28	37	28	33	16	27	31	28	31	37	21	15	6	3	14	14	31	43	27.3
Columbia.	Maximum...	52	62	50	70	47	42	59	44	46	56	31	30	41	65	67	63	50	35	40	52	61	65	69	51	25	22	21	29	34	50	55	47.9
	Minimum ...	41	47	42	41	31	24	34	24	24	31	20	22	30	30	34	33	26	21	34	34	30	32	43	19	17	4	4	18	19	34	31	28.2
Fayette	Maximum...	45	64	51	70	41	46	57	37	49	60	31	31	41	65	55	63	38	39	38	52	61	66	69	35	26	24	20	33	31	49	45	46.2
	Minimum ...	42	44	44	33	38	22	28	27	19	30	17	13	21	28	39	24	32	16	27	32	28	29	32	33	15	16	3	12	16	27	42	26.7
Hannibal	Maximum...	50	59	58	67	59	43	53	46	41	56	42	31	32	40	64	52	47	31	40	49	54	64	67	58	21	21	20	27	28	48	54	45.9
	Minimum ...	41	43	45	36	34	23	34	26	22	29	16	17	26	30	40	29	30	21	29	34	30	36	46	18	13	3	− 3	14	11	28	46	27.3
Jefferson City §§	Maximum...	52	63	55	75	45	45	60	37	50	58	34	31	42	67	59	68	48	41	45	54	64	69	74	38	27	19	24	34	42	51	63	49.3
	Minimum ...	43	46	46	37	37	24	24	31	22	22	21	21	22	29	29	30	35	22	22	34	33	37	37	36	18	17	5	9	17	19	40	27.9
Kirksville.	Maximum...	49	58	58	65	56	43	50	46	43	57	35	30	33	38	59	52	48	29	34	48	54	63	64	58	19	17	17	24	25	43	48	44.0
	Minimum ...	38	42	43	34	32	22	21	22	20	27	12	13	21	22	35	25	28	13	21	32	25	34	32	17	8	0	− 6	− 3	6	24	41	22.6
Louisiana	Maximum...	50	55	54	70	62	45	50	43	45	59	42	35	36	42	60	55	55	37	36	50	55	65	70	52	20	20	17	26	30	55	60	46.8
	Minimum ...	42	42	46	36	40	25	35	30	19	32	19	20	25	30	32	20	33	25	27	33	30	30	40	20	16	7	0	11	12	26	46	27.4
Macon§§	Maximum...	50	62	49	67	38	44	54	32	44	52	42	30	37	65	51	57	37	34	35	50	57	64	68	28	20	10	18	28	39	50	51	44.0
	Minimum ...	39	40	44	34	37	21	24	26	20	19	15	15	19	27	30	26	33	12	17	32	28	34	41	26	12	3	− 4	9	10	16	38	24.0
Mexico §§	Maximum...	53	61	50	64	46	58	54	52	45	59	30	32	40	67	60	60	43	40	49	51	59	64	70	39	24	30	21	29	41	50	57	48.3
	Minimum ...	40	40	44	37	38	23	27	26	20	23	18	17	20	29	30	26	34	20	22	29	29	30	35	33	15	8	0	7	14	18	39	25.5
St. Louis	Maximum...	54	59	53	67	59	41	55	49	41	59	37	33	38	61	66	59	56	40	50	51	56	65	72	54	27	24	17	31	31	52	59	48.9
	Minimum ...	47	47	47	40	35	28	30	31	28	37	21	20	27	31	45	37	33	30	38	37	39	44	46	22	20	5	4	13	16	31	45	31.4
Marionville	Maximum...	53	54	55	62	50	46	56	47	46	50	38	30	35	35	55	56	50	40	35	50	55	65	66	55	18	14	20	22	25	45	50	44.5
	Minimum ...	32	34	40	37	32	22	32	14	20	30	10	14	20	21	31	30	27	11	20	30	25	35	34	10	4	− 5	− 5	8	5	16	40	21.7
Warrenton	Maximum...	53	59	58	67	61	41	59	56	42	59	55	29	37	44	63	60	52	37	45	52	52	67	72	69	28	25	19	28	28	53	64	49.5
	Minimum ...	43	47	44	37	38	24	29	28	21	35	20	18	24	30	43	33	35	25	32	34	33	39	39	27	18	8	1	14	14	27	45	29.2
Southeast Lowlands																																	
Campbell	Maximum...	66	60	64	68	66	66	55	52	47	60	50	37	53	68	70	66	65	65	54	50	61	67	67	61	43	34	21	35	40	58	57	55.7
	Minimum ...	46	40	45	31	49	31	20	28	22	34	31	26	30	33	56	45	53	36	40	32	30	29	33	34	21	19	9	14	17	26	42	32.3
Caruthersville	Maximum...	72	61	62	71	68	68	51	51	45	61	60	49	45	66	71	65	65	57	58	46	58	64	68	66	51	40	27	36	41	59	66	57.0
	Minimum ...	51	52	42	54	38	28	35	31	39	36	30	34	34	45	53	54	42	45	36	33	40	45	54	24	32	14	19	24	35	41	45	38.2
Doniphan	Maximum...	65	60	61	62	65	52	56	52	56	65	50	44	52	62	76	72	68	58	56	52	56	68	66	58	40	32	28	34	39	54	64	55.6
	Minimum ...	50	49	38	32	50	30	20	28	20	32	35	27	34	32	52	40	53	39	40	32	30	30	32	40	21	18	12	12	18	28	48	33.0
Jackson	Maximum...	59	58	61	68	63	50	51	47	44	58	53	35	45	52	72	68	62	52	52	49	57	62	67	64	37	39	23	32	39	55	55	52.5
	Minimum ...	50	47	47	32	49	30	22	30	24	32	30	21	32	33	52	40	52	36	40	34	28	32	32	37	21	15	7	12	17	32	45	32.6
Poplar Bluff	Maximum...	58	63	63	67	59	47	47	42	40	62	46	36	48	66	73	61	61	46	56	42	58	65	65	63	43	32	22	34	39	57	62	52.4
	Minimum ...	47	41	41	32	45	27	20	30	20	32	32	27	32	37	55	40	40	36	40	31	27	30	31	40	21	19	10	13	18	27	47	31.9
Skeston	Maximum...	69	60	62	71	66	63	52	51	49	60	58	41	53	55	74	71	65	48	47	49	59	66	70	69	41	36	23	34	41	56	65	55.6
	Minimum ...	51	45	47	43	51	35	24	32	26	35	32	27	32	32	33	46	46	37	41	34	32	36	42	40	22	22	9	14	19	30	43	34.1
Cairo, Ill.	Maximum...	60	63	61	72	66	45	51	46	44	59	48	35	48	65	72	61	65	49	55	45	57	65	70	61	37	33	24	33	40	57	64	53.3
	Minimum ...	52	52	48	44	45	33	27	36	32	38	28	28	33	37	59	48	42	40	40	35	35	41	47	29	23	11	8	15	20	34	47	35.7
Ozark Plateau																																	
Arcadia §§	Maximum...	53	59	55	68	59	46	54	41	43	61	39	35	45	62	72	62	58	44	49	56	59	67	69	53	34	25	22	30	37	55	61	50.7
	Minimum ...	48	50	45	33	37	28	21	30	21	19	28	25	25	33	35	29	29	32	32	35	34	34	37	40	19	19	5	5	8	14	35	28.5
Birchtree	Maximum...	66	59	60	71	61	46	55	58	46	62	55	37	49	55	73	64	64	55	49	56	60	69	72	56	35	31	25	31	40	51	62	54.0
	Minimum ...	57	47	47	34	45	28	20	35	18	32	35	27	30	35	55	55	40	34	36	34	30	31	36	31	19	16	10	13	19	28	46	33.0
Eldon §§	Maximum...	53	63	51	74	43	46	61	40	49	64	39	34	37	67	59	49	50	39	43	55	62	58	..	26	27	20	25	34	41	51	62	[a]47.4
	Minimum ...	45	43	46	36	37	25	24	32	21	22	23	20	23	31	34	31	31	23	22	34	33	32	37	..	19	18	8	10	18	20	41	[a]28.0
Farmington	Maximum...	63	58	60	67	56	52	55	48	44	46	48	36	40	57	75	64	62	60	62	54	60	58	70	60	36	29	26	30	37	57	62	52.6
	Minimum ...	39	45	40	32	35	30	20	30	20	33	30	23	29	33	40	32	40	40	35	38	32	37	37	35	17	10	1	5	13	30	37	29.6
Koshkonong	Maximum...	64	59	60	74	68	50	58	51	52	64	..	56	50	59	73	68	69	46	48	55	56	70	..	60	35	32	47	38	41	53	63	[b]55.8
	Minimum. .	49	45	43	43	50	31	27	37	23	42	..	26	32	36	48	43	46	36	36	34	36	40	..	34	21	18	12	14	18	32	47	[b]34.4
Lebanon §§	Maximum...	58	60	48	74	50	65	60	43	51	63	40	38	48	63	63	65	46	43	46	54	62	69	70	37	32	22	26	38	40	53	63	51.3
	Minimum ...	45	40	35	46	45	20	20	30	19	27	24	24	27	35	39	34	36	26	26	33	30	32	39	34	11	18	10	10	19	22	38	28.8
Mountain Grove	Maximum...	61	59	59	70	62	56	58	51	52	66	56	40	50	55	70	63	59	39	46	66	62	70	70	59	37	30	26	41	36	55	60	54.3
	Minimum ...	50	46	41	40	39	23	27	30	20	34	26	28	32	35	52	36	34	29	34	32	31	39	43	28	17	14	9	14	18	30	43	31.4
Neosho	Maximum...	73	70	68	75	70	48	60	56	50	48	48	46	58	69	70	68	67	38	41	55	63	65	69	65	39	35	32	42	43	55	63	56 4
	Minimum ...	53	54	39	40	40	23	25	33	21	35	35	37	35	40	47	30	37	28	36	32	28	32	39	31	22	17	17	23	32	35	48	33.7
Rolla	Maximum...	54	59	58	71	65	42	59	55	48	60	56	34	45	55	64	64	57	36	49	53	61	67	71	58	31	27	25	34	35	54	63	51.9
	Minimum ...	45	49	45	38	42	24	27	30	21	38	25	24	31	33	54	31	36	28	34	35	33	38	47	31	17	13	8	17	17	35	46	32.0
Springfield	Maximum...	61	63	52	74	58	43	58	47	51	63	43	40	55	67	64	63	59	40	45	53	61	68	70	54	36	31	26	38	37	50	61	52.6
	Minimum ...	51	49	42	46	32	26	31	32	28	38	28	33	34	38	46	42	31	29	33	33	36	44	48	22	19	14	12	18	25	36	45	33.6
Southwest Plain																																	
Appleton City	Maximum...	57	68	60	57	57	40	57	56	47	54	53	32	44	71	65	70	60	34	39	49	53	64	60	59	28	28	25	32	37	46	51	50.1
	Minimum ...	45	53	45	40	37	23	33	31	23	37	20	26	31	32	43	34	31	20	30	28	30	34	39	26	18	9	10	18	21	35	45	30.5
Clinton	Maximum...	54	68	55	66	56	43	52	50	46	58	55	32	50	70	65	67	50	34	40	52	60	63	65	58	29	28	25	36	38	39	52	50.2
	Minimum ...	44	50	44	40	37	24	32	31	23	34	20	25	32	32	43	40	32	20	30	30	29	30	38	26	19	10	10	20	21	34	35	30.2
Harrisonville §§	Maximum...	53	63	49	65	42	43	58	43	55	61	32	34	45	69	57	67	38	37	34	54	61	68	66	30	26	18	24	35	37	51	47	47.2
	Minimum ...	40	41	42	38	36	21	22	27	24	24	16	17	21	28	34	33	28	14	16	25	26	31	33	27	15	5	5	9	16	22	35	24.9
Lamar §§	Maximum...	64	69	58	72	44	47	58	44	54	62	39	42	57	72	61	71	39	39	41	55	61	66	69	39	33	22	29	40	41	55	58	51.6
	Minimum ...	53	53	43	44	43	26	26	35	26	25	25	25	32	39	46	35	38	23	23	30	30	30	35	38	19	18	13	17	21	30	40	31.6
Lamonte	Maximum...	53	66	50	68	48	47	58	46	49	57	31	31	44	64	64	69	53	31	37	52	59	64	66	47	26	25	26	33	36	48	52	48.4
	Minimum ...	42	46	37	37	36	21	33	23	22	31	19	20	30	30	34	32	25	17	29	29	30	33	42	22	18	5	8	18	19	35	44	28.0
Marshall	Maximum...	57	62	65	68	57	46	57	53	50	48	46	46	43	55	65	67	61	45	36	51	60	63	66	61	39	25	25	31	33	47	52	51.0
	Minimum ...	40	40	40	40	36	24	30	28	25	18	18	18	18	30	39	33	25	17	28	34	32	36	42	38	16	6	5	12	12	32	44	27.6
Nevada	Maximum...	59	68	58	69	58	42	58	53	55	60	48	35	55	70	67	71	56	35	40	55	61	66	66	57	30	30	28	38	37	51	50	52.5
	Minimum ...	47	50	45	45	35	23	35	33	25	38	21	29	32	37	44	37	30	19	31	30	29	29	43	24	18	10	12	18	24	34	47	31.4
Warrensburg	Maximum...	53	67	59	66	54	46	57	51	52	59	52	41	44	69	66	68	57	33	36	53	60	65	70	54	26	25	23	33	35	45	50	50.6
	Minimum ...	40	45	42	37	33	23	31	26	22	36	17	21	27	28	39	33	29	15	27	27	31	35	42	21	15	5	6	15	18	32	43	27.8
Warsaw	Maximum...	54	67	62	73	62	46	60	55	53	60	55	35	51	67	67	78	61	36	44	54	67	71	71	63	29	29	26	38	39	50	58	54.2
	Minimum ...	43	50	46	34	35	22	32	30	20	36	21	25	30	32	49	30	32	19	32	30	26	30	36	25	18	9	9	16	21	36	45	29.6
Northwest Plateau																																	
Chillicothe §§	Maximum...	51	61	48	64	43	46	55	37	47	58	28	32	38	64	52	60	37	40	35	47	59	66	69	26	21	13	22	30	37	49	47	44.6
	Minimum ...	35	40	40	32	24	20	25	24	19	21	13	13	17	27	30	28	29	8	8	28	27	27	35	24	11	1	− 2	5	9	15	36	21.6
Grant City	Maximum...	52	51	52	49	49	48	48	50	48	51	34	29	32	43	43	52	49	41	38	53	57	67	66	52	19	16	22	24	29	46	45	43.7
	Minimum ...	38	42	42	36	30	31	35	20	21	25	10	15	24	25	30	27	25	10	25	20	24	30	35	12	8	− 3	− 3	9	6	28	24	22.6
Kansas City..	Maximum...	52	66	48	62	45	47	60	41	55	56	28	31	41	67	65	67	55	40	36	53	62	67	67	52	25	22	26	32	38	49	49	48.5
	Minimum ...	41	46	44	43	33	29	28	32	26	16	19	31	30	38	38	24	17	30	30	42	46	49	18	15	6	8	21	19	37	19	29	29.5
Kidder §§	Maximum...	48	59	46	61	42	45	55	33	49	54	25	30	39	63	48	60	32	38	37	48	57	65	67	24	20	9	22	29	37	50	47	43.2
	Minimum ...	35	38	41	35	32	21	21	24	23	24	13	13	18	24	29	30	28	13	12	25	24	30	35	22	11	2	− 2	5	10	16	35	22.2
Lexington §§	Maximum...	50	66	48	66	44	48	59	41	54	59	32	33	44	67	55	67	31	37	35	53	63	65	68	28	25	17	22	34	38	50	50	46.7
	Minimum ...	40	40	45	40	36	23	24	27	27	30	15	17	18	30	33	34	30	15	16	28	29	35	38	28	15	6	5	10	11	22	32	25.8
Maryville	Maximum...	50	52	50	58	50	45	55	47	53	52	34	31	40	40	47	60	49	46	43	54	58	68	67	47	19	19	27	27	32	49	46	45.6
	Minimum ...	38	41	40	36	31	20	31	22	23	27	11	18	26	27	28	29	23	13	25	20	25	31	36	12	9	− 2	0	12	8	32	25	23.1
Oregon	Maximum...	48	60	54	62	50	47	61	50	56	52	36	34	46	46	62	64	55	49	42	56	62	71	68	56	23	22	27	34	36	53	47	49.3
	Minimum ...	38	42	42	41	30	24	35	23	27	33	13	17	23	29	29	32	24	15	24	23	33	38	42	13	13	1	4	14	12	33	24	25 5
St. Joseph..	Maximum...	47	62	50	59	44	46	59	37	55	53	28	32	43	64	51	64	48	43	37	53	58	65	65	46	22	18	26	32	37	48	48	46.5
	Minimum ...	39	46	42	40	30	26	35	25	29	23	14	19	27	30	32	33	20	14	30	26	31	37	44	15	13	3	8	15	14	36	15	26.2
Trenton	Maximum...	53	54	57	53	53	37	52	52	43	43	41	28	32	46	46	49	49	37	37	37	52	61	45	20	19	20	18	25	28	49	47	41.4
	Minimum ...	39	44	34	34	33	24	32	22	22	30	14	17	27	28	34	36	30	12	23	33	27	33	12	11	0	− 2	12	11	9	28	40	24.2

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 1-24-34—900.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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19 MISSOURI SECTION
ROSCOE NUNN
ST. LOUIS, MO.
JUN 28 1934

VOL. XXXVII YEAR 1933 No. 13

GENERAL SUMMARY

Another warm year was added to the record, with the close of 1933. The three preceding years were also warm, especially 1931; in fact, twelve of the last sixteen years averaged warmer than normal. The average temperature for 1933, 57.3°, is the highest annual average, except 1931, in the last twelve years. February, April, August, and October were the only months showing averages below normal, and the departures were slight in those months. Outstanding temperature excesses occurred in January, June, September, and December; however, there were few days of extreme heat in the summer, but long periods of steady, above-normal temperatures.

Precipitation was extremely varied, with excesses on the one hand and severe local drought on the other. For the State as a whole, the annual precipitation was 36.21 inches, or 3.99 inches less than normal, which is not a great deficiency; but some stations received more than twice as much as others. In Northern Missouri annual amounts ranged from 20.46 inches at West Ely, Marion County, to 39.49 inches at Oregon, Holt County; in the central third of the State, from 27.55 inches at Harrisonville, Cass County, to 41.92 inches at St. Thomas, Cole County; in the southern third, from 34.79 inches at Salem to 59.32 inches at Sikeston.

In the summary for each month, given below, some details will be found, both as to weather and its effects upon crops. For still further details, Climatological Data for each month should be consulted. In these will be found accounts of storms, references to floods, etc. There were but few severe storms during the year and no very damaging floods.

TEMPERATURE

The annual mean temperature for the State was 57.3°, or 2.4° above normal. The highest annual mean was 62.7°, at Caruthersville, and the lowest was 53.1° at Grant City. The highest temperature recorded was 108° at Warsaw, on July 2d; the lowest was 22° below zero at Macon, on February 8th and 9th. The greatest daily range was 53° at Chillicothe, on February 6th.

PRECIPITATION

The average precipitation for the State was 36.21 inches, or 3.99 inches less than normal. The greatest annual amount was 59.32 inches at Sikeston, and the least was 20.46 inches at West Ely. The greatest local monthly amount was 12.97 inches at Canton and Pacific, in May; and the least local monthly amount was none at Owensville and St. Thomas, in June. The greatest precipitation in any twenty-four hours was 9.01 inches at Gorin, on June 28-29th. The average number of days with .01 inch or more of precipitation was 86.

The snowfall averaged 8.0 inches, for the State, or 10.0 inches less than normal. The greatest annual amount was 29.3 inches at Edina and the least annual amount was 1.0 inch at Rolla and Lamar. The greatest monthly snowfall was 13.5 inches at Brunswick, in February.

THE WEATHER BY MONTHS

JANUARY.—It was the mildest January since 1880. Excepting a few comparatively cold days, about the 1st, 12th, and 28th, the temperatures were mostly such as normally occur in the middle of March. Wheat fields showed green during most of the month and fruit buds began to swell in the southern half of the State. Precipitation was very light the first half of the month, but substantial rains came during the 17th to 22d, except light in the northwestern counties. Small tornadoes oc-

(Continued on page 66)

CONDENSED STATE SUMMARY FOR 1933

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	41.4	+10.6	72	8	2.43	+0.19	7.87	0.32	6
February	32.2	− 0.8	78	−22	1.35	−0.68	4.05	0.21	5
March	44.1	+ 0.5	87	5	3.53	+0.38	10.39	1.56	10
April	54.9	− 0.3	88	22	3.53	−0.39	7.85	0.71	10
May	65.9	+ 1.6	96	35	7.53	+2.73	12.97	2.23	13
June	78.4	+ 5.0	107	38	1.72	−3.07	9.10	0.00	3
July	79.3	+ 1.7	108	49	2.49	−1.35	7.26	0.12	5
August	75.4	− 0.7	103	48	3.91	−0.03	10.62	0.36	9
September	74.6	+ 5.4	102	36	4.38	+0.32	12.02	0.73	9
October	56.4	− 0.9	86	23	2.68	−0.18	6.59	0.74	7
November	45.9	+ 1.5	83	7	0.84	−1.66	2.09	0.06	4
December	39.1	+ 5.0	78	− 7	1.82	−0.25	4.65	0.76	5
Year	57.3	+ 2.4	108	−22	36.21	−3.99	12.97	0.00	86

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Precipitation					Number of days		
	Mean	Highest	Lowest	Average	Greatest annual	Least annual	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	52.9	111	−32	41.22	54.85	32.77	....	81	....	....	....
1889	54.3	107	− 9	37.91	56.27	20.18	....	85	....	....	....
1890	54.7	110	−19	35.71	63.15	16.98	....	82	....	....	....
1891	53.9	104	−13	38.04	47.71	26.84	....	93	....	....	....
1892	52.8	102	−31	42.76	59.51	31.32	....	92	141	95	130
1893	52.7	107	−20	38.19	53.00	27.03	....	77	155	117	93
1894	55.1	111	−35	33.18	47.51	18.68	15.4	73	170	120	75
1895	52.9	106	−26	39.30	63.18	26.75	23.7	85	161	108	96
1896	55.5	108	−10	44.63	58.92	29.06	12.6	86	154	111	101
1897	55.0	108	−16	38.82	57.80	23.49	19.5	86	167	104	94
1898	54.4	104	−20	53.67	80.08	39.05	18.6	102	162	102	101
1899	54.0	108	−32	37.22	66.01	27.21	28.8	82	166	110	89
1900	55.6	105	−16	38.34	51.53	26.04	18.5	90	171	106	88
1901	55.5	116	−29	25.28	39.22	16.66	19.2	72	190	98	77
1902	54.1	103	−17	44.96	65.64	34.89	16.7	103	159	103	103
1903	53.6	102	−25	40.15	51.64	32.20	16.5	96	170	96	99
1904	53.2	100	−23	41.68	55.83	32.06	18.8	89	180	99	87
1905	53.6	103	−40	45.41	71.25	31.91	22.3	97	174	91	100
1906	55.0	101	−13	37.09	59.92	21.81	28.2	98	165	89	111
1907	55.4	109	−15	41.87	53.78	23.23	12.8	95	173	82	110
1908	56.8	102	−10	43.56	58.27	30.78	9.7	91	184	92	90
1909	55.8	110	−20	45.16	57.59	34.73	18.3	92	173	90	102
1910	54.6	109	−24	37.91	52.42	14.37	17.2	82	183	81	101
1911	56.7	113	−19	38.94	50.03	28.13	15.2	88	166	86	113
1912	53.5	105	−36	38.68	53.27	23.90	39.6	81	192	80	94
1913	56.5	110	−12	37.47	54.85	25.07	26.0	87	174	80	111
1914	56.1	109	−18	34.72	47.09	25.16	26.4	81	171	86	108
1915	55.0	102	−24	49.88	64.62	36.15	25.3	98	160	86	119
1916	55.3	109	−29	41.45	50.61	28.17	18.2	87	191	77	98
1917	52.6	107	−23	32.06	48.31	22.58	13.9	80	186	83	96
1918	55.4	111	−25	37.06	52.91	24.89	27.2	84	185	80	100
1919	55.3	106	−23	40.14	58.49	26.53	10.2	86	181	81	103
1920	54.3	105	−10	37.17	52.77	24.03	15.4	89	171	82	113
1921	58.2	109	− 8	43.77	61.33	21.48	11.1	92	173	93	99
1922	56.8	108	− 6	39.99	56.59	29.15	8.2	85	192	80	93
1923	55.3	108	−11	41.53	64.54	23.98	8.6	98	165	88	112
1924	53.0	106	−28	39.73	54.55	30.11	28.3	92	173	91	102
1925	55.6	110	−15	39.06	53.47	31.13	16.4	84	171	94	100
1926	54.5	103	−20	43.07	61.99	32.04	23.2	95	160	86	119
1927	55.6	102	−24	55.06	82.67	30.71	13.4	101	163	91	111
1928	55.2	102	−18	45.59	67.40	28.28	6.8	90	174	94	98
1929	53.5	105	−23	46.61	62.34	32.17	22.3	102	155	93	117
1930	55.9	114	−31	31.27	55.26	19.06	17.6	75	194	84	87
1931	58.0	110	− 5	40.27	52.27	29.89	14.2	93	175	82	108
1932	55.6	109	−21	37.79	60.29	25.49	16.0	85	178	93	95
1933	57.3	108	−22	36.21	59.32	20.46	8.0	86	175	95	95
Period	**54.9**	**116**	**−40**	**40.20**	**82.67**	**14.37**	**18.0**	**89**	**173**	**90**	**102**

Climatological Data for Year 1933

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)							Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date		Length of record, years	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain																					
Brunswick	Chariton	652	53	57.5	102	July 22	−12	Feb. 8		55	27.28	6.47	May	0.48	July	20.5	93	....	....	....	.....
Clifton Hill	Randolph	731	35	55.9	101	July 22	−19	Feb. 9		25	26.65	6.83	May	0.64	Nov.	20.5	105	200	66	99	.....
Columbia	Boone	784	44	57.0	100	July 1	−10	Feb. 8		44	30.82	7.30	May	0.80	Nov.	5.8	102	171	107	87	s.
Downing	Schuyler	876	13	54.2	101	June 6	−19	Feb. 9		25	26.98	6.16	May	0.24	Feb.	11.8	90	185	95	85	sw.
Elsberry	Lincoln	449	3	56.0	102	June 30†	− 9	Feb. 8		3	33.09	6.23	May	0.79	Nov.	3.5	83	104[b]	119[b]	134[b]	s.
Fayette	Howard	661	54	55.8	102	July 22	−11	Feb. 8†		51	27.05	7.82	May	0.76	Sept.	14.6	90	....	....	....	.....
Fulton	Callaway	818	46	56.3	102	July 2	−11	Feb. 7		42	34.24	6.95	May	0.71	June	3.5	101	193	89	83	sw.
Gorin	Scotland	700	..	....	....	.....	.....	.....		47	32.14	9.10	June	0.23	Nov.	14.5	75	151	71	143	sw.
Hannibal	Marion	759	42	56.4	100	June 11†	−11	Feb. 9		50	26.17	7.08	May	0.15	Nov.	8.2	102	153	91	121	sw.
Jefferson City	Cole,	557	44	57.0	101	June 24†	−10	Feb. 8†		52	36.93	7.28	May	1.44	Nov.	3.0	93	....	....	....	.....
Kirksville	Adair	969	45	54.5	101	June 11	−16	Feb. 9		52	34.93	8.83	June	0.28	Nov.	23.5	71	190	56	119	sw.
Louisiana	Pike	469	40	56.1	104	July 1	−10	Feb. 8†		53	32.90	7.27	May	0.37	Feb.	3.2	65	195	113	57	w.
Macon	Macon	875	35	54.7	100	June 6†	−22	Feb. 8†		41	26.42	5.39	May	0.35	Nov.	16.1	79	197	84	84	w.
Mexico	Audrain	800	45	55.4	104	July 1†	−10	Feb. 9†		56	31.69	8.30	May	0.67	Nov.	10.8	97	203	59	103	w.
Monroe City	Monroe	748	..	....	....	.....	.....	.....		13	22.63	5.70	May	0.06	Nov.	8.5	66	148	106	111	ne.
St. Charles	St. Charles	520	46	58.4	104	June 30	− 7	Feb. 8		56	32.30	9.07	May	0.02	June	3.2	82	145	137	83	s.
St. Louis	**St. Louis City**	568	97	59.0	103	July 2	− 5	Feb. 8		97	34.77	8.59	May	0.15	June	3.8	100	150	105	110	s.
St. Louis University	St. Louis City	578	22	58.5	102	July 2	− 6	Feb. 8		23	33.21	7.76	May	0.36	June	7.5	103	198	81	86	w.
Shelbina	Shelby	779	..	....	....	.....	.....	.....		41	28.85	8.25	May	0.51	Nov.	12.0	94	....	....	....	.....
Steffenville	Lewis	650	36	54.9	99	June 23	−15	Feb. 9		41	31.76	6.77	May	0.42	Nov.	18.0	84	182	106	77	s.
Unionville	Putnam	1,062	41	54.7	103	June 26	−18	Feb. 8		41	31.49	7.37	Sept.	0.40	Nov.	17.5	59	....	....	....	.....
Warrenton	Warren	816	52	58.2	103	July 2	−10	Feb. 8		44	34.31	9.05	May	0.36	June	6.3	89	123	142	100	sw.
Keokuk, Iowa	Lee, Iowa	614	62	55.0	99	June 6	−16	Feb. 9		62	30.56	8.43	May	0.33	Nov.	9.9	93	131	101	133	sw.
Division means	**and extremes**	.....	..	**56.3**	**104**	**July 1†**	**−22**	**Feb. 8†**		..	**30.17**	**12.97**	**May**	**0.02**	**June**	**10.7**	**88**	**168**	**96**	**101**	**sw.**
Southeast Lowlands																					
Campbell	Dunklin	314	8	59.3	104	June 7†	1	Feb. 8†		8	52.43	9.14	May	1.35	Nov.	4.0	120	189	90	86	s.
Caruthersville	Pemiscot	265	38	62.7	104	July 2	5	Feb. 8†		42	54.23	10.39	Mar.	0.25	June	3.5	100	....	....	....	.....
Doniphan	Ripley	344	30	59.9	104	June 21†	− 7	Feb. 11		30	44.79	6.77	April	0.92	June	4.2	91	176	76	113	s.
Jackson	Cape Girardeau.	428	43	59.5	105	July 2	− 1	Feb. 9		44	49.91	11.21	May	0.07	June	3.5	91	126	62	177	s.
Marble Hill	Bollinger	470	39	59.5	104	July 2	− 1	Feb. 8		41	56.42	11.27	May	0.30	June	2.6	90	150	118	97	w.
Morehouse	New Madrid	289	..	....	....	.....	.....	.....		23	58.93	11.12	Sept.	0.54	June	3.0	108	184	81	100	sw.
Poplar Bluff	Butler	339	29	59.2	103	July 2	− 3	Feb. 11		30	45.10	6.86	Sept.	0.63	June	4.0	95	227	51	87	w.
Sikeston	Scott	318	27	60.9	102	June 7†	2	Feb. 9†		37	59.32	11.23	Sept.	1.20	June	4.9	108	....	....	....	.....
Cairo, Ill.	Alexander, Ill.	356	62	60.4	100	July 2	1	Feb. 9		63	53.84	9.02	May	0.91	June	3.8	121	119	95	151	s.
Division means	**and extremes**	.....	..	**60.3**	**105**	**July 2**	**− 7**	**Feb. 11**		..	**51.52**	**11.27**	**May**	**0.07**	**June**	**3.7**	**103**	**167**	**82**	**116**	**s.**
Ozark Plateau																					
Arcadia	Iron	926	53	56.1	101	July 2	− 6	Feb. 9		56	47.60	11.53	May	T.	June	2.7	97	171	84	110	s.
Birchtree(near)	Shannon	1,000	39	58.7	102	July 2	− 4	Feb. 8		40	45.56	9.80	May	0.75	June	3.5	95	221	55	89	s.
Buffalo	Cedar	1,200	2	....	....	.....	.....	.....		3	....	....	.....	.....	.....	.....	....	....	....	....	.....
Caplinger Mills	Dallas	750	..	....	....	.....	.....	.....		7	28.37	6.30	May	T.	June	2.0	78	152	117	96	s.
Dean	McDonald	1,000	30	58.9	107	June 25	−12	Feb. 8†		35	43.70	10.45	May	0.32	June	3.5	79	....	....	....	sw.
Eldon	Miller	934	38	56.7	106	July 2	− 9	Feb. 8†		35	39.92	9.42	Sept.	0.35	June	4.0	96	121[d]	159[d]	81[d]	s.
Farmington	St. Francis	918	23	57.7	101	Aug. 8	− 6	Feb. 8†		37	43.75	9.07¶	May	T.	June	6.9	89	....	....	....	.....
Goodland	Iron	1,000	41	57.3	105	July 31	− 8	Feb. 11		41	38.99	7.13	May	0.18	June	5.3	82	181	100	84	s.
Greenville	Wayne	381	25	57.5	103	July 2	−10	Feb. 11		27	45.66	8.47	May	0.50	June	3.0	74	204	79	82	sw.
Hailey	Barry	1,350	..	....	....	.....	.....	.....		9	47.83	7.72	May	0.20	June	3.2	70	175	102	88	se.
Koshkonong	Oregon	958	33	60.1	102	July 2	− 6	Feb. 8		34	53.98	9.62	Aug.	1.31	June	4.0	106	172[b]	64[b]	127[b]	sw.
Lebanon	Laclede	1,265	46	57.6	105	June 23†	−15	Feb. 8		47	51.68	11.51	May	1.00	Feb.	3.5	79	212[a]	59[a]	93[a]	e.
Lockwood	Dade	1,078	28	59.3	104	July 2	−11	Feb. 8		38	42.01	8.18	May	0.27	June	4.7	83	208	103	54	sw.
Mountain Grove(near)	Wright	1,463	33	57.4	102	July 2	−11	Feb. 8		37	40.50	9.53	May	0.77	June	3.2	109	193	100	72	sw.
Neosho	Newton	1,011	47	59.4	100	July 2	−11	Feb. 8		51	46.63	11.38	May	0.47	June	1.5	86	186	117	62	sw.
Rolla	Phelps	1,099	34	58.5	101	July 2	− 8	Feb. 8		50	32.78	8.12	May	0.13	June	1.0	91	107	94	163	se.
Salem	Dent	1,173	30	57.5	104	July 2	− 8	Feb. 8		33	34.79	9.21	May	0.48	June	1.7	88	142	104	119	s.
Seligman	Barry	1,542	33	60.0	99	June 25†	−11	Feb. 8		31	50.12	8.54	May	1.13	June	14.5	96	214[f]	67[f]	78[f]	e.
Seymour(near)	Webster	1,642	28	57.0	99	July 2	−11	Feb. 8		28	47.21	9.63	May	0.95	June	3.5	97	170	98	97	se.
Springfield	Greene	1,324	46	58.4	100	July 2	−13	Feb. 8		46	44.07	7.02	Sept.	0.84	Dec.	7.9	101	188	89	88	s.
Versailles	Morgan	1,037	2	58.6	106	July 2	−11	Feb. 8		2	38.58	9.61	May	0.60	June	3.5	103	167	91	107	sw.
Division means	**and extremes**	.....	..	**58.2**	**107**	**June 25**	**−15**	**Feb. 8**		..	**42.82**	**11.53**	**May**	**0.00**	**June**	**4.2**	**90**	**177**	**94**	**94**	**s.**
Southwest Plain																					
Appleton City	St. Clair	853	39	58.6	107	July 2	−13	Feb. 8		42	30.12	6.18	May	0.46	June	3.2	85	114	199	52	sw.
Clinton	Henry	765	41	58.8	106	July 2	−12	Feb. 8†		47	33.75	6.39	Sept.	1.11	Nov.	6.0	95	134	165	66	sw.
Harrisonville	Cass	904	56	55.9	104	June 29†	−15	Feb. 8†		59	27.55	7.68	May	0.39	June	6.0	85	146	86	133	sw.
Lamar	Barton	980	46	58.3	103	July 2	−11	Feb. 8		53	37.98	7.84	May	0.25	June	1.0	70	199	87	79	sw.
Lamonte	Pettis	867	33	57.3	103	July 22	−12	Feb. 8†		48	29.64	5.81	Sept.	0.35	Nov.	6.4	88	204	63	98	se.
Marshall	Saline	779	47	57.7	101	July 1	−13	Feb. 8		44	24.31	7.39	May	0.35	Nov.	15.5	71	214	96	55	sw.
Nevada	Vernon	862	41	58.7	105	July 2	−13	Feb. 8		42	29.73	7.58	May	0.26	June	3.5	61	180	79	106	s.
Warrensburg	Johnson	878	47	57.6	103	June 30†	−15	Feb. 8		54	29.79	6.21	Sept.	0.29	Nov.	9.1	83	199	76	90	sw.
Warsaw	Benton	687	33	59.3	108	July 2	−11	Feb. 8		39	36.50	7.72	May	0.35	June	2.5	103	175	92	98	s.
Division means	**and extremes**	.....	..	**58.0**	**108**	**July 2**	**−15**	**Feb. 8†**		..	**31.14**	**7.85**	**May**	**0.18**	**Nov.**	**5.9**	**82**	**174**	**105**	**86**	**sw.**
Northwest Plateau																					
Bethany	Harrison	916	39	54.5	100	June 11	−16	Feb. 8		41	31.82	8.80	Aug.	0.25	Feb.	10.4	60	213	80	72	nw.
Chillicothe	Livingston	779	25	54.3	103	June 24	−17	Feb. 9		28	37.92	9.55	Aug.	0.50	Nov.	14.8	76	208	83	74	.....
Conception	Nodaway	980	45	55.0	103	June 11	−20	Feb. 8		50	28.88	7.67	Aug.	0.37	Feb.	16.5	67	164	118	83	se.
Edgerton	Platte	856	14	55.6	101	June 24	−16	Feb. 8		23	26.43	5.31	Aug.	0.29	Feb.	12.1	86	226	44	95	s.
Grant City	Worth	1,134	30	53.1	101	June 6†	−18	Feb. 8		42	27.44	9.84	Aug.	0.26	Feb.	13.0	69	102[f]	155[f]	102[f]	sw.
Kansas City	Jackson	963	45	58.2	103	July 1	−13	Feb. 8		45	27.11	6.94	May	0.31	Nov.	13.7	78	153	119	93	s.
Kidder	Caldwell	1,020	42	54.1	100	June 24	−16	Feb. 8†		46	26.66	5.57	May	0.53	Feb.	16.7	74	176	96	93	s.
King City	Gentry	1,095	..	....	....	.....	.....	.....		8	31.39	8.15	Aug.	0.33	Feb.	14.2	70	....	....	....	.....
Lexington	Lafayette	688	49	57.5	105	June 30	−13	Feb. 8		50	28.01	5.64	May	0.53	Nov.	16.7	81	213	104	48	sw.
Maryville	Nodaway	1,169	44	55.2	105	June 6	−19	Feb. 8		40	29.77	8.34	Aug.	0.32	Nov.	20.2	85	182	78	105	n.
Oregon	Holt	1,048	78	57.3	105	June 10	−17	Feb. 8		78	39.49	8.50	Sept.	0.21	Feb.	8.0	68	239	69	57	sw.
St. Joseph	Buchanan	967	24	56.5	102	June 6†	−15	Feb. 8		62	30.29	6.05	June	0.31	Feb.	5.2	85	188	98	79	se.
Tarkio	Atchison	916	31	53.2	104	June 6†	−18	Feb. 8		40	29.53	6.06	Aug.	0.30	Feb.	17.2	61	167	104	94	sw.
Trenton	Grundy	822	38	55.6	102	June 11	−15	Feb. 8		39	26.12	6.28	May	0.34	Nov.	10.9	68	166	129	70	s.
Division means	**and extremes**	.....	..	**55.4**	**105**	**June 6†**	**−20**	**Feb. 8**		..	**30.30**	**10.62**	**Aug.**	**0.21**	**Feb.**	**13.5**	**73**	**185**	**98**	**82**	**s.**
State means	**and extremes**	.....	..	**57.3**	**108**	**July 2**	**−22**	**Feb. 8†**		..	**36.21**	**12.97**	**May**	**0.00**	**June**	**8.0**	**86**	**175**	**95**	**95**	**sw.**

† Also on other dates. ¶ Estimated

a, b, c, indicate the number of days missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Mean Temperatures for the Year 1933, with Departures from Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	42.0	+15.3	30.7	+ 0.9	44.7	+ 2.8	55.4	+ 1.2	66.1	+ 1.9	79.2	+ 6.2	81.0	+ 4.9	75.7	+ 1.5	75.0	+ 8.0	56.1	+ 0.8	46.2	+ 4.6	38.2	+ 7.6	57.5	+ 4.6
Clifton Hill	38.1	+10.0	26.4	− 3.8	39.8	− 2.4	53.0¶	− 0.5	65.6	+ 2.0	78.9	+ 6.5	79.8	+ 3.4	74.7	− 1.3	75.4	+ 6.8	55.4	− 1.3	46.2[e]	+ 2.8	37.3	+ 6.8	55.9	+ 2.4
Columbia	42.1	+12.9	31.6	− 0.1	44.0	+ 1.4	54.4	− 0.5	65.4	+ 1.1	78.0	+ 5.2	79.7	+ 2.8	75.3	− 0.3	74.4	+ 6.2	55.8	− 0.8	44.8	+ 1.5	38.0	+ 4.8	57.0	+ 2.8
Downing	37.7	+12.3	27.5	− 4.8	39.9	− 1.7	52.4	− 0.8	63.2	+ 0.5	78.6	+ 7.2	76.6	+ 0.2	72.4	− 2.5	73.0	+ 5.4	53.4	− 2.5	42.8	+ 1.2	32.9	+ 3.3	54.2	+ 1.5
Elsberry	41.4	.....	31.9	.....	43.8	.....	53.9	.....	65.6	.....	77.4	.....	78.6	.....	72.7[b]	.....	73.0	.....	53.2	.....	43.6	.....	37.5	.....	56.0	.....
Fayette	39.8	+12.8	28.8	− 1.8	41.9	0.0	52.8	− 1.4	64.2	+ 0.4	77.3	+ 4.5	79.2	+ 2.0	75.0	− 0.9	73.5	+ 5.4	55.8	− 0.6	44.4	+ 2.2	36.4	+ 5.3	55.8	+ 2.3
Fulton	40.2	+10.7	30.7	− 2.4	42.1	− 2.0	53.6	− 1.0	65.3	+ 0.7	77.4	+ 4.2	79.1	+ 1.4	75.2	− 1.2	74.5	+ 5.6	55.8	− 1.6	44.4	+ 0.2	37.2	+ 3.7	56.3	+ 1.5
Hannibal	40.8	+13.7	30.4	+ 0.7	41.8	+ 0.8	53.3	− 0.1	65.3	+ 1.7	79.2	+ 6.7	79.2	+ 2.4	75.1	+ 0.1	75.6	+ 7.9	55.2	− 0.8	44.2	+ 2.1	36.6	+ 5.1	56.4	+ 3.4
Jefferson City	41.7	+11.9	31.0	− 1.1	42.7	− 0.9	53.8	− 2.2	65.4	+ 0.7	78.2	+ 4.4	79.6	+ 1.5	76.3	− 0.4	75.4	+ 6.1	56.4	− 0.4	45.0	+ 0.9	38.6	+ 5.7	57.0	+ 2.2
Kirksville	38.9	+14.1	28.1	+ 1.0	40.6	+ 0.9	52.5	+ 0.6	63.5	+ 1.2	78.4	+ 6.7	76.6	+ 0.6	72.5	− 1.5	72.5	+ 6.2	54.5	− 0.2	42.7	+ 2.1	33.3	+ 3.7	54.5	+ 3.0
Louisiana	39.1	+11.0	29.4	− 1.5	42.0	− 1.5	54.9[a]	+ 0.9	64.7¶	+ 1.0	78.0	+ 5.9	79.8	+ 3.4	74.4	− 0.5	74.6	+ 6.6	54.4	− 1.8	44.8	+ 0.7	37.1	+ 5.3	56.1	+ 2.5
Macon	38.5	+11.0	26.0	− 3.6	40.6	− 1.6	50.7	− 2.4	64.1	+ 0.6	79.0	+ 6.6	78.6	+ 1.4	74.2	− 1.9	73.6	+ 5.7	55.0	− 1.3	42.6	− 0.2	34.0	+ 3.9	54.7	+ 1.5
Mexico	38.8	+10.8	29.2	− 0.9	41.0	− 1.0	53.3	− 0.5	64.7	+ 0.7	78.3	+ 5.1	79.1	+ 1.8	74.2	− 1.8	74.6	+ 6.1	53.5	− 2.8	41.8	− 1.1	36.9	+ 5.1	55.4	+ 1.8
St. Charles	42.4	+11.4	34.4	+ 1.1	45.5	+ 1.0	55.6	0.0	68.0	+ 4.9	80.0	+ 6.1	81.5[b]	+ 3.4	77.4	+ 0.6	77.6	+ 9.3	55.6	− 2.6	44.0	− 1.3	38.9	+ 4.0	58.4	+ 3.2
St. Louis	43.6	+12.5	35.1	+ 0.3	44.8	+ 0.7	55.5	− 0.6	67.2	+ 0.2	81.7	+ 6.7	81.2	+ 2.4	77.8	+ 0.3	77.4	+ 6.9	57.4	− 1.4	46.0	+ 0.6	40.2	+ 5.3	59.0	+ 2.8
St. Louis University	43.0	+12.8	34.7	+ 2.5	44.6	+ 1.0	55.2	0.0	66.7	+ 0.6	81.4	+ 6.5	80.9	+ 0.8	77.6	+ 0.4	76.6	+ 6.4	56.8	− 2.1	45.5	− 1.0	39.4	+ 5.1	58.5	+ 2.8
Steffenville	39.2	+11.8	28.2	− 1.5	40.9	− 1.3	52.2	− 0.9	63.8	0.0	78.5	+ 5.9	77.8	0.0	73.6	− 2.9	72.4	+ 3.4	53.9	− 3.5	43.4	− 0.1	35.0	+ 4.4	54.9	+ 1.3
Unionville	37.9	+14.4	27.6	+ 0.9	40.6	+ 1.7	52.6	+ 1.6	63.2	+ 1.1	78.9	+ 7.6	78.0	+ 1.5	74.2	− 0.6	73.2	+ 6.1	53.6	− 1.6	43.6	+ 3.3	33.1	+ 5.5	54.7	+ 3.5
Warrenton	43.2	+14.0	33.4	+ 2.5	44.1	+ 1.6	54.8	0.0	66.4	+ 1.5	79.8	+ 6.4	81.0	+ 3.2	76.6	+ 0.1	76.5	+ 7.5	56.8	+ 0.8	46.8	+ 3.6	39.4	+ 7.0	58.2	+ 4.0
Keokuk, Iowa	39.4	+14.5	28.0	− 0.3	40.2	+ 1.3	52.0	− 0.3	63.7	− 0.1	80.0	+ 7.5	78.4	+ 1.5	74.0	− 1.0	73.7	+ 6.1	54.2	− 1.2	41.8	+ 0.7	34.2	+ 4.6	55.0	+ 2.8
Division means	**40.4**	**+12.5**	**30.2**	**− 0.6**	**42.3**	**0.0**	**53.6**	**− 0.4**	**65.1**	**+ 1.1**	**78.9**	**+ 6.1**	**79.3**	**+ 2.0**	**74.9**	**− 0.7**	**74.6**	**+ 6.4**	**55.1**	**− 1.3**	**44.2**	**+ 1.2**	**36.7**	**+ 5.0**	**56.8**	**+ 2.6**
Southeast Lowlands																										
Campbell	42.8	.....	36.8	.....	47.2	.....	56.8	.....	69.6	.....	78.4	.....	79.3	.....	76.7	.....	75.5	.....	57.5	.....	47.5	.....	44.0	.....	59.3	.....
Caruthersville	47.4	+ 8.3	40.6	+ 0.3	50.9	− 0.5	61.1	+ 0.9	72.6	+ 2.8	80.6	+ 2.2	81.9	+ 0.6	79.1	− 1.2	78.2	+ 3.7	61.3	− 0.9	50.9	+ 0.5	47.6	+ 6.7	62.7	+ 2.0
Doniphan	43.6	+ 7.8	37.3	− 2.0	46.6	− 2.4	58.3	− 0.2	70.0	+ 3.5	78.1	+ 3.1	79.6	+ 1.0	76.0	− 1.6	76.6	+ 5.4	58.7	+ 0.2	50.2	+ 2.9	44.3	+ 6.5	59.9	+ 2.0
Jackson	41.2	+ 7.4	35.8	− 0.7	47.2	0.0	57.6	+ 0.5	69.7	+ 4.1	79.3	+ 5.2	80.0	+ 2.4	77.0	+ 0.9	76.4	+ 6.3	59.6	+ 1.7	47.2	+ 0.6	42.6	+ 6.0	59.5	+ 2.9
Marble Hill	43.8	+ 9.2	36.4	− 0.2	47.1	− 0.5	57.5	+ 0.3	69.0	+ 3.4	77.3	+ 3.3	79.4	+ 1.6	77.1	+ 0.1	77.1	+ 6.4	58.6	+ 0.4	47.7	+ 2.5	43.0	+ 6.3	59.5	+ 2.7
Poplar Bluff	43.4	+ 7.4	36.8	− 1.3	47.8	− 0.8	57.8	− 1.7	69.0	+ 1.5	77.1	+ 1.7	79.0	− 0.2	76.4	− 1.6	76.0	+ 4.3	57.8	− 2.3	46.8	− 0.9	42.2	+ 4.4	59.2	+ 0.9
Sikeston	46.6	+ 9.6	37.8	+ 0.6	49.0	+ 0.4	58.4	+ 0.3	70.7	+ 2.2	79.7	+ 5.4	80.0	+ 1.4	77.1	− 0.5	77.1	+ 6.0	60.2	+ 0.9	49.2	+ 2.0	44.8	+ 7.1	60.9	+ 3.0
Cairo, Ill	45.8	+10.9	37.8	− 0.7	47.6	+ 0.4	58.5	+ 0.4	70.3	+ 1.9	79.6	+ 3.3	79.4	− 0.2	76.8	− 1.0	77.1	+ 5.6	59.6	− 0.8	48.4	+ 1.1	44.5	+ 6.7	60.4	+ 2.3
Division means	**44.3**	**+ 8.7**	**37.4**	**− 0.6**	**47.9**	**− 0.5**	**58.2**	**+ 0.1**	**70.1**	**+ 2.8**	**78.8**	**+ 3.5**	**79.8**	**+ 0.9**	**77.0**	**− 0.7**	**76.9**	**+ 5.4**	**59.2**	**− 0.1**	**48.5**	**+ 1.2**	**44.1**	**+ 6.2**	**60.2**	**+ 2.3**
Ozark Plateau																										
Arcadia	40.0	+ 8.1	32.9	− 1.2	43.7	− 0.9	55.1	− 0.2	65.6	+ 1.5	74.2	+ 2.4	76.1	+ 0.3	72.8	− 1.5	73.2	+ 5.6	54.7	− 1.3	44.8	+ 0.9	39.6	+ 5.3	56.1	+ 1.6
Birchtree(near)	44.2	+ 9.7	36.1	− 0.2	46.6	− 0.7	56.2	− 0.9	67.4	+ 2.4	75.5[e]	+ 2.8	78.3	+ 1.7	76.0	− 0.1	74.2	+ 4.4	57.0	− 1.4	49.6	+ 3.0	43.5	+ 7.1	58.7	+ 2.3
Dean	44.6	+ 8.7	34.4	− 1.3	47.6	− 1.2	56.4	− 0.3	66.6	+ 0.9	76.0	+ 3.3	79.6	+ 2.3	75.8[e]	− 1.9	73.2	+ 2.2	59.4[e]	+ 0.7	48.9	− 0.4	44.6[a]	+ 7.1	58.9	+ 1.7
Eldon	40.4	+ 9.3	31.8[a]	− 1.3	42.9	− 0.7	52.7[a]	− 2.7	64.8	+ 0.6	78.3	+ 5.3	80.6	+ 3.4	75.6	− 0.8	74.0	+ 4.6	57.0[a]	− 0.4	44.1[c]	− 0.7	37.7[a]	+ 3.4	56.7	+ 1.7
Farmington	43.2	+10.6	34.7	− 2.2	44.7	− 1.8	53.8[d]	− 3.1	66.1¶	+ 2.4	74.5¶	+ 1.7	78.2	+ 1.9	75.3	− 0.1	77.6	+ 8.0	56.8	0.0	46.6	+ 1.8	41.1	+ 4.4	57.7	+ 2.0
Goodland	42.0	+ 9.4	33.6	− 0.7	44.4	− 0.6	54.4	− 0.6	66.0	+ 2.0	74.0	+ 2.1	77.4	+ 1.8	75.4	+ 0.9	76.9	+ 9.1	56.9	+ 1.0	46.2	+ 1.5	40.7	+ 5.9	57.3	+ 2.6
Greenville	41.4	+ 6.4	34.2	− 1.6	44.8	− 2.9	55.5	− 1.1	67.4	+ 1.5	75.0	+ 1.4	77.1	− 0.3	74.6	− 2.1	74.4	+ 3.6	56.2	− 1.4	47.5	+ 2.1	42.2	+ 6.0	57.5	+ 1.0
Koshkonong	44.6	+ 8.1	37.0[a]	− 2.1	47.4[b]	− 2.0	58.5	0.0	68.8	+ 2.2	79.2	+ 4.8	79.8	+ 1.0	76.0	− 1.9	75.8	+ 4.4	58.8	− 0.8	50.4	+ 1.4	45.1[b]	+ 6.7	60.1	+ 1.8
Lebanon	40.6	+ 8.1	34.0	− 0.4	46.0	+ 1.0	54.6	− 0.9	65.6	+ 0.7	77.8	+ 5.1	79.2	+ 2.3	75.7	− 0.4	74.0	+ 4.6	57.1[a]	− 0.6	46.5	+ 0.9	40.0	+ 5.2	57.6	+ 2.1
Lockwood	45.0	+11.7	36.2	− 0.8	47.3	0.0	56.5	0.0	67.0	+ 2.6	78.8	+ 5.2	80.6	+ 3.0	75.6	− 1.6	74.4	+ 3.5	58.6	− 0.1	48.6	+ 1.6	43.1	+ 7.0	59.3	+ 2.7
Mountain Grove(near)	41.2	+ 8.4	31.2	− 3.9	43.4	− 2.0	55.2	+ 0.3	65.4	+ 1.6	76.6	+ 4.8	78.4	+ 2.0	75.1	− 0.4	73.9	+ 5.0	58.0	+ 0.4	48.0	+ 2.1	42.8	+ 8.1	57.4	+ 2.2
Neosho	45.0	+ 9.9	36.6	− 1.0	48.4	+ 0.3	56.9	− 1.4	67.4	+ 1.4	75.9	+ 2.1	78.8	+ 1.3	75.2	− 1.9	74.6	+ 4.1	59.4	+ 0.2	49.0	+ 1.7	45.0	+ 7.9	59.4	+ 2.0
Rolla	43 8	+11.9	34.6	− 1.7	45.8	+ 0.3	56.0	+ 0.1	66.6	+ 2.1	77.3	+ 4.3	78.9	+ 1.2	76.1	− 0.1	75.4	+ 6.7	58.0	+ 1.5	47.6	+ 2.6	42.0	+ 7.4	58.5	+ 3.0
Salem	42.8	+10.2	33.8	− 2.0	44.7	− 1.7	55.2	− 0.8	66.4	+ 1.9	76.2	+ 3.8	77.8	+ 1.0	75.0	− 0.9	74.2	+ 5.0	56.2	− 1.4	46.5	+ 0.4	41.2	+ 5.8	57.5	+ 1.8
Seligman	46.0[e]	+10.9	37.0[c]	− 0.5	48.6[b]	+ 2.0	57.6	+ 1.0	66.3[e]	+ 1.8	77.2	+ 4.8	80.2[e]	+ 3.5	76.0	− 0.2	75.0[a]	+ 5.4	59.4[d]	+ 0.4	50.3	+ 3.0	45.8	+ 8.5	60.0	+ 3.4
Seymour(near)	42.6	+ 8.6	34.1	− 0.9	45.0	− 0.4	54.4	− 1.3	64.8	+ 1.1	74.9	+ 3.2	76.9	+ 1.4	73.4	− 1.6	71.8	+ 3.0	57.0	− 0.4	47.2	+ 1.3	42.2	+ 6.8	57.0	+ 1.7
Springfield	44.3	+10.8	34.5	− 0.7	46.2	+ 1.0	55.2	− 0.8	65.8	+ 1.3	78.3	+ 5.8	78.3	+ 1.5	74.7	− 1.0	74.4	+ 5.5	57.6	− 0.6	48.2	+ 2.5	43.1	+ 6.9	58.4	+ 2.7
Versailles	43.8	.....	34.0	.....	45.8	.....	55.3	.....	66.6	.....	79.1	.....	80.8	.....	76.8	.....	75.8	.....	57.2	.....	47.2	.....	41.0	.....	58.6	.....
Division means	**43.1**	**+ 9.5**	**34.5**	**− 1.3**	**45.7**	**− 0.6**	**55.6**	**− 0.6**	**66.4**	**+ 1.6**	**76.7**	**+ 3.8**	**78.7**	**+ 1.7**	**75.3**	**− 0.9**	**74.6**	**+ 5.0**	**57.5**	**− 0.2**	**47.6**	**+ 1.5**	**42.8**	**+ 6.4**	**58.2**	**+ 2.1**
Southwest Plain																										
Appleton City	43.2	+11.9	33.8	− 0.1	46.5	+ 1.4	55.8	− 0.3	66.6	+ 1.6	78.5	+ 4.1	80.1	+ 1.9	77.5	− 0.3	74.8	+ 4.4	57.9	− 1.0	47.8	+ 1.8	40.3	+ 5.7	58.6	+ 2.6
Clinton	42.0	+10.3	32.7	− 0.9	45.6	+ 0.6	57.0	+ 0.7	67.2	+ 1.7	79.6	+ 5.8	81.6	+ 3.3	78.1	+ 0.5	77.0	+ 6.2	58.0	− 3.5	47.0	0.0	40.2	+ 5.5	58.8	+ 2.5
Harrisonville	39.2	+11.9	29.0	− 1.7	42.2	+ 0.9	53.2	− 0.7	63.8	0.0	78.4	+ 5.3	80.1	+ 2.4	75.2	− 0.7	74.0	+ 5.5	55.5	− 0.3	44.2	+ 1.7	36.0	+ 4.7	55.9	+ 2.4
Lamar	42.5	+10.4	33.0	− 2.3	45.6	− 0.4	55.2	− 1.4	66.0	+ 0.4	78.4	+ 4.2	80.2	+ 1.8	76.2	− 1.5	75.0	+ 4.2	58.6	− 0.3	47.4	+ 1.1	41.6	+ 6.4	58.3	+ 1.9
Lamonte	41.2	+12.3	31.3	− 1.9	44.4	+ 0.4	54.3	− 0.9	65.4	+ 0.8	78.4	+ 4.4	80.8	+ 1.7	76.8	− 0.3	74.8	+ 4.6	56.4	− 1.6	45.2	+ 0.8	38.2	+ 4.3	57.3	+ 2.0
Marshall	42.5	+14.6	31.8	+ 0.9	45.0	+ 2.0	54.4	− 0.4	66.0	+ 1.8	80.6	+ 7.4	81.0	+ 3.5	76.2	+ 0.2	75.8	+ 7.0	55.0	− 1.6	45.0	− 0.2	39.3	+ 7.4	57.7	+ 3.6
Nevada	43.3	+11.4	34.6	+ 0.7	47.2	+ 2.3	56.0	+ 0.3	65.6	+ 1.1	78.3	+ 4.8	79.6	0.0	76.0	− 1.1	75.0	+ 5.5	58.1	+ 0.5	48.3	+ 3.5	42.0	+ 6.7	58.7	+ 3.0
Warrensburg	41.6	+12.9	31.6	− 0.9	43.9	− 0.1	54.4	− 1.7	64.6	− 0.4	79.2	+ 5.3	80.3	+ 1.5	76.7	− 0.4	75.1	+ 4.9	57.3	− 0.7	47.3	+ 2.3	39.2	+ 5.8	57.6	+ 2.4
Warsaw	44.1	+11.2	34.2	− 1.4	46.6	− 0.4	56.2	− 0.5	67.3	+ 1.8	80.0	+ 6.2	81.7	+ 3.4	77.6	0.0	75.8	+ 5.3	57.9	− 1.1	48.0	+ 0.8	41.9	+ 6.2	59.3	+ 2.6
Division means	**42.2**	**+11.9**	**32.4**	**− 0.8**	**45.2**	**+ 0.7**	**55.2**	**− 0.5**	**65.8**	**+ 1.0**	**79.0**	**+ 5.3**	**80.6**	**+ 2.2**	**76.7**	**− 0.4**	**75.3**	**+ 5.3**	**57.2**	**− 1.1**	**46.7**	**+ 1.3**	**39.9**	**+ 5.9**	**58.0**	**+ 2.6**
Northwest Plateau																										
Bethany	37.8	+13.0	28.3	+ 0.8	41.0	+ 0.7	52.4	+ 0.9	62.6	+ 0.1	77.9	+ 5.9	77.4	+ 1.1	72.6	− 2.4	72.1	+ 5.0	54.0	− 0.8	48.5	+ 0.7	34.2	+ 4.1	54.5	+ 2.4
Chillicothe	37.4	+10.6	26.8	− 5.2	39.6	− 1.5	51.6	− 1.5	63.8	− 1.4	79.0	+ 6.1	78.8	− 0.1	78.5	− 2.2	72.8	+ 4.2	53.2	− 3.6	41.8	+ 0.1	33.1	+ 0.2	54.3	+ 0.5
Conception	37.4	+12.7	28.2	0.0	40.6	+ 0.8	53.2	+ 1.0	62.8	+ 0.7	79.6	+ 8.1	78.8	+ 2.2	74.2	− 0.5	73.0	+ 5.8	54.4	− 1.0	44.0	+ 2.6	34.0	+ 4.8	55.0	+ 3.1
Edgerton	36.2[d]	+ 9.3	28.5	− 5.8	44.2[b]	+ 1.0	53.2[b]	− 0.6	63.9[a]	+ 0.9	78.2[b]	+ 6.3	78.4[a]	+ 2.3	74.3[b]	− 0.8	73.0[a]	+ 5.1	54.8[a]	− 1.5	45.4[b]	+ 3.6	37.0[a]	+ 6.6	55.6	+ 2.2
Grant City	35.8	+11.0	26.8	− 1.8	39.9	− 1.4	51.4	− 0.8	61.6	− 0.4	77.0	+ 6.2	76.0	− 0.2	71.4[f]	− 3.5	69.6	+ 2.6	52.2	− 2.9	41.9	0.0	33.2	+ 5.2	53.1	+ 1.2
Kansas City	42.4	+14.2	32.1	+ 0.9	44.2	+ 1.5	55.1	+ 0.3	65.4	+ 0.6	81.8	+ 8.2	80.9	+ 2.8	76.2	− 0.4	75.7	+ 6.8	58.0	+ 0.3	47.2	+ 3.5	39.0	+ 6.5	58.2	+ 3.8
Kidder	37.2	+11.2	26.0	− 2.4	39.6	− 1.2	52.8	+ 0.6	63.7	+ 1.1	78.4	+ 6.6	78.3	+ 1.7	73.6	− 1.8	72.2	+ 4.9	53.0	− 2.8	41.7	− 0.1	32.7	+ 3.5	54.1	+ 1.2
Lexington	41.0	+13.2	30.5	− 0.5	43.1	− 0.3	54.2	− 0.4	66.4	+ 2.0	81.4	+ 8.5	82.1	+ 4.7	77.7	+ 1.5	76.0	+ 7.2	56.4	− 1.1	44.8	+ 0.6	36.2	+ 4.2	57.5	+ 3.3
Maryville	37.6	+14.7	29.2	+ 3.4	41.6	+ 3.7	53.6	+ 2.8	63.2	+ 1.9	79.3	+ 9.5	78.8	+ 3.1	73.8	0.0	72.6	+ 7.0	54.6	+ 1.1	43.8	+ 4.4	34.4	+ 7.6	55.2	+ 4.9
Oregon	40.2	+16.1	31.2	+ 2.4	43.6	+ 4.0	55.0	+ 2.3	64.9	+ 1.7	81.0	+ 8.8	80.4	+ 4.8	75.6	+ 0.4	74.4	+ 7.3	57.0	+ 1.9	46.5	+ 6.0	37.4	+ 8.7	57.3	+ 5.4
St. Joseph	40.1	+13.1	29.8	− 2.6	42.6	+ 0.4	54.6	+ 0.4	64.2	+ 0.2	80.6	+ 6.8	80.0	+ 1.1	75.0	− 1.7	73.4	+ 4.4	55.8	− 0.9	45.1	+ 1.7	36.4	+ 5.6	56.5	+ 2.4
Tarkio	36.2	+13.3	27.3	− 1.7	39.5	− 0.6	51.4	− 0.8	61.2	− 1.4	79.2	+ 7.4	76.8	0.0	71.6	− 3.6	68.6	+ 2.3	52.2	− 2.6	42.4	+ 2.3	32.0	+ 5.6	53.2	+ 1.7
Trenton	38.8	+12.5	28.7	− 0.7	42.2	+ 1.1	54.8[b]	+ 2.1	64.8	+ 1.3	79.8	+ 7.6	79.0	+ 2.2	74.6	− 0.6	73.6	+ 6.4	54.5	− 1.4	43.0	+ 0.8	32.8	+ 3.2	55.6	+ 2.9
Division means	**38.8**	**+12.7**	**28.7**	**− 1.0**	**41.7**	**+ 0.6**	**53.3**	**+ 0.5**	**63.7**	**+ 0.6**	**79.5**	**+ 7.4**	**78.9**	**+ 2.0**	**74.2**	**− 1.2**	**72.8**	**+ 5.3**	**54.6**	**− 1.2**	**43.9**	**+ 2.0**	**34.8**	**+ 5.1**	**55.4**	**+ 2.7**
State means	**41.4**	**+10.6**	**32.2**	**− 0.8**	**44.1**	**+ 0.5**	**54.9**	**− 0.3**	**65.9**	**+ 1.6**	**78.4**	**+ 5.0**	**79.3**	**+ 1.7**	**75.4**	**− 0.7**	**74.6**	**+ 5.4**	**56.4**	**− 0.9**	**45.9**	**+ 1.5**	**39.1**	**+ 5.0**	**57.3**	**+ 2.4**

* Partially estimated ¶ Estimated

Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days, etc.

Monthly and Annual Precipitation for the Year 1933, with Departures from Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Bethel	1.73	.....	0.88	.....	2.40	.....	1.77	.....	6.59	.....	2.32	.....	2.37	.....	3.27	.....	1.54	.....	0.74	.....	0.29	.....	1.80	.....	25.70	.....
Boonville	1.58	−0.23	0.74	−1.48	2.70	−0.44	2.69	−1.32	8.83	+3.74	2.20	−3.40	0.79	−2.94	4.63	+0.77	1.63	−3.08	3.12	0.0	0.62	−1.70	1.64	−0.24	31.17	−10.32
Bowling Green	1.78	.....	0.95	.....	2.61	.....	2.69	.....	4.76	.....	0.69	.....	1.17	.....	4.12	.....	0.73	.....	3.68	.....	0.49	.....	1.36	.....	24.88	.....
Brunswick	1.37	−0.21	1.32	−0.47	2.96	+0.45	1.89	−1.66	6.47	+1.74	2.12	−3.37	0.48	−3.87	4.58	+0.74	1.83	−2.66	1.59	−1.33	0.81	−1.23	1.86	+0.21	27.28	−11.66
Canton	2.17	.....	0.57	.....	2.10	.....	2.95	.....	12.97	.....	4.54	.....	1.84	.....	3.89	.....	2.89	.....	0.84	.....	0.32	.....	1.68	.....	36.76	.....
Clifton Hill	1.33	−0.25	1.22	−0.21	2.80	+0.16	1.54	−2.32	6.83	+2.29	1.46	−3.43	1.18	−2.22	4.68	+0.67	1.67	−2.78	1.85	−0.71	0.64	−1.50	1.45	−0.18	26.65	−10.48
Columbia	1.87	−0.05	0.97	−1.07	3.27	+0.33	1.72	−2.05	7.30	+2.84	2.18	−2.58	1.02	−2.47	2.86	−0.74	3.92	−0.43	2.97	+0.36	0.80	−1.40	1.94	+0.08	30.82	−7.18
Downing	1.92	+0.49	0.24	−1.08	2.28	−0.05	1.95	−1.81	6.16	+2.43	3.07	−2.39	1.57	−2.92	4.34	+0.62	2.69	−2.91	1.32	−1.53	0.29	−1.57	1.15	−0.35	26.98	−11.07
Edina	1.73	.....	0.85	.....	1.97	.....	1.69	.....	6.77	.....	9.08	.....	0.59	.....	3.77	.....	1.67	.....	0.79	.....	0.46	.....	1.07	.....	30.44	.....
Elsberry	2.92	.....	1.28	.....	4.46	.....	3.36	.....	6.23	.....	1.11	.....	1.81	.....	2.58	.....	2.68	.....	4.17	.....	0.79	.....	1.70	.....	33.09	.....
Ewing	1.61	.....	0.70	.....	2.36	.....	2.15	.....	6.24	.....	8.16	.....	1.37	.....	3.43	.....	2.98	.....	0.93	.....	0.36	.....	1.90	.....	32.19	.....
Farber	1.88	.....	0.96	.....	2.90	.....	2.55	.....	5.54	.....	0.52	.....	3.52	.....	6.33	.....	1.96	.....	3.13	.....	0.73	.....	1.69	.....	31.71	.....
Fayette	1.57	−0.29	1.26	−0.54	3.67	+0.87	2.57	−1.05	7.82	+3.27	1.31	−3.48	0.83	−2.77	2.63	−0.63	0.76	−3.99	2.14	−0.54	0.91	−1.22	1.58	−0.10	27.05	−10.47
Fulton	3.45	+1.22	1.11	−0.65	4.02	+1.00	2.23	−1.95	6.95	+2.13	0.71	−3.96	1.96	−1.89	2.93	−0.54	3.83	−0.46	4.50	+1.41	0.85	−1.51	1.70	−0.33	34.24	−5.53
Gorin	1.72	+0.24	0.64	−0.80	2.72	+0.30	1.73	−2.10	7.19	+2.92	9.10	+4.81	1.50	−2.41	3.34	+0.22	2.01	−2.65	0.92	−1.88	0.23	−1.76	1.04	−0.62	32.14	−3.73
Hannibal	1.96	+0.24	0.44	−1.42	4.05	+1.45	2.13	−1.06	7.08	+2.73	1.56	−2.34	1.30	−1.79	2.24	−1.10	2.38	−1.69	1.23	−1.16	0.15	−1.91	1.65	+0.11	26.17	−7.84
Hermann	3.98	+1.89	1.00	−1.10	3.23	+0.17	2.44	−1.44	11.40	+7.03	0.58	−4.04	1.71	−1.93	2.21	−0.99	4.56	+0.58	3.20	+0.26	0.99	−1.78	1.56	−0.29	36.86	−1.64
Jefferson City	3.14	+1.01	1.55	−0.37	2.76	−0.34	2.53	−1.32	7.28	+2.76	2.88	−1.39	3.02	−0.43	3.09	−0.16	3.20	−0.33	4.56	+1.77	1.44	−0.93	1.48	−0.46	36.93	−0.19
Kahoka	1.66	.....	0.48	.....	2.03	.....	1.75	.....	7.61	.....	8.60	.....	0.72	.....	3.22	.....	2.70	.....	1.05	.....	0.26	.....	0.94	.....	31.02	.....
Kirksville	2.47	+1.02	0.62	−1.08	3.16	+0.44	1.76	−1.83	6.44	+1.68	8.83	+4.12	2.60	−1.47	4.59	+1.08	1.31	−3.15	1.37	−1.61	0.28	−1.63	1.50	−0.11	34.93	−2.54
Linneus	1.92	.....	0.80	.....	2.79	.....	1.69	.....	5.98	.....	3.77	.....	1.81	.....	4.34	.....	2.56	.....	1.78	.....	0 28	.....	0.91	.....	28.63	.....
Louisiana	2.15	+0.18	0.37	−1.91	5.22	+2.12	2.88	−0.56	7.27	+2.79	0.73	−3.46	2.11	−1.13	4.15	+0.33	2.59	−1.49	3.02	+0.13	0.75	−1.67	1.66	−0.10	32.90	−4.77
Lucerne	0.78	−0.20	0.45	−1.01	2.65	+0.82	0.85	−3.09	4.01	+1.87	2.63	−3.91	1.35	−1.77	4.13	+0.73	5.12	−0.76	1.59	−1.91	0.18	−1.68	0.76	−0.56	24.50	−11.47
Macon	1.64	+0.07	0.85	−0.97	3.23	+0.61	1.59	−1.77	5.39	+0.99	4.22	−0.67	2.14	−1.23	2.53	−1.01	1.68	−2.62	1.47	−1.53	0.35	−1.75	1.33	−0.21	26.42	−10.09
Memphis	2.14	.....	0.42	.....	2.72	.....	1.91	.....	6.26	.....	6.49	.....	2.33	.....	4.50	.....	2.27	.....	0.97	.....	0.40	.....	1.26	.....	31.67	.....
Mexico	2.12	+0.11	1.37	−0.73	3.61	+0.79	2.39	−1.27	8.30	+3.61	1.23	−3.85	1.83	−1.77	3.59	+0.35	2.35	−2.25	2.10	−0.57	0.67	−1.71	2.13	+0.13	31.69	−7.16
Milan	2.90	+1.79	0.85	−0.56	3.20	+0.81	1.87	−2.05	5.55	+2.52	1.97	−4.88	0.12	−2.80	8.11	+4.31	1.97	−3.21	1.56	−2.25	0.37	−2.21	2.16	+0.75	30.63	−7.78
Monroe City	1.53	−0.50	0.72	−0.77	3.06	+0.34	1.79	−1.92	5.70	+2.09	0.84	−4.23	2.03	−1.70	1.90	−2.67	1.81	−2.20	1.17	−1.51	0.06	−2.07	2.02	+0.35	22.63	−14.79
New London	1.62	.....	0.73	.....	3.82	.....	3.17	.....	6.57	.....	1.08	.....	1.88	.....	1.83	.....	2.00	.....	1.55	.....	0.36	.....	0.93	.....	25.04	.....
Pacific	1.76	−0.60	1.20	−0.94	4.34	+0.63	3.52	−0.65	12.97	+8.02	0.07	−4.46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Palmyra	1.79	−0.45	0.39	−1.56	2.61	−0.42	1.62	−2.00	6.33	+1.62	1.63	−2.82	1.58	−1.75	2.84	−0.66	1.53	−2.53	1.36	−0.88	0.15	−2.16	1.60	−0.07	23.43	−13.68
Paris	1.07	.....	1.07	.....	2.97	.....	2.60	.....	7.77	.....	1.56	.....	1.04	.....	2.45	.....	1.96	.....	1.43	.....	0.41	.....	1.86	.....	26.19	.....
Perry	1.25	.....	0.78	.....	3.37	.....	2.25	.....	6.77	.....	0.63	.....	0.77	.....	3.33	.....	1.47	.....	1.71	.....	0.49	.....	1.73	.....	24.55	.....
Philadelphia	2.60	.....	0.51	.....	2.12	.....	2.12	.....	9.45	.....	2.33	.....	2.95	.....	3.35	.....	1.33	.....	*1.19	.....	0.27	.....	*1.75	.....	29.97	.....
St. Charles	2.13	−0.06	0.94	−1.55	4.58	+1.54	3.02	−0.63	9.07	+4.77	0.02	−4.10	0.95	−2.17	0.72	−2.76	5.66	+2.35	2.82	+0.10	0.62	−1.90	1.77	−0.11	32.30	−4.52
St. Louis	2.18	−0.16	0.96	−1.60	4.91	+1.53	3.84	+0.03	8.59	+4.25	0.15	−3.67	4.63	+1.65	0.60	−2.39	2.60	−0.86	2.97	+0.25	1.64	−1.19	1.70	−0.51	34.77	−2.67
St. Louis University	1.92	−0.59	1.34	−0.60	5.30	+1.92	3.35	−0.79	7.76	+3.55	0.36	−3.31	3.31	+0.84	0.73	−3.52	3.16	−1.08	2.76	−0.59	1.60	−1.02	1.62	−0.86	33.21	−6.05
Shelbina	2.69	+1.10	0.80	−1.13	2.39	−0.43	2.20	−1.38	8.25	+3.60	2.99	−2.02	1.55	−2.33	2.55	−0.47	1.89	−2.28	1.47	−1.43	0.51	−1.68	1.65	+0.02	28.85	−9.43
Steffenville	2.17	+0.12	0.67	−1.12	3.23	+0.27	2.30	−1.39	6.77	+2.15	5.05	+0.57	2.35	−1.92	3.42	−0.29	2.24	−2.13	1.30	−1.14	0.42	−1.69	1.84	+0.21	31.76	−6.36
Troy	3.18	.....	1.04	.....	3.07	.....	4.62	.....	6.29	.....	0.64	.....	0.57	.....	1.90	.....	4.30	.....	3.48	.....	0.81	.....	1.38	.....	31.28	.....
Union	2.94	+1.07	1.16	−0.17	6.59	+3.17	3.79	−0.89	10.13	+5.36	0.16	−4.28	3.68	+1.03	1.38	−3.18	3.88	−0.13	3.74	−0.06	1.44	−1.62	1.47	−0.89	40.36	−0.59
Unionville	1.75	−0.01	0.70	−1.07	2.60	+0.18	0.80	−2.92	5.20	+0.72	3.10	−1.99	1.45	−2.61	4.95	+0.88	7.37	+2.44	1.65	−1.18	0.40	−1.56	1.52	−0.10	31.49	−7.22
Valley Park	1.94	+0.22	1.43	+0.12	4.21	+0.83	3.26	−1.39	12.68	+7.93	1.27	−2.47	1.72	−0.34	0.36	−3.28	2.31	−1.10	3.36	−0.24	1.06	−1.63	1.33	−1.12	34.93	−2.47
Warrenton	3.15	+0.85	1.59	−0.46	5.22	+1.88	2.97	−1.19	9.05	+4.41	0.86	−3.86	1.50	−1.76	0.92	−3.48	4.11	+0.09	2.75	−0.25	0.60	−2.09	2.09	−0.05	34.31	−5.91
West Ely	1.17	.....	0.56	.....	2.44	.....	1.52	.....	5.81	.....	0.99	.....	1.54	.....	2.37	.....	1.75	.....	1.34	.....	0.06	.....	0.91	.....	20.46	.....
Winfield	3.57	.....	1.45	.....	4.24	.....	4.01	.....	5.68	.....	0.58	.....	1.00	.....	1.27	.....	3.09	.....	1.33	.....	0.66	.....	1.45	.....	28.33	.....
Keokuk, Iowa	1.87	+0.31	0.65	−0.90	2.31	−0.07	1.59	−1.40	8.43	+4.50	6.88	+2.75	1.61	−1.80	1.83	−1.97	2.25	−1.59	1.07	−1.19	0.33	−1.61	1.74	+0.29	30.56	−2.08
Division means	**2.13**	**+0.22**	**0.88**	**−0.88**	**3.29**	**+0.70**	**2.37**	**−1.51**	**7.41**	**+3.34**	**2.67**	**−2.35**	**1.72**	**−1.67**	**3.10**	**−0.64**	**2.61**	**−1.48**	**2.08**	**−0.66**	**0.58**	**−1.63**	**1.54**	**−0.18**	**30.17**	**−6.89**
Southeast Lowlands																										
Bragg City	1.53	.....	1.62	.....	9.29	.....	4.09	.....	6.22	.....	1.07	.....	3.64	.....	5.19	.....	5.41	.....	1.82	.....	*1.53	.....	*3.90	.....	45.31	.....
Campbell	3.69	.....	2.93	.....	8.31	.....	4.66	.....	9.14	.....	2.15	.....	5.13	.....	4.25	.....	4 98	.....	2.56	.....	1.35	.....	3.28	.....	52.43	.....
Cape Girardeau	3.02	−0.93	3.04	+0.71	5.09	+1.47	6.27	+2.21	10.50	+6.22	0.22	−4.15	4.31	+1.48	1.81	−1.98	5.86	+2.45	2.58	−0.61	0.96	−2.99	2.48	−0.91	46.14	+2.97
Carruthersville	5.47	+0.63	1.88	−1.74	10.39	+5.88	4.41	−0.04	5.56	+1.04	0.25	−3.77	4.84	+1.45	3.98	+0.60	8.39	+5.25	3.98	+0.88	1.30	−2.66	3.78	−0.50	54.23	+7.02
Dexter	3.36	−1.93	3.29	+0.48	4.90	+1.75	5.49	+0.53	8.71	+3.75	0.55	−4.01	3.16	−0.24	3.91	−0.40	12.02	+7.26	2.84	−1.60	0.38	−3.58	2.10	−1.24	50.71	+0.82
Doniphan	3.56	−0.84	3.35	+0.30	4.32	+0.21	6.77	+1.39	5.83	+1.40	0.92	−3.67	2.42	−1.69	4.19	−0.09	6.49	+2.77	2.66	−0.46	1.22	−2.31	3.06	−0.51	44.79	−3.50
Fisk	3.50	.....	3.42	.....	4.68	.....	7.70	.....	7.79	.....	1.52	.....	3.09	.....	2.31	.....	4.20	.....	3.47	.....	0.96	.....	3.53	.....	46.17	.....
Jackson	4.63	+0.85	3.26	+0.42	6.15	+1.85	6.21	+1.67	11.21	+6.77	0.07	−4.65	4.40	+0.92	2.25	−1.36	5.36	+1.58	3.12	−0.12	1.16	−2 27	2.09	−1.13	49.91	+4.53
Marble Hill	7.87	+4.20	3.17	−0.08	6.05	+1.64	7.29	+2.57	11.27	+6.68	0.30	−4.41	3.56	−0.81	1.98	−1.62	6.95	+3.21	3.92	+1.00	1.18	−2.45	2.88	−0.63	56.42	+9.27
Morehouse	4.49	−0.36	3.32	+0.38	6.64	+2.08	5.79	+0.71	7.92	+3.10	0.54	−4.49	7.20	+4.18	3.73	−0.25	11.12	+6.36	3.24	−0.28	1.79	−2.28	3.15	−0.62	58.93	+8.53
New Madrid	4.06	−1.30	3.65	−0.15	7.10	+1.83	5.64	+1.04	8.38	+3.74	1.07	−3.41	5.60	+1.57	3.92	+0.12	7.27	+3.64	3.21	−0.17	1.95	−2.08	4.65	+0.30	56.50	+5.13
Parma	4.03	+0.30	3.65	+0.93	8.36	+2.47	5.43	+0.84	7.49	+2.79	0.95	−2.94	3.38	−0.32	4.46	+0.31	6.65	+1.57	3.35	−0.07	1.80	−2.70	3.49	−1.28	53.04	+1.90
Poplar Bluff	3.05	−1.17	3.19	+0.28	4.76	+0.20	5.79	+1.09	6.70	+1.64	0.63	−4.04	1.70	−1.78	5.27	+0.90	6.86	+3.07	2.26	−0.88	1.68	−1.94	3.21	−0.73	45.10	−3.36
Sikeston	4.23	−0.21	4.05	+0.99	6.78	+2.35	5.21	+0.73	8.25	+3.89	1.20	−3.03	7.26	+2.89	3.80	−0.06	11.23	+7.90	3.13	+0.31	1.32	−2.42	2.86	−0.99	59.32	+12.35
Cairo, Ill	3.78	+0.02	3.77	+0.64	6.39	+2.64	3.68	−0.04	9.02	+5.31	0.91	−2.92	7.49	+4.42	4.41	+1.39	7.81	+4.92	2.75	−0.01	1.23	−2.45	2.60	−0.80	58.84	+13.12
Division means	**4.53**	**+0.39**	**3.17**	**+0.26**	**6.61**	**+2.03**	**5.63**	**+1.06**	**8.27**	**+3.86**	**0.82**	**−3.79**	**4.48**	**+1.00**	**3.70**	**−0.20**	**7.54**	**+4.16**	**2.99**	**−0.17**	**1.30**	**−2.51**	**3.08**	**−0.75**	**51.52**	**+4.80**
Ozark Plateau																										
Arcadia	2.65	−0.39	2.10	−0.84	2.90	−0.90	6.55	+1.87	11.53	+6.83	T.	−4.69	3.97	−0.17	1.68	−2.05	7.57	+3.83	5.21	+2.09	1.27	−2.35	2.17	−0.80	47.60	+2.43
Birchtree (near)	3.77	+0.58	2.22	−0.26	3.30	−0.85	7.19	+2.39	9.80	+5.43	0.75	−3.83	1.77	−2.09	3.15	−1.43	5.53	+1.90	3.94	+0.95	1.28	−1.85	2.86	+0.11	45.56	+1.05
Buffalo	.....	.....	.....	.....	.....	.....	.....	.....	8.91	.....	1.04	.....	1.99	.....	5.38	.....	2.77	.....	6.21	.....	0.89	.....	0.86	.....	.....	.....
Caplinger Mills	2.54	.....	0.47	.....	1.56	.....	3.00	.....	6.30	.....	T	.....	2.58	.....	3.01	.....	3.93	.....	3.15	.....	0.68	.....	1.15	.....	28.37	.....
Chaonia	3.93	.....	3.40	.....	3.71	.....	7.35	.....	6.40	.....	0.41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dean	0.96	−1.38	1.70	−0.08	2.30	−1.22	5.71	+1.11	10.45	+4.62	0.32	−5.72	3.21	−0 98	5.78	+1.62	4.47	+0.54	5.30	+1.49	1.30	−2.04	2.20	−0.07	43.70	−2.11
Eldon	3.86	+2.23	1.04	−0.76	2.56	−0.53	2.45	−2.11	6.89	+2.22	0.35	−4.27	1.98	−1.56	3 88	+0.06	9.42	+5.33	4.50	+1.24	1.13	−1.36	1.86	−0.22	39.92	+0.27
Farmington	2.15	−0.37	1.28	−1.68	2.54	−0.87	6.68	+2.44	*9.07	+3.62	T	−4.65	5.20	+1.76	2.02	−1.65	8.68	+5.31	2.70	−0.24	1.71	−2.04	1.72	−1.04	43.75	+0.69
Fredericktown	3.53	+0.09	1.87	−0.73	3.52	−0.26	6.92	+1.93	8.56	+4.92	0.06	−5.13	5.50	+1.68	4.43	+0.37	6.98	+2 65	3.45	−0.98	1.32	−1.86	2.94	+0.18	49.06	+2.86
Galena	2.96	+0.67	1.73	−0.14	3.03	−0.16	3.24	−0.87	6.92	+1.76	0.55	−4.17	4.41	+0.44	4.25	+0.14	3.02	−1.30	4.13	+1.04	1.30	−1.97	2.13	−0.60	37.67	−4.96
Goodland	2.76	+0.08	1.15	−1.17	3.12	−1.01	6.68	+1.68	7.13	+2.29	0.18	−4.08	4.69	+0.81	3.27	−0.71	3.87	+0.05	3.11	−0.28	1.41	−1.51	1.62	−0.93	38.99	−4.78
Greenville	3.65	+0.59	2.24	−0.76	3.74	−0.76	7.85	+2.86	8.47	+4.28	0.50	−4.28	2.21	−1.56	4 01	+0.66	5.85	+2.71	3.45	+0.58	1.57	−2.11	2.12	−0.91	45.66	+1.30
Hailey	2.80	+0.07	2.14	+0.30	3.36	+0.19	6.16	+1.14	7.72	+1.79	0.20	−5.82	5.10	+1.10	6.37	+1.00	4.60	+0.48	6.59	+2.99	1.47	−1.02	1.92	−0.61	47.83	+1.61
Koshkonong	3.36	−0.30	2.69	−0.06	4.72	+0.79	6.64	+1.37	9.31	+4.74	1.31	−3.40	4.44	+0.77	9.62	+5.28	5.20	+1.52	2.14	−1.05	1.36	−1.94	3.19	−0.22	55.98	+7.60
Lakeside	3.64	.....	1.43	.....	2.54	.....	2.61	.....	10.56	.....	0.02	.....	0.81	.....	3.62	.....	4.61	.....	4.94	.....	1.67	.....	1.86	.....	37.71	.....
Lebanon	2.55	+0.02	1.00	−1.29	5.76	+2.22	4.99	+0.63	11.51	+6.06	1.46	−3.79	3.27	−0.70	4.62	+0.74	8.17	+3.92	5.38	+2.05	1.33	−1.29	1.64	−0.84	51.68	+7.73
Leeper	4.10	−0.21	2.61	+0.25	3.02	−0.28	7.39	+1.76	9.83	+4.85	0.79	−5.50	2.55	−1.18	2.94	−0.99	7.81	+4.82	4.84	+0.97	1.18	−2.35	2.37	−0.62	49.43	+1.32
Lockwood	2.62	+0.88	1.11	−0.66	2.67	−0.16	5.66	+1.35	8.18	+3.22	0.27	−5.07	2.53	−2.18	6.38	+2.02	5.99	+1.43	3.92	+0.40	1.17	−1.28	1.51	−0.55	42.01	−0.60
Mountain Grove	2.98	+0.16	1.72	−0.50	3.21	−0.91	4.91	−0.05	9.53	+4.70	0.77	−4.01	3.11	−0.72	4.09	−0.23	4.06	−0.18	2.47	−0.78	1.42	−1.31	2.23	−0.25	40.50	−4.11
Neosho	3.30	+0.80	0.68	−1.56	2.36	−1.12	5.78	+1.29	11.38	+5.52	0.47	−5.34	2.99	−1.32	5.21	+1.07	6.69	+2.80	4.18	+0.70	1.06	−2.10	2.58	+0.09	46 63	+0.33
Owensville	1.99	+0.12	0.74	−0.81	4.77	+1.19	3.13	−0.61	7.71	+2.24	0.00	−5.29	1.55	−1.23	1.37	−1.99	3.25	−0.64	3.83	+0.25	1.83	−1.02	1.20	−1.04	31.37	−8.84
Ozark Beach	4.30	+1.46	1.86	+0.25	2.69	+0.77	5.54	−0.04	7.88	+2.80	0.05	−5.79	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rolla	2.00	−0.44	0.71	−1.44	2.75	−0.97	3.60	−1.02	8.12	+3.13	0.13	−4.13	2.26	−1.62	2.83	−1.25	3.99	+0.08	3.74	+0.69	1.35	−1.17	1.30	−0.86	32.78	−9.00
St. Thomas(near)	3.82	.....	1.56	.....	3.40	.....	2.54	.....	10.97	.....	0.00	.....	2.27	.....	2.82	.....	7.02	.....	5.33	.....	1.14	.....	1.05	.....	41.92	.....
Salem	1.80	−0.99	1.79	−0.48	2.53	−1.09	4.90	+0.27	9.21	+4.51	0.48	−4.22	1.75	−1.61	2.19	−2.29	3.62	−0.46	3.34	−0.39	1.28	−1.31	1.90	−0.48	34.79	−8.57
Seligman	4.04	+1.16	2.70	+0.81	2.85	−0.67	7.58	+3.24	8.54	+2.90	1.13	−3.22	2.63	−1.68	5.76	+1.72	6.40	+2.03	4.74	+1.32	2.09	−0.78	1.66	−0.84	50 12	+6.06
Seymour(near)	3.46	+0.91	1.54	−0.63	4.12	+0.25	4.62	+0.33	9.63	+4.38	0.95	−4.45	4.67	+0.43	5.59	+1.63	5.89	+1.42	4.07	+0.77	1.13	−1.54	1.54	−0.77	47.21	+2.73
Springfield	2.68	+0.34	1.09	−1.26	2.40	−0.99	6.61	+2.75	6.79	+1.60	3.43	−1.25	4.17	−0.04	4.86	+0.77	7.02	+3.50	3.17	+0.12	1.01	−1.78	0.84	−1.47	44.07	+2.29

Continued on next page

Monthly and Annual Precipitation for the Year 1933, with Departures from Normal—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Ozark Plateau—concluded																										
Steelville	2.75	+0.69	0.98	−1.19	2.21	−0.53	5.46	+0.98	9.37	+4.87	0.16	−4.00	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....
Stover	3.26	+1.48	0.82	−0.67	2.25	−0.49	2.17	−2.17	10.94	+5.35	0.46	−4.99	0.94	−2.16	3.41	−0.26	5.79	+1.90	3.53	−0.78	0.67	−2.10	1.89	−0.01	36.13	−4.90
Versailles	2.96	.....	0.97	.....	2.60	.....	3.16	.....	9.61	.....	0.60	.....	1.13	.....	2.63	.....	8.09	.....	4.45	.....	0.95	.....	1.43	.....	38.58	.....
Williamsville	3.95	−0.25	2.59	+0.04	3.39	−0.14	7.85	+2.56	6.80	+2.44	0.99	−5.61	4.09	+0.73	6.78	+1.33	7.59	+3.84	3.16	−0.46	1.55	−2.10	2.73	−1.09	51.47	+1.29
Willow Springs(near)	3.46	+0.03	2.09	−0.55	3.77	−1.21	6.43	+1.63	8.49	+3.51	1.06	−3.70	2.43	−1.79	3.69	−0.29	4.68	+0.44	3.37	+0.30	1.17	−2.34	2.56	−0.27	43.20	−4.24
Division means	**2.84**	**+0.22**	**1.63**	**−0.59**	**3.11**	**−0.36**	**5.31**	**+0.93**	**8.86**	**+3.88**	**0.57**	**−4.46**	**3.01**	**−0.59**	**4.19**	**+0.21**	**5.75**	**+1.90**	**4.03**	**+0.52**	**1.27**	**−1.70**	**1.88**	**−0.56**	**42.82**	**−0.51**
Southwest Plain																										
Appleton City	2.56	+0.72	1.16	−0.62	2.71	−0.47	3.15	−1.26	6.18	+1.00	0.46	−4.79	2.32	−2.19	2.88	−0.80	3.41	−0.71	3.51	+0.94	0.59	−1.65	1.19	−0.47	30.12	−10.30
Clinton	3.12	+1.13	1.59	−0.38	3.08	−0.03	2.68	−1.63	6.08	+0.75	1.16	−3.86	1.96	−1.87	1.56	−1.81	6.39	+2.33	3.31	+0.26	1.11	−0.96	1.71	−0.16	33.75	−6.23
Concordia	1.39	+0.17	1.82	+0.12	2.92	+0 22	2.72	−0.93	5.77	+1.80	1.05	−4.96	0.75	−3.15	2.25	−0 44	2.87	−0.82	2.56	−0.01	0.18	−2.11	1.60	−0.26	25.88	−10.37
Harrisonville	1.11	−0.44	1.24	−0.62	2.55	−0.13	2.06	−1.48	7.68	+3.15	0.39	−4.24	1.69	−2.07	3.45	−0.60	2.30	−2.28	2.84	+0.01	0.41	−1.66	1.83	+0.14	27.55	−10.22
Joplin	3.57	+1.47	0.98	−1.17	1.71	−1.16	6.53	+2.02	7.85	+2.68	1.41	−4.23	3.81	−0.54	4.72	+0.50	5.09	+1.46	3.32	−0.17	1.13	−1.44	1.85	−0.09	41.97	−0.67
Lamar	2.97	+1.21	0.74	−1.35	1.69	−1.31	4.55	+0.07	7.34	+1.97	0.25	−5.00	3.57	−0.61	4.65	+0.42	5.48	+0.96	3.81	+0.65	1.38	−1.00	1.60	−0.38	37.98	−4.37
Lamonte	1.69	−0.29	1.66	−0.23	3.45	+0.55	2 40	−1.51	5.64	+0.69	1.50	−3.33	1.56	−2.39	1.79	−1.94	5.81	+1.19	2.60	−0.08	0.35	−1.81	1.19	−0.56	29.64	−9.71
Marshall	0.94	−0.77	1.73	−0.01	3.36	+0.57	1.82	−2.02	7.39	+2.54	1.06	−3.57	0.64	−3.20	2.04	−1.60	1.34	−3.80	1.70	−1.16	0.35	−1.91	1.94	+0.26	24.31	−14.67
Nevada	2.18	+0.15	0.35	−1.42	1.87	−1.08	2.73	−1.47	7.58	+2.27	0.26	−5.26	3.12	−0.82	2.95	−0.69	4.58	+0.28	1.37	−1.62	1.24	−0.79	1.50	−0.33	29.73	−10.78
Osceola	2.05	−0.08	0.83	−0.89	2.14	−1.05	3.22	−1.16	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....
Warrensburg	1.46	−0.31	1.03	−1.00	2.73	+0.06	2.87	−0.48	5.91	+1.37	1.16	−3.87	1.46	−2.39	2.09	−1.40	6.21	+2.42	3.24	+0.52	0.29	−1.71	1.34	−0.42	29.79	−7.21
Warsaw	3.59	+1.31	0.90	−1.43	2.52	−1.06	2.54	−2.01	7.72	+2.60	0.35	−5.03	3.24	−0.85	2.94	−1.35	5.47	+0.75	4.68	+1.21	0.61	−1.98	1.94	−0.34	36.50	−8.21
Waverly	1.37	−0.16	1.26	−0.11	2.77	−0.12	2.52	−1.56	6.73	+2.05	1.21	−4.31	0.23	−3.39	2.93	−0.84	2.67	−2.64	2.24	−0.95	0.27	−2.10	2.32	+0.86	26.52	−13.27
Division means	**2.18**	**+0.30**	**1.18**	**−0.70**	**2.58**	**−0.39**	**3.06**	**−1.03**	**6.82**	**+1.91**	**0.86**	**−4.37**	**2.03**	**−1.96**	**2.85**	**−0.88**	**4.30**	**−0.07**	**2.93**	**−0.03**	**0.66**	**−1.59**	**1.67**	**−0.15**	**31.14**	**−8.83**
Northwest Plateau																										
Bethany	1.30	+0.04	0.25	−1.20	2.05	−0.25	1.28	−1.99	5.44	+1.01	1.66	−3.16	2.53	−1.70	8.80	+4.85	5.32	+1.16	1.80	−0.65	0.37	−1.46	1.02	−0.23	31.82	−3.58
Chillicothe	1.93	+0.40	1.51	−0.35	2.79	+0.31	2.48	−1.81	8.12	+4.14	3.11	−2.73	1.43	−2.73	9.55	+5.09	2.07	−3.61	1.47	−2.26	0.50	−1.84	1.41	−0.05	37.92	−5.44
Conception	0.53	−0.38	0.37	−0.82	3.78	+2.06	1.42	−1.43	3.64	−0.73	1.46	−3.48	2.18	−2.15	7.67	+3.97	5.22	+1.10	0.59	−2.11	0.41	−1.05	1.61	+0.67	28.88	−4.35
Edgerton	0.76	−0.30	0.29	−1.07	2.97	+0.80	1.66	−1.79	4.70	+0.41	2.88	−1.62	2.22	−1.66	5.31	+2.09	2.70	−1.10	0.73	−1.92	0.56	−0.97	1.65	+0.44	26.43	−6.69
Gallatin	0.73	−0.43	0.73	−0.83	2.32	+0.11	0.92	−2.87	5.25	+0.50	4.24	+1.61	1.50	−2.58	10.62	+6.75	3.58	−0.85	1.27	−1.75	0.52	−1.39	1.98	+0.53	33.66	−1.20
Grant City	0.51	−0.41	0.26	−0.87	2.75	+0.70	0.71	−2.31	2.23	−2.03	1.34	−3.57	3.32	−1.51	9.81	+6.10	4.28	+0.02	0.95	−1.87	0.46	−1.16	0.79	−0.28	27.44	−7.19
Kansas City	1.20	+0.01	0.93	−0.82	4.25	+1.72	1.82	−1.32	6.94	+2.29	1.46	−3.53	1.13	−3.00	4.00	−0.09	2.69	−1.87	0.58	−2.34	0.31	−1.52	1.80	+0.47	27.11	−10.00
Kidder	0.69	−0.90	0.53	−0.98	1.99	−0.20	1.48	−1.70	5.57	+0.90	2.42	−2.58	3.21	−0.71	4.77	+0.90	2.81	−1.76	1.13	−1.78	0.55	−1.36	1.51	+0.25	26.66	−9.92
King City	0.70	−0.62	0.33	−1.00	3.31	+1.40	1.83	−1.44	4.83	+0.38	2.76	−2.66	1.61	−2.24	8.15	+4.44	5.34	+0.72	0.64	−2.20	0.87	−0.87	1.02	−0.05	31.39	−4.14
Lexington	1.01	−0.61	1.00	−0.98	3.11	+0.57	3.22	−0.50	5.64	+0.61	3.08	−2.04	0.84	−3.84	2.21	−1.24	3.71	−1.03	1.60	−1.38	0.53	−1.54	2.06	+0.28	28.01	−11.70
Maryville	0.66	−0.36	0.40	−0.99	3.44	+1.60	0.95	−2.10	2.95	−2.04	2.42	−2.67	2.33	−2.80	8.34	+4.38	5.21	+0.71	1.11	−1.70	0.32	−1.31	1.64	+0.64	29.77	−6.64
Oregon	0.50	−0.84	0.21	−1.39	3.09	+1.01	3.81	+0.49	4.38	−0.30	4.79	−0.22	3.36	−0.90	7.84	+3.83	8.50	+4.59	0.83	−1.82	0.52	−1.21	1.66	+0.29	39.49	+3.58
St. Joseph	0.37	−0.55	0.31	−1.11	2.81	+0.53	3.42	+0.23	3.49	−0.59	6.05	+1.02	2.59	−0.54	5.09	+1.59	3.44	−1.56	0.79	−2.03	0.52	−1.50	1.41	+0.27	30.29	−4.24
Tarkio	0.32	−0.42	0.30	−0.79	3.12	+1.40	1.00	−2.15	3.63	−0.66	3.87	−1.23	2.42	−1.32	6.06	+2.01	4.55	+0.71	2.64	+0.04	0.52	−0.96	1.10	+0.22	29.53	−3.15
Trenton	0.99	−0.36	0.53	−1.00	2.23	−0.19	0.95	−2.52	6.28	+1.47	1.79	−3.21	1.69	−2.37	5.49	+1.80	2.85	−1.68	1.54	−1.38	0.34	−1.54	1.44	+0.05	26.12	−10.93
Division means	**0.82**	**−0.38**	**0.53**	**−0.95**	**2.93**	**+0.77**	**1.80**	**−1.55**	**4.87**	**+0.36**	**2.89**	**−2.00**	**2.16**	**−2.00**	**6.92**	**+3.10**	**4.15**	**−0.30**	**1.18**	**−1.68**	**0.49**	**−1.31**	**1.47**	**+0.28**	**30.30**	**−5.71**
State means	**2.43**	**+0.19**	**1.35**	**−0.68**	**3.53**	**+0.38**	**3.53**	**−0.39**	**7.53**	**+2.73**	**1.72**	**−3.07**	**2.49**	**−1.35**	**3.91**	**−0.03**	**4.38**	**+0.32**	**2.68**	**−0.18**	**0.84**	**−1.66**	**1.82**	**−0.25**	**36.21**	**−3.99**

* Estimated ¶ Partially estimated

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curred on the 18th in Dent and Stoddard counties and on the 21st near the border of Benton and Hickory counties and in Polk County. A remarkable deposit of dust occurred at St. Joseph and Maryville on the 21st-22d.

FEBRUARY.—Zero weather prevailed on the 4th to 11th, the lowest temperatures since January 1930 being registered, with as low as 10° below zero at many stations and an extreme of 22° below at Macon in the north-central section. But there was much mild weather, giving nearly normal average temperature for the month. Precipitation was very light in the northwestern counties, more than normal in the southeastern counties, and generally somewhat deficient elsewhere. Wheat suffered no extensive winter-killing, but peaches were mostly killed by the sub-zero cold of the 4-11th.

MARCH.—The temperature averaged slightly above normal, but cold days came on the 9th, 10th, 20th, and 21st. There was no extended mild spell, and vegetation did not advance unseasonably. Precipitation was more than normal in most parts and ground moisture conditions were good. Damaging storms occurred on the 14th and 30th. Wheat, alfalfa, and pastures were in fair to good condition. Frequent rains the last two weeks delayed seeding of oats and preparations for corn planting.

APRIL.—Nearly normal temperature conditions prevailed. Precipitation averaged nearly normal, but was unevenly distributed, being rather heavy in the Southeast Lowlands and the Ozark Plateau, but decidedly deficient in northern and west-central sections. High waters occurred in some streams of the Southeast. Heavy, wet snow fell to a depth of several inches on the 13-14th, principally in Platte, Caldwell, Linn, Adair, Greene, and Barry counties. Wet ground the first two weeks seriously delayed farm work, and showers interfered again about the 20th to 25th. Corn planting was decidedly behind-hand in the eastern half of the State. No very damaging frost or freeze occurred. Wheat made fairly good progress.

MAY.—Temperatures were seasonable. The principal feature of the weather of the month was the frequency of rain and the prevailing wetness, except in the upper northwestern counties. At many stations it was one of the wettest Mays of record. Strong floods occurred in the Black, St. Francis, and Meramec Rivers, and light in the Mississippi at Hannibal, Grafton, Alton, and Chester. Thunderstorms were very frequent, with some damaging winds. The abundant rains were favorable in replenishing subsoil moisture, but caused serious delay in farm work. Wheat did well generally and was in good condition and heading; oats very good; alfalfa generally fine; some early planted corn was well advanced; but at the end of May much corn acreage remained to be planted.

JUNE.—Heat and drought were the outstanding features. At St. Louis it was the warmest June in the last 97 years. In many localities no rainfall of importance occurred, but in a few there were heavy falls, even severe local floods in some northeastern counties. The ample soil moisture at the begin-ning of the month was exhausted in most sections by the third week. Wheat was greatly damaged, as it was just reaching maturity in most fields at the beginning of the heat and drought. Oats suffered likewise. Corn held up fairly well until the last week of June. Cotton was in good condition.

JULY.—Although the average temperature for the State was the lowest July average since 1929, this was an unusually warm month. There were no record-breaking high temperatures, but the heat was persistent. The rainfall averaged much less than normal, but the distribution was very irregular, with some localities receiving more than normal amounts and others less than one-fourth the normal. St. Louis had a record-breaking downpour of 3.68 inches in two hours on the 23d, but the surrounding country had only light showers on this occasion. Wheat and oats were mostly threshed. Wheat yields were generally good in northwestern, north-central, and some western counties, and fair to poor in most other parts. Oats averaged a poor crop. Corn suffered greatly from heat and drought over most of the State. Cotton was good to very good.

AUGUST.—Temperatures were nearly normal. Rainfall was very unevenly distributed, being light over most of the southern half, except ample in the Springfield area, light in the northeastern quarter, and heavy in the Northwest Plateau. The driest area (very severe drought) was in the western suburbs of St. Louis, including most of St. Charles County, St. Louis County, and parts of Warren and Franklin counties. Some very heavy rains fell in northwestern counties, notably, the Gallatin district, where a flood occurred in the Grand River. Crop conditions were quite variable. Corn was good to excellent in large parts of the northern third of the State and in some parts of the southern third, especially the southwest, but over much of the central third it was poor to fair.

SEPTEMBER.—One of the strongest and most persistent periods of late-summer heat ever recorded in Missouri characterized the month. Very high temperatures occurred as late as the 30th. As in the preceding three months, rainfall this month was very unevenly distributed. Severe drought persisted in some east-central counties, especially the St. Louis area, until late in the month, while in several localities, principally in southern and southwestern sections, rainfall was excessive. Over most of the State conditions were favorable for late crops, but large areas in central and eastern sections suffered severely from drought.

OCTOBER.—A rather cool month, with notably cool days about the 7-9th and 25-27th, but very warm the last three days. The first general killing frosts occurred in the northern portions between the 22d and 25th, but over most of the southern half there was no killing frost, although light to heavy frost occurred on several dates. The precipitation was quite deficient in most parts of the northern third, while in the Ozark region it was generally more than normal, and in the remainder of the State, near normal. The month was favorable for outdoor work.

NOVEMBER.—Temperatures were unusually variable, but averaged considerably above normal. It was the driest November since 1914. For the State as a whole, the precipitation was only 34 per cent of normal. A severe duststorm on the 12th affected most of the northern half of the State. Wheat and other grains made fair growth generally. River stages were very low, especially in the upper and middle Mississippi. At St. Louis the lowest stage of record for November was recorded.

DECEMBER.—The month averaged unusually mild, although not without some cold days, and one severe cold wave (25-27th), when temperatures registered as low as 7° below zero in the northern third of the State and as low as 1° above zero in the Ozark Plateau. Much needed precipitation occurred the first three days and again on the 17-20th, but the monthly total precipitation was slightly deficient in most parts. Wheat and other winter crops made fair progress. River stages were very low, especially in the middle Mississippi, with the lowest stage ever recorded at St. Louis occurring on the 30th, when it reached 4.6 feet below zero.

KILLING FROSTS, 1933

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
Northeast Plain			*Ozark Plateau (continued)*		
Brunswick	April 11	Oct. 25	Greenville	April 12*	Oct. 26*
Clifton Hill	April 11*	Oct. 25	Koshkonong	Mar. 22*	Nov. 8
Columbia	April 7	Oct. 25	Lebanon	April 11	Oct. 25
Downing	April 27*	Oct. 25	Lockwood	Mar. 26*	Nov. 8
Elsberry	April 27*	Oct. 13*	Mountain Grove	April 7*	Oct. 25*
Fayette	April 27*	Oct. 18*	Neosho	April 14*	Nov. 8
Fulton	April 7*	Nov. 8	Rolla	April 7*	Nov. 8
Hannibal	Mar. 26	Oct. 25	Salem	April 7*	Oct. 25
Jefferson City	April 7*	Oct. 25	Seligman	April 15*	Nov. 8*
Kirksville	April 27	Oct. 25	Seymour(near)	April 7	Oct. 25*
Louisiana	April 27	Oct. 12*	Springfield	Mar. 21	Nov. 8
Macon	April 14*	Oct. 25*	Versailles	April 11	Oct. 25
Mexico	April 27*	Oct. 18*			
St. Charles	Mar. 26*	Nov. 8	*Southwest Plain*		
St. Louis	Mar. 22	Nov. 8	Appleton City	April 14*	Nov. 8
St. Louis Univ.	Mar. 22	Nov. 8	Clinton	April 14*	Oct. 25*
Steffenville	April 27*	Oct. 13*	Harrisonville	April 14*	Oct. 25*
Unionville	April 27*	Oct. 22	Lamar	Mar. 26*	Nov. 8
Warrenton	April 7*	Oct. 25	Lamonte	April 11*	Oct. 25*
Keokuk, Iowa	Mar. 28	Oct. 18	Marshall	April 11*	Oct. 25*
			Nevada	April 11*	Oct. 25*
Southeast Lowland			Warrensburg	April 15*	Oct. 25*
Campbell	April 7*	Oct. 26*	Warsaw	April 15*	Nov. 8
Caruthersville	Mar. 20*	Nov. 7*			
Doniphan	April 12*	Nov. 8*	*Northwest Plateau*		
Jackson	April 14*	Nov. 8	Bethany	April 27	Oct. 22
Marble Hill	April 12*	Nov. 8	Chillicothe	April 27*	Oct. 18*
Poplar Bluff	April 7*	Nov. 8	Conception	April 15*	Oct. 23*
Sikeston	Mar. 22*	Nov. 8*	Edgerton	April 15*	Oct. 18
Cairo, Ill.	Mar. 22	Nov. 8	Grant City	Mar. 26	Oct. 18
			Kansas City	April 13	Oct. 25
Ozark Plateau			Kidder	April 15*	Oct. 25
Arcadia	April 12*	Nov. 8*	Lexington	April 7	Nov. 3
Birchtree(near)	April 7*	Nov. 8*	Maryville	April 7	Oct. 22
Dean	April 15*	Nov. 8	Oregon	April 15*	Oct. 25
Eldon	April 12*	Oct. 25*	St. Joseph	April 11	Oct. 25
Farmington	April 7*	Nov. 8	Tarkio	April 16	Oct. 8
Goodland	April 27*	Oct. 17*	Trenton	April 27*	Oct. 18*

* Occurrence of killing frost not recorded, dates given are last in spring and first in fall of temperature 32° or lower.

WBO, St. Louis, 2-10-34—1125.

NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

19 MISSOURI SECTION
ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII JANUARY 1934 No. 1

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GENERAL SUMMARY

This was the fourth successive January with temperature averaging decidedly above normal, but it was decidedly colder than January 1933, which was the mildest of record in Missouri (years 1888-1934, inclusive). However, it was only the severe cold wave of the last three or four days that kept January 1934 from being the second warmest January of record, as there was a very persistent mildness, with only two brief interruptions, during the first twenty-seven days. From the 10th to the 24th there was no hard freezing, and on several nights the temperature remained well above freezing point. The cold wave of the 28-30th was one of the most rapidly-moving cold waves ever experienced in the United States; but the cold was only moderately severe in Missouri, the lowest temperature recorded being 6° below zero. The cold wave covered all parts of the State, giving zero to 6° below in the northern and western portions and 1° to 9° above zero in the Southeast Lowlands.

Precipitation was unusually light in all parts of the State, but it was fairly well distributed through the month, with principal periods of occurrence around the 4-5th, 7-8th, 12-13th, and 21st-25th. This was the fourth successive month with deficient precipitation. Total precipitation for the four months, October to January, inclusive, averaged 6.58 inches for the State, which is only 68 per cent of the normal.

There was no very severe storm, but strong winds occurred on several dates, with minor damage to property on the 28th. The occurrence of hail on the 21st and 22d was an unusual feature of the month's weather.

Subsoil moisture was quite deficient at the end of January pretty generally over the State. Surface moisture, due to several light rains during the month, kept wheat and other winter crops looking fairly well for the most part, but they could not make satisfactory growth. Water for livestock was scarce in many localities, and in some places it was necessary to haul water. The open weather was favorable for farm work, plowing, etc., and for livestock.

Rivers and small streams remained low throughout the month, especially the Mississippi River bordering the State of Missouri. At St. Louis the lowest January stage of record (years 1861 to 1934, inclusive) was registered, viz., 3.3 feet below zero on the 1st, and the average stage for the month, 1.9 feet below zero, is the lowest monthly average on record.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 36.1°, or 5.2° above normal. The highest monthly mean was 43.1° at Caruthersville, and the lowest monthly mean was 29.6° at Tarkio. The highest temperature recorded was 71° at Fayette and Warsaw on the 24th, and at Poplar Bluff on the 27th, and the lowest was 6° below zero at Harrisonville on the 30th. The greatest daily range was 55° at Marshall on the 28th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 1.24 inches, or 0.98 inch less than normal. The greatest local monthly amount was 2.73 inches at Dexter, and the least local monthly amount was 0.37 inch at Conception. The greatest amount in any twenty-four hours was 1.84 inches at Dexter on the 4th. The average number of days with 0.01 inch or more of precipitation was 5. The snowfall averaged 1.5 inches, or 2.9 inches less than normal. The greatest monthly snowfall was 6.2 inches at Maryville.

MISCELLANEOUS PHENOMENA

Fogs.—Dense, 4th, 6th, 14th, 16th, 19th, 20th, 21st, 22d, 26th.

Hail.—Light, at Farmington on 21st and at St. Louis and Warrenton on 22d; moderate, at Eldon on 22d.

(Continued on page 4)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.15	30.60	29	29.73	4	9.0	30	nw.	28	82	64	62	60
Kansas City...	30.14	30.65	29	29.67	24	9.9	37	n.	28	81	63	66	48
St. Joseph	30.14	30.62	29	29.66	24	8.9	30	nw.	28	82	63	66	58
St. Louis....	30.15	30.54	29	29.70	28	12.3	34	sw.	24	73	62	63	41
Springfield	30.14	30.56	29	29.79	4	9.9	26	nw.	28	82	72	70	46
Cairo, Ill.....	30.18	30.54	30	29.77	28	9.4	29	nw.	28	82	67	66	44
Keokuk, Iowa.	30.15	30.60	29	29.70	28	8.9	30	nw.	28	78	63	67	52

COMPARATIVE DATA FOR JANUARY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	21.5	− 9.4	74	−32	1.91	−0.31	3.34	0.60	....	6	..	..	..
1889....	31.8	+ 0.9	69	− 2	2.36	+0.14	4.05	1.00	....	6	..	..	..
1890....	33.8	+ 2.9	81	−19	4.25	+2.03	10.50	0.85	....	9	..	..	..
1891....	34.1	+ 3.2	74	− 1	1.52	−0.70	3.27	0.10	4.3	6	..	..	..
1892....	24.0	− 6.9	67	−31	1.80	−0.42	3.79	0.55	....	4	14	8	9
1893....	22.5	− 8.4	66	−14	0.45	−1.77	1.75	0.00	2.4	3	9	11	11
1894....	31.4	+ 0.5	77	−35	2.21	−0.01	5.36	0.20	2.7	5	13	9	9
1895....	24.7	− 6.2	78	−22	1.49	−0.73	5.82	0.17	9.4	5	14	8	9
1896....	32.9	+ 2.0	71	− 9	1.17	−1.05	3.97	0.27	3.1	4	10	7	14
1897....	28.4	− 2.5	72	−16	4.90	+2.68	10.37	1.05	4.0	8	12	7	12
1898....	34.3	+ 3.4	75	−10	3.98	+1.76	7.31	1.98	8.4	9	11	8	12
1899....	30.2	− 0.7	70	−21	1.55	−0.67	12.61	0.01	4.0	6	12	8	11
1900....	34.5	+ 3.6	77	− 9	1.22	−1.00	5.21	T.	0.2	4	14	7	10
1901....	35.0	+ 4.1	72	−11	1.30	−0.92	3.57	0.22	0.8	4	17	7	7
1902....	30.1	− 0.8	72	−17	1.23	−0.99	6.31	0.28	6.9	5	16	7	8
1903....	31.4	+ 0.5	73	−11	1.36	−0.86	3.45	0.06	5.0	5	13	6	12
1904....	27.0	− 3.9	66	−23	2.85	+0.63	5.29	0.77	7.4	8	14	6	11
1905....	22.3	− 8.6	72	−19	1.79	−0.43	4.28	0.10	6.8	8	14	6	11
1906....	35.6	+ 4.7	77	− 8	3.64	+1.42	7.88	0.60	9.2	6	14	5	12
1907....	34.3	+ 3.4	79	− 5	5.16	+2.88	9.45	1.23	2.8	12	7	6	18
1908....	34.4	+ 3.5	68	−10	1.51	−0.71	4.30	0.00	3.6	5	19	5	7
1909....	33.7	+ 2.8	83	−20	2.17	−0.05	5.24	0.42	6.5	7	6	7	18
1910....	32.3	+ 1.4	78	−24	1.83	−0.39	3.98	0.37	3.5	5	13	5	12
1911....	34.6	+ 3.7	78	−19	1.20	−1.02	3.70	0.00	0.7	5	8	7	16
1912....	20.0	−10.9	70	−36	1.06	−1.16	3.97	T.	6.5	4	14	7	10
1913....	33.1	+ 2.2	74	−12	3.67	+1.45	15.65	0.36	2.6	8	13	6	12
1914....	38.1	+ 7.2	78	− 1	1.42	−0.80	3.47	0.05	1.0	4	12	7	12
1915....	29.1	− 1.8	76	−24	2.92	+0.70	5.81	1.48	5.4	8	12	5	14
1916....	31.6	+ 0.7	72	−24	7.36	+5.14	14.12	1.37	3.4	12	9	4	18
1917....	32.9	+ 2.0	76	−10	1.52	−0.70	5.54	0.20	2.3	5	15	7	9
1918....	16.4	−14.5	67	−24	1.68	−0.54	7.18	0.22	16.6	7	12	7	12
1919....	34.0	+ 3.1	70	−23	0.40	−1.82	4.47	0.00	1.4	2	20	5	6
1920....	28.6	− 2.3	72	− 5	1.57	−0.65	7.46	0.10	5.7	5	15	5	11
1921....	37.1	+ 6.2	74	− 1	1.88	−0.34	4.06	0.51	5.4	6	10	7	14
1922....	29.5	− 1.4	66	− 6	1.21	−1.01	6.15	0.32	3.9	5	14	5	12
1923....	39.2	+ 8.3	75	3	2.72	+0.50	8.56	0.10	0.6	6	12	7	12
1924....	24.9	− 6.0	68	−25	1.54	−0.68	4.44	0.23	5.7	7	14	5	12
1925....	29.7	− 1.2	65	−15	1.00	−1.22	3.31	0.03	4.7	4	15	7	9
1926....	32.7	+ 1.8	70	−20	1.90	−0.32	5.55	0.41	4.2	6	11	7	13
1927....	30.8	− 0.1	73	−24	3.05	+0.83	9.99	0.22	3.6	6	13	6	12
1928....	33.3	+ 2.4	77	−18	0.87	−1.55	2.75	T.	0.5	3	16	7	8
1929....	25.1	− 5.8	72	−13	3.47	+1.25	8.64	0.70	6.8	8	11	6	14
1930....	20.8	−10.1	73	−31	4.51	+2.29	13.58	0.71	13.0	10	12	5	14
1931....	36.0	+ 5.1	76	− 5	0.69	−1.53	2.12	0.07	2.0	4	16	6	9
1932....	36.4	+ 5.5	73	− 7	3.32	+1.10	9.92	0.29	1.0	9	10	7	14
1933....	41.4	+10.5	72	8	2.43	+0.21	7.87	0.32	0.5	6	14	8	9
1934....	36.1	+ 5.2	71	− 6	1.24	−0.98	2.73	0.37	1.5	5	13	6	12
Period.	30.9	.....	83	−36	2.22	.....	15.65	0.00	4.4	6	13	7	11

Climatological Data for January 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	35.9	+ 9.2	69	20	1	30	49	1.04	−0.54	0.75	0.2	6	19	2	10	sw.	O. K. Benecke
Clifton Hill	Randolph	781	35	35.2	+ 7.1	69	24	− 2	30	46	1.41	−0.17	0.60	1.0	6	11	6	14	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	35.6	+ 6.4	70	24	3	30	41	0.93	−0.99	0.54	0.4	6	12	7	12	sw.	U. S. Weather Bureau
Downing	Schuyler	876	13	33.2	+ 7.8	63	27	− 4	30	52	0.75	−0.68	0.41	2.0	6	12	8	11	sw.	James Taylor
Elsberry	Lincoln	449	3	35.2	.....	68	24	0	30	41	1.68	.....	0.75	0.2	7	8	10	13	s.	Ray E. Mills
Fayette	Howard	661	54	35.2	+ 8.2	71	24	0	30	39	0.94	−0.92	0.66	0.4	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	34.3	+ 4.8	68	24	1	30	39	1.43	−0.80	0.71	T.	6	12	5	14	s.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	0.63	−0.85	0.45	T.	3	12	5	14	nw.	Mrs. J. W. Pulliam
Hannibal	Marion	759	42	35.0	+ 7.9	68	24	0	29†	50	0.89	−0.83	0.50	0.5	5	13	5	13	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	44	35.2	+ 5.4	70	24	0	30	44	1.72	−0.41	0.64	2.0	7	13	6	12	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	33.2	+ 8.4	64	24	− 1	29	47	0.39	−1.06	0.35	0.4	3	10	5	16	sw.	Prof. J. S. Stokes
Louisiana	Pike	469	40	35.1	+ 7.0	67	24	0	30	42	1.40	−0.57	0.65	T.	5	17	5	9	s.	Stark Bro's Nurseries
Macon	Macon	875	35	32.7	+ 5.2	68	24	− 2	30	43	0.78	−0.79	0.44	0.5	4	15	5	11	w.	W. C. Brown
Mexico	Audrain	800	45	34.4	+ 6.4	70	24	1	30	46	1.41	−0.60	0.61	0.2	7	12	7	12	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	1.51	−0.52	0.61	0.7	4	9	11	11	se.	J. S. Conway
St. Charles	St. Charles	520	46	35.8	+ 4.8	64	24†	1	30	33	1.10	−1.09	0.35	T.	7	15	2	14	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	37.8	+ 6.7	65	24	4	29	46	1.72	−0.62	0.73	1.4	5	11	5	15	s.	**Section Center**
St. Louis University	St. Louis City	578	22	36.9	+ 6.7	64	24	3	29†	47	1.59	−0.92	0.72	2.2	6	12	5	14	w.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	0.73	−0.86	0.46	0	3	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	33.8	+ 6.4	68	24	− 3	30	49	0.73	−1.32	0.57	T.	3	14	7	10	s.	Frank Hall
Unionville	Putnam	1,062	41	32.4	+ 8.9	65	27	− 2	30	51	0.80	−0.96	0.50	3.2	4	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	37.0	+ 7.8	68	24	0	30	42	1.68	−0.62	0.80	3.0	5	12	6	13	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	33.0	+ 8.1	67	24	− 1	30	47	0.81	−0.75	0.46	0.4	4	8	6	17	sw	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**34.8**	**+ 7.0**	**71**	**24**	**− 4**	**30**	**52**	**1.04**	**−0.77**	**1.11**	**0.8**	**5**	**12**	**6**	**13**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	40.3	.....	66	27	4	30	38	2.34	.....	1.25	T.	10	12	5	14	s.	Jeff. King
Caruthersville	Pemiscot	265	38	43.1	+ 4.0	67	24	9	29	54	1.84	−3.00	0.84	T.	7	12	3	16	.....	Sam Smith
Doniphan	Ripley	344	30	41.0	+ 5.2	70	27	3	30	41	2.37	−2.03	1.25	T.	7	11	5	15	nw.	W. W. Martin
Jackson	Cape Girardeau	428	43	39.6	+ 5.8	66	27	3	30	33	1.82	−1.96	0.94	T.	6	11	7	13	n.	John G. Putz
Marble Hill	Bollinger	470	39	40.2	+ 5.6	70	27	1	30	41	2.11	−1.56	1.30	0	3	15	4	12	n.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	1.98	−2.87	1.02	T.	7	14	4	13	sw.	John A. Spence
Poplar Bluff	Butler	339	29	37.7	+ 1.7	71	27	3	30	42	24.3	−1.79	1.41	T.	7	14	3	14	w.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	42.6	+ 5.6	69	27†	5	30	32	1.63	−2.81	0.83	T.	5	14	7	10	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	62	40.9	+ 6.0	67	27	7	30	46	1.28	−2.48	0.84	T.	7	9	6	16	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**40.7**	**+ 4.8**	**71**	**27**	**1**	**30**	**54**	**2.04**	**−2.38**	**1.84**	**T.**	**7**	**12**	**5**	**14**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	35.9	+ 4.0	67	27	0	30	41	1.69	−1.35	0.84	T.	9	19	4	8	w.	Arcadia College
Birchtree (near)	Shannon	1,000	39	39.6	+ 5.1	67	27	2	30	37	1.39	−1.80	0.65	T.	3	14	5	12	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	0.96	.....	0.34	4.3	3	20	1	10	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	1.16	.....	0.51	0.3	6	10	12	9	sw.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	30	39.2	+ 3.3	68	24	7	30	38	1.68	−0.66	1.05	2.0	4	14	3	14	ne.	H. E. Dean
Eldon	Miller	934	39	35.1	+ 4.0	69	22	1	30†	37	1.09	−0.54	0.48	2.0	4	8	12	11	s.	E. H. Shepherd
Farmington	St. Francois	918	23	38.3	+ 5.7	68	27	1	30	33	0.75	−1.77	0.75	0	1	14	4	13	s.	H. O. Miller
Goodland	Iron	1,000	41	37.8	+ 5.2	66	24†	− 3	30	42	1.59	−1.09	0.64	2.0	5	15	3	13	n.	F. M. Adams
Greenville	Wayne	381	25	38.4	+ 3.4	69	27	− 2	30	43	1.68	−1.38	0.96	0	3	15	3	13	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	2.15	−0.58	1.33	1.0	3	10	13	8	e.	A. W. Madison
Koshkonong	Oregon	958	33	41.4	+ 4.9	66	15†	4	30	29	1.87	−1.79	0.77	T.	5	13	5	13	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	35.6	+ 3.1	69	24	0	30	39	1.14	−1.39	0.72	2.5	3	16[b]	3[b]	10[b]	.....	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	38.2	+ 4.9	67	24	3	30	35	1.58	−0.16	0.90	4.5	7	15	7	9	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	38.1	+ 5.3	66	27	0	30	40	1.97	−0.85	0.89	3.0	8	19	4	8	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	40.8	+ 5.7	66	24†	2	30	36	1.62	−0.88	1.09	T.	6	15	7	9	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	38.0	+ 6.1	67	24	3	30	35	1.49	−0.95	0.61	3.0	8	12	6	13	sw.	F. H. Lane
Salem	Dent	1,178	30	37.4	+ 4.8	66	24	0	30	33	1.43	−1.36	0.70	4.0	4	14	5	12	s.	E. E. Martin
Seligman	Barry	1,542	33	38.3[1]	+ 3.2	67	24	4	30	..	2.09	−0.79	1.25	4.5	5	10[d]	5[d]	12[d]	s.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	37.4	+ 3.4	66	24	0	30	37	2.07	−0.48	1.14	5.0	6	10	7	14	sw.	A. L. Hailey
Springfield	Greene	1,324	46	37.8	+ 4.3	67	24	2	30	39	1.42	−0.92	1.00	5.4	6	11	7	13	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	37.4	.....	70	24	2	30	44	1.14	.....	0.57	2.1	6	11	7	13	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**38.0**	**+ 4.5**	**70**	**24**	**− 3**	**30**	**44**	**1.51**	**−1.18**	**1.33**	**2.2**	**5**	**14**	**6**	**11**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	37.2	+ 5.9	64	23†	− 3	30	40	0.93	−0.91	0.52	2.6	5	11	10	10	sw.	W. G. Bigelow
Clinton	Henry	765	41	36.8	+ 5.1	68	24	− 5	30	41	1.30	−0.69	0.67	3.0	8	11	11	9	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	33.0	+ 5.7	68	27	− 6	30	54	1.02	−0.53	0.52	2.5	5	11	5	15	sw.	John H. Patterson
Lamar	Barton	980	46	37.1	+ 5.0	70	24	4	30	39	0.97	−0.79	0.45	1.0	4	12	8	11	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	35.9	+ 7.0	69	24	1	30	41	1.42	−0.56	0.75	2.0	6	10	12	9	sw.	J. E. Wheeler
Marshall	Saline	779	47	36.0	+ 8.1	69	24	2	30	55	1.23	−0.48	0.76	2.0	4	19	4	8	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	37.8	+ 5.9	67	24	− 1	30	41	0.83	−1.20	0.58	2.5	3	15	4	12	s.	George A. Kaupp
Warrensburg	Johnson	878	47	35.0	+ 6.3	68	24	− 1	30	40	1.40	−0.37	0.78	3.0	4	12	4	15	sw.	E. A. Markey
Warsaw	Benton	687	33	37.8	+ 4.9	71	24	− 5	30	43	1.17	−1.11	0.65	1.0	7	15	2	14	s.	Everett Martin
Division means	**and extremes**	.....	..	**36.8**	**+ 6.0**	**71**	**24**	**− 6**	**30**	**55**	**1.18**	**−0.65**	**0.96**	**2.2**	**5**	**13**	**7**	**11**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	32.2	+ 7.4	64	27	0	30	45	0.57	−0.69	0.47	1.0	3	11	7	13	nw.	A. S. Cumming
Chillicothe	Livingston	779	25	31.8	+ 5.0	67	24	− 3	30	51	0.83	−0.70	0.51	T.	4	11	8	12	.....	Wm. J. Olenhouse
Conception	Nodaway	980	45	31.0	+ 6.3	65	27	− 2	30	47	0.37	−0.54	0.24	2.5	3	10	9	12	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	34.4[d]	+ 7.5	66	27	− 3	30	39	0.87	−0.19	0.46	0.6	4	17	2	12	s.	Fred L. Stiff
Grant City	Worth	1,134	30	30.9	+ 6.1	62	27	− 2	30	44	0.54	−0.38	0.40	3.1	4	7	10	14	sw.	Howard Rybolt
Kansas City (a)	Jackson	963	45	35.4	+ 7.2	70	27	5	30	42	0.49	−0.70	0.41	0.6	5	11	8	12	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	30.8	+ 4.8	65	24	− 1	30	49	0.75	−0.84	0.40	1.0	4	12	4	15	sw.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	0.63	−0.69	0.44	2.0	5	11	7	13	nw.	John M. Martin
Lexington	Lafayette	688	49	34.2	+ 6.4	68	27	2	30	47	0.88	−0.74	0.53	1.6	5	12	8	11	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	32.2	+ 9.3	67	27	0	30	44	0.85	−0.17	0.32	6.2	6	9	7	15	nw.	J. R. Brink
Oregon	Holt	1,048	78	34.6	+10.5	69	27	0	30	47	0.53	−0.81	0.22	1.5	4	16	6	9	sw.	Mina Wright
St. Joseph	Buchanan	987	24	34.0	+ 6.4	67	27	3	30	43	0.40	−0.50	0.28	0.7	4	15	4	12	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	29.6	+ 6.7	62	27	− 1	30	41	0.96	+0.22	0.67	6.0	2	11	9	11	nw.	Albert Volker
Trenton	Grundy	822	38	32.8	+ 6.5	62	24	− 2	30	49	0.56	−0.79	0.44	0.7	3	13	3	15	s.	W. H. Estes
Division means	**and extremes**	.....	..	**32.6**	**+ 6.9**	**70**	**27**	**− 3**	**30**	**51**	**0.66**	**−0.53**	**0.67**	**2.0**	**4**	**12**	**7**	**12**	**sw.**	
State means	**and extremes**	.....	..	**36.1**	**+ 5.2**	**71**	**24†**	**− 6**	**30**	**55**	**1.24**	**−0.98**	**1.84**	**1.5**	**5**	**13**	**6**	**12**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Precipitation for January 1934

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi					.37								.29																			0.66
Boonville	Missouri				.55	.10		.02	.07					.10												.03							0.87
Bowling Green	Mississippi					.53			.06					.20												.10							1.24
Brunswick	Grand				.75	.10		.03	.01					.13								.02		.35		.10				T.			1.04
Canton	Mississippi					.61								.26																			0.87
Clifton Hill	Chariton				.58	.01		.60	T.	T.			.14	.07									.01									T.	1.41
Columbia***	Missouri			.07	.47	T.		.14	T.	T.			.12									T.	.01		.12					T.		T.	0.93
Downing	Mississippi				.41	.02		T.					.08	.12								.02				.10							0.75
Edina	....do				.25	.12			T.	T.				.10											.02								0.49
Elsberry	....do				.75			.12	.25					.20									.28			.03						.05	1.68
Ewing	....do				.05	.35								.10																			0.50
Farber	....do				.28	.12			.08					.10									.03			.14							0.75
Fayette	Missouri				.66	.04		.03	.04					.17																			0.94
Fulton	....do				.63	.08		.06	.26					.15										.25		T.							1.43
Gorin	Mississippi				.45			T.	T	T.			.10					T.						.08									0.63
Hannibal	....do				.50	T.		.02					.19	.05								T.	T.			.13						T.	0.89
Hermann	Missouri				.52	.16		.05	.13					.03								.01		.12		.05							1.07
Jefferson City	....do				.64	.10		.36	.14	.17				.17										.14									1.72
Kahoka	Mississippi				.06	.31								.45												.08							0.90
Kirksville	....do				.35			.02					T.	.02																			0.39
Linneus	Grand			.55	.08	T.	T	.03	T				.13												T.					T.			0.79
Louisiana	Mississippi				.65			.10	T				.25										.25		.15								1.40
Lucerne	Grand				**	.30		T.						.14																			0.44
Macon	Chariton				.44	.05			.07					.22																			0.78
Memphis	Mississippi				.13	.26		T.	T	T.				.13									T.			T.							0.52
Mexico	....do				.61	.16			.12					.20								.01		.12		.19							1.41
Milan	Grand				.52			.13						.34												.05							1.04
Monroe City	Mississippi				.61					.25			.42								T.					.23							1.51
New London	....do				.64	.47		.12		T.	T.			.34										.17									1.74
Palmyra	....do				.16	.36								.24																			0.76
Paris	....do				.41	.13			.03					.14												.07							0.78
Perry	....do				.40	.18			.04					.13										T.		T.							0.75
Philadelphia	....do					**							.46										.10										0.56
St. Charles	Missouri				.27	.35		.09	.15					.06								T.		.16		.02						T.	1.10
St. Louis**	Mississippi		T.		.73		T.	.45	T.	T.			.13									T.	.36			.05	T.					T.	1.72
St. Louis University*	....do				.72			.39					.14									.01	.28			.05						T.	1.59
Shelbina	....do				.46	.12								.15																			0.73
Steffenville	....do				.57			T		T.			.11	.05																			0.73
Troy	....do				.24	.52			.10					.12												.19							1.21
Union	Meramec				.45	.30		.32	.23					.06												.04							1.64
Unionville	Chariton				.40	.10		T.	T.				.10	.20												.18							0.80
Valley Park	Meramec				.94	.50		.21	.22				T.	T.									T.			.10							2.04
Warrenton	Mississippi				.80			.30					.20	.10									.28			.07						T.	1.68
West Ely	....do				.03	.54			.12				.14													.14							0.99
Winfield	....do				.35	.38																											1.11
Keokuk, Ia.***	....do			T.	.28	T.		T.	T.	T.			.33	.13								T.	T.		.07						T.	0.81
Southeast Lowlands																																	
Bragg City	St. Francis																																
Campbell	....do				1.25		.11	.65	.01				.10	.02			.02		.08		.06	.04											2.34
Cape Girardeau	Mississippi				.76	.13		.42	.01	.05			.12	.02												T.	T.						1.51
Caruthersville	....do			.84	.25		.34	.11	T.			.11							.17								.02				T.	1.84
Dexter	St. Francis				1.84			.69					.14									.06											2.73
Doniphan	Black				1.25		.25	.42	.08				.18				.09					.10				T.						T.	2.37
Fisk	St. Francis				1.17	.11		.69	T.	T.			.37	T.		.04						.07											2.45
Jackson	Mississippi				.94			.52	.04				.27										.03			.02							1.82
Marble Hill	....do				1.30				.65				.16																				2.11
Morehouse	....do				1.02		.02	.73	.01				.12	.02									.06			T.							1.98
New Madrid	....do				.50	.57		.51	.09	.02			.12	.06			.06	T.		.05	.02		.02	.01			.01						2.04
Parma	St. Francis				.95	T		.82	.05				.15									.18											1.97
Poplar Bluff	Black				1.31	.10		.70	.02	T.			.10	.02									.03										2.43
Sikeston	Mississippi			.83			.60		T.			.12	.05										.02			.01						T.	1.63
Cairo, Ill.***	.. .do				.84		.24	.08	.01	T.			.08				T.					T.										T.	1.28
Ozark Plateau																																	
Arcadia	St. Francis				.63	.21		.24	.29					.03									.06	.12		.06	.05						1.69
Birchtree (near)	Black				.65			.54					.20																				1.39
Buffalo	Osage				.34			.32	.30																								0.96
Caplinger Mills	....do			.21	.30			.37	T.	T.			.10									T.	.15				T.			.03			1.16
Dean	Neosho			.25	.36		T.	1.05	T.				T.	T.							T.	.02				T.				T.			1.68
Eldon	Missouri				.48			.26	T.					.15			T.																1.09
Farmington	St. Francis				.75			T.	T.				T.	T.								T.		.20		T.					T.			0.75
Fredericktown	....do	.01			.83	.13		.48	.10	.01				.03										.34		.05	.03						2.01
Galena	White							.22														.10					.10						0.42
Goodland	Black				.64			.50	.05				T.										.15			.20	.05						1.59
Greenville	St. Francis				.96			.51														.21				T.							1.68
Hailey	White			.70				1.33														.12											2.15
Koshkonong	Black				.77		.13	.53	T.					.05								.39											1.87
Lakeside	Osage				.52	.02		.29	.16	T.	T.		T.	.12			T.						T.	.03							T.		1.14
Lebanon	....do				.42	T.		**	.72													T.	T.										1.14
Leeper	Black				.89	.09		.54	.04	T.			.05	.04								.01				T.	T						1.66
Lockwood	Osage			.15	.34			.90	T.				.06	.04												.07				.02			1.58
Mountain Grove	White			.18	.61			.89					.11	.03								.02				.08	.05						1.97
Neosho	Neosho			.26	.17		.36	.73					.05													.05				T.			1.62
Owensville	Gasconade				.45	.10		.17	.11					.26												.26							1.35
Rolla	Meramec				.61	.08		.59	.05					.10								T.	.01			.04	.01					T.	1.49
St. Thomas (near)	Osage				.52	.08		.43	.23					.29			.04							T.									1.59
Salem	Meramec				.50			.70					.10									T.				.13	T.					T.	1.43
Seligman	Neosho			.42	.29			1.25					.04									.09								T.			2.09
Seymour (near)	White			.09	.52			1.14					.15													.15	.02			T.		T.	2.07
Springfield	....do	T.		.21	.11		T.	1.00	T.	T.			.04			T.				T.	T				.01	T.				.05			1.42
Stover	Missouri				.65			.35	T					.10									.03										1.13
Versailles	Osage			T.	.57			.36	.01	T.			.14	T.		T.						.01	.05							T.			1.14
Williamsville	Black	.01			1.00	.14		.49	.05	T.			.10	.05								.07	.06				.01						1.98
Willow Sprgs. (near)	White				.50	.29		.55	.34					.14			.07					.11									.01		2.01
Southwest Plain																																	
Appleton City	Osage			.04	.48	T.		.29	T.	T.			.10	T.								T.								.02			0.93
Clinton	.... do			.67	.05	.05		.22					.20				.02					.04								.05			1.30
Concordia	Missouri				.72			T.	.10					.22																			1.04
Harrisonville	Osage				.52	.01		.34						.10																	.05			1.02

Continued on next page

Daily Precipitation for January 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho	....	....	.40	.14	....	.06	.96	.02	....	....	....	.09	....	....	....	....	....	....	....	....	....	....	....	....	.07	.03	....	....	....	....	....	1.77
Lamar ‖‖	....do	....	....	....	.45	....	....	.30	.15	....	....	....	....	T.	....	....	....	....	....	....	....	..	.07	....	....	....	T.	....	....	....	T.	....	0.97
Lamonte	Missouri	.01	....	.03	.75	....	....	.28	....	T.	....	....	.15	....	....	....	....	....	....	....	....	....	....	....	.20	....	....	....	....	T.	....	....	1.42
Marshall	.... do	....	....	....	.76	....	....	.20	....	....	....	....	.22	....	....	....	....	....	....	....	....	....	....	....	....	.05	....	....	....	T.	....	....	1.23
Nevada	Osage	....	....	T.	.58	....	....	.20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.05	....	....	0.83
Warrensburg	Missouri	....	....	....	.78	T.	....	.25	T.	T.	....	....	.25	....	....	....	....	....	....	....	....	....	....	....	....	.12	....	....	....	T.	....	....	1.40
Warsaw	Osage	....	....	.04	.65	....	....	.29	....	....	....	....	.10	....	....	....	....	....	....	....	....	.02	.02	....	....	....	....	....	....	.05	....	....	1.17
Waverly ‖‖	Missouri	.03	....	....	.60	.22	....	.05	T.	....	....	....	....	.11	....	....	....	....	....	....	....	....	T.	....	....	.12	....	....	....	....	....	....	1.13
Northwest Plateau																																	
Bethany	Grand	....	....	....	.47	....	....	....	....	....	....	....	.05	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	0.57
Chillicothe ‖‖	....do	T.	T.	....	.51	.13	....	.03	T.	T.	....	....	....	.16	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	T.	....	....	0.83
Conception	Missouri	T.	....	T.	.24	T.	....	T.	T.	....	....	....	.03	.10	....	....	....	....	....	....	....	T.	T.	....	....	....	....	....	....	T.	....	....	0.37
Edgerton	....do	T.	....	....	.46	T.	....	.01	....	....	....	....	.15	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	.25	....	....	0.87
Gallatin ‖	Grand	....	....	T.	.45	.10	....	....	....	....	....	....	....	.13	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.68
Grant City	.... do	T.	....	....	.40	.05	....	....	T.	....	....	....	.02	.07	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	0.54
Kansas City***(a)	Missouri	T.	T.	.21	.20	T.	T.	.02	T.	T.	T.	....	.04	T.	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	.02	....	....	0.49
Kidder ‖‖	Grand	....	....	....	.40	.25	....	.05	T.	....	....	....	....	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.75
King City	Missouri	....	.01	.02	.44	.02	....	T.	....	....	....	....	.14	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	T.	....	....	0.63
Lexington ‖‖	....do	....	....	....	.53	.18	....	.03	.04	....	....	....	....	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0.88
Maryville ‖‖	....do	....	....	....	.32	.05	.02	....	.02	T.	....	T.	.15	.29	....	....	....	....	....	....	....	....	....	T.	T.	....	....	....	....	T.	....	....	0.85
Oregon	....do	T.	....	.02	.20	T.	....	T.	T.	T.	....	....	.22	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	....	.09	....	....	0.53
St. Joseph***	....do	T.	T.	.14	.15	T.	....	T.	T.	T.	....	....	.09	....	....	....	....	....	....	....	....	T.	T.	....	....	....	....	....	....	.02	....	....	0.40
Tarkio	....do	....	....	....	.29	....	....	....	....	T.	....	....	.67	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	0.96
Trenton	Grand	....	....	....	.44	....	....	.06	....	....	....	....	.06	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	T.	....	....	0.56

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated
(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for January 1934
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.016	.040	.014	††††	.020	.021	.001	....	....	....	....	....	****	.027	.013	.051	.061	.059	.039	.032	.083	.028	.069	.139	.165	.057	.064	.115	....	....	....	1.355
	Mean temperature	27	32	35	38	40	38	33	24	28	29	36	34	39	38	39	39	38	38	40	46	42	54	46	50	32	40	50	46	13	18	24	36.2
	Wind movement	121	76	92	56	105	79	57	129	105	47	35	49	130	71	40	62	37	53	48	38	40	70	63	116	125	49	81	102	174	82	91	2,423

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report. †††† —.018 **** —.041

Continued from Page 1

Halos.—Solar, 6th, 11th, 15th, 17th, 18th; lunar, 6th, 23d, 27th, 28th.

Sleet.—3d, 4th, 7th, 11th, 12th, 13th, 25th, 31st.

Smoke.—Dense, 6th.

Thunderstorms.—22d.

Windstorms.—Strong winds on 24th, 28th, 29th, with minor damage to window glass, signs, cornices of buildings, street light globes, etc., on 28th at St. Louis.

ERRATA

December 1933, page 57, Kansas City highest reduced pressure should be 30.70 on 26th. Page 58, St. Joseph greatest precipitation in twenty-four hours should be 0.78.

KANSAS CITY, NEW EXPOSURE FOR INSTRUMENTS

Beginning January 1, 1934, the weather observations at Kansas City, for use in weather maps and climatological records, are being made at the airport station, which is on the opposite side of the Missouri River, one and one-fourth miles (air-line) northwest of the former location on the roof of the Scarritt Building, corner 9th Street and Grand Avenue. The changes in elevations of the instruments above ground and above sea level, as well as the change from city business district to more open suburban exposure, will have some effect upon the records, especially temperature records during some types of weather conditions. The thermometers were 161 feet above ground at old location; at new location, 32 feet. The rain gage was 141 feet above ground, now 38 feet. The anemometer was 181 feet above ground, now 45 feet. The barometer was 1,029 feet above sea level, now 760 feet. The new location is on comparatively low ground, approximately 165 feet lower than the ground at old location.

Daily Temperatures for January 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	50	32	34	38	39	45	39	25	30	38	43	42	40	48	47	48	53	49	47	69	52	66	58	68	68	49	65	60	19	29	50	46.5
	Minimum ...	20	22	29	31	32	28	23	17	21	27	31	31	30	21	28	19	24	33	22	27	29	46	29	45	19	21	35	15	5	1	24	25.3
Columbia.	Maximum...	31	32	34	43	41	45	37	22	31	36	45	45	36	50	43	47	54	50	51	61	56	59	58	70	36	49	61	52	15	30	46	44.1
	Minimum ...	20	26	30	34	35	32	22	18	20	30	27	35	28	24	32	23	29	37	26	38	44	38	32	36	22	24	37	11	5	3	26	27.2
Fayette	Maximum...	53	32	37	40	40	47	34	25	33	40	46	45	39	50	45	51	55	50	52	65	55	63	59	71	42	49	65	44	18	33	45	45.9
	Minimum ...	19	24	29	31	32	27	22	17	19	27	29	30	31	21	25	20	20	30	23	26	35	44	27	42	20	19	35	12	3	0	25	24.6
Hannibal	Maximum...	46	31	33	40	43	42	42	27	31	42	44	46	38	40	41	49	52	51	48	62	57	60	52	68	64	50	60	58	24	26	44	45.5
	Minimum ...	18	23	29	31	31	31	18	20	19	29	24	25	27	22	32	25	25	35	24	31	37	26	32	42	18	21	37	8	0	0	24	24.6
Jefferson City §§	Maximum...	30	32	40	45	42	45	35	24	32	39	50	44	40	52	45	49	56	57	51	63	57	60	57	70	39	50	65	39	17	30	45	45.2
	Minimum ...	21	22	27	30	34	30	30	20	19	23	23	23	32	24	25	25	25	29	26	28	37	43	30	37	23	24	33	36	5	0	1	25.3
Kirksville.	Maximum...	42	30	31	36	36	45	38	20	30	37	38	41	33	40	37	45	50	53	48	59	50	57	51	64	62	48	63	56	12	25	50	42.8
	Minimum ...	14	18	25	29	31	26	19	14	20	25	28	28	24	18	30	23	22	32	21	27	34	44	29	41	15	20	35	9	− 1	8	22	23.5
Louisiana	Maximum...	50	33	35	40	42	40	37	28	30	40	44	42	36	43	42	45	46	50	49	63	52	65	61	67	59	47	60	55	14	25	47	44.7
	Minimum ...	20	25	30	30	28	25	26	20	20	26	20	30	30	24	26	26	24	36	22	26	36	46	32	46	22	20	36	13	2	0	23	25.5
Macon §§	Maximum...	27	31	34	39	37	45	34	24	31	39	43	42	34	45	40	47	53	52	48	61	52	59	54	68	33	49	62	32	14	32	48	42.2
	Minimum ...	17	18	27	28	32	26	30	15	17	23	28	31	26	18	22	23	22	28	22	28	36	41	30	36	17	19	26	30	1	− 2	5	23.2
Mexico §§	Maximum...	29	35	37	45	42	46	38	26	35	42	48	44	42	49	42	50	53	51	48	60	56	60	58	70	34	48	61	50	16	29	48	44.9
	Minimum ...	19	19	26	30	33	29	29	19	19	24	24	25	30	23	24	23	24	27	23	25	36	42	32	33	20	20	23	36	2	1	2	23.9
St. Louis	Maximum...	49	33	38	48	44	47	39	27	31	38	48	49	37	46	47	48	52	56	51	58	50	58	52	65	60	45	63	54	15	26	35	45.5
	Minimum ...	24	29	31	37	39	37	26	24	24	27	30	36	34	30	36	34	32	37	32	38	41	43	36	41	28	32	40	8	4	5	21	30.2
Unionville	Maximum...	45	30	32	35	35	48	42	22	28	35	45	40	38	36	38	44	50	48	47	56	56	53	55	62	60	58	65	58	10	25	46	43.3
	Minimum ...	10	12	20	25	30	30	18	12	18	20	25	30	20	18	30	20	22	24	20	25	35	43	30	40	12	20	35	7	0	− 2	20	21.6
Warrenton	Maximum...	52	31	34	44	45	44	39	29	32	43	49	44	42	50	44	49	53	53	50	60	56	58	55	68	61	50	63	59	17	28	36	46.4
	Minimum ...	21	25	29	32	35	31	28	21	20	26	25	36	33	24	33	27	26	34	26	35	38	45	31	41	23	28	38	17	2	0	21	27.5
Southeast Lowlands																																	
Campbell	Maximum...	57	37	47	55	54	47	45	40	39	48	53	46	52	54	62	50	51	52	57	47	53	59	59	65	60	52	66	64	38	28	37	50.8
	Minimum ...	32	29	30	41	35	35	34	27	27	24	24	40	33	24	24	33	21	24	38	33	40	45	30	33	37	36	38	34	9	4	11	29.8
Caruthersville	Maximum...	65	48	49	54	52	48	48	40	38	44	53	51	51	50	61	55	51	53	51	51	54	60	59	67	64	49	66	66	45	25	36	51.7
	Minimum ...	33	33	33	42	38	38	32	30	30	34	40	37	29	35	33	28	35	43	41	44	46	38	38	46	39	43	45	12	9	19	25	34.5
Doniphan	Maximum...	55	44	56	54	55	46	45	40	40	47	52	48	52	55	63	54	54	50	58	54	56	60	60	68	60	57	70	62	35	23	35	51.9
	Minimum ...	34	26	36	38	36	36	38	28	23	22	41	30	20	23	24	13	25	42	30	42	45	40	27	41	46	43	35	10	3	16	30.2	
Jackson	Maximum...	62	41	47	51	51	47	45	37	34	43	50	47	47	48	59	53	51	55	55	50	50	56	54	65	60	45	66	61	35	25	34	49.2
	Minimum ...	31	29	33	40	41	36	30	27	28	24	25	36	34	23	27	37	22	29	33	29	35	48	31	34	36	35	33	34	8	3	18	30.0
Poplar Bluff	Maximum...	55	37	47	49	49	44	44	35	35	35	49	47	45	57	58	45	51	47	47	45	54	54	54	59	59	47	71	61	21	28	35	47.2
	Minimum ...	35	28	32	35	35	33	33	27	29	25	22	36	26	20	20	25	19	24	32	32	40	48	30	27	38	38	38	19	9	3	17	28.2
Sikeston	Maximum...	65	36	49	52	53	52	56	37	37	47	52	52	49	52	63	63	54	55	56	63	53	57	58	66	66	48	69	69	38	27	36	52.6
	Minimum ...	34	34	33	42	40	39	37	27	30	26	29	41	35	25	31	35	25	31	36	37	40	49	32	36	38	37	40	38	9	5	18	32.5
Cairo, Ill.	Maximum...	56	36	49	54	50	48	45	35	36	45	54	46	48	47	60	49	53	54	56	46	52	57	56	66	54	48	67	59	15	24	36	48.4
	Minimum ...	33	30	33	44	41	41	35	29	29	29	34	40	36	29	36	34	31	37	38	38	39	50	38	42	39	38	44	13	9	7	20	33.4
Ozark Plateau																																	
Arcadia §§	Maximum...	32	32	44	47	48	46	36	27	31	44	52	43	45	53	61	52	52	61	53	57	47	52	60	65	42	48	67	53	16	29	33	46.1
	Minimum ...	30	27	28	29	37	30	31	23	23	24	22	23	34	19	20	20	20	32	26	26	39	29	25	35	33	34	38	6	0	1	25.7	
Birchtree	Maximum...	54	34	39	48	50	46	43	35	34	45	46	46	47	55	62	54	51	54	58	60	59	65	64	65	62	51	67	62	30	29	30	49.8
	Minimum ...	28	25	28	37	35	33	33	23	25	21	28	38	31	21	28	27	22	30	35	36	42	46	36	38	34	36	39	25	7	2	19	29.3
Eldon §§	Maximum...	34	34	38	43	44	45	34	23	32	35	37	45	47	53	46	50	55	53	51	64	57	69	63	65	37	40	64	49	16	30	32	44.7
	Minimum ...	22	22	27	30	34	29	29	19	19	19	21	21	33	24	35	30	26	26	28	27	34	43	31	29	26	25	33	39	6	1	1	25.5
Farmington	Maximum...	57	33	37	57	48	43	34	36	33	43	52	46	43	50	55	57	50	63	60	53	60	53	57	58	66	46	68	60	25	29	29	48.4
	Minimum ...	26	28	30	33	43	32	30	28	23	24	23	30	33	23	28	28	33	33	30	28	27	44	30	30	33	34	35	30	5	1	18	28.2
Koshkonong	Maximum...	53	35	41	49	54	47	43	35	35	47	52	43	49	57	66	54	53	53	60	62	56	63	59	66	66	59	66	58	34	28	34	50.9
	Minimum..	30	25	29	40	35	37	34	24	24	25	28	41	33	30	37	36	30	35	39	37	42	42	35	39	37	39	46	33	9	4	17	32.0
Lebanon §§	Maximum...	30	44	46	45	48	46	32	25	33	34	48	42	42	54	56	48	55	61	58	61	52	58	63	69	35	50	62	47	14	28	41	46.0
	Minimum ...	20	20	21	29	34	30	32	20	19	16	17	24	29	24	30	29	25	29	29	31	36	44	29	34	29	27	34	33	6	0	2	25.2
Mountain Grove	Maximum...	56	32	35	47	45	56	42	27	32	41	49	43	46	55	63	52	51	60	59	59	55	63	58	65	61	43	66	61	22	28	34	48.6
	Minimum ...	20	24	27	34	33	32	26	19	20	16	25	35	29	24	34	34	26	32	35	37	42	42	29	39	30	32	37	21	4	0	18	27.6
Neosho	Maximum...	58	58	51	41	50	48	46	32	38	36	53	50	49	58	60	58	55	62	60	59	60	62	64	66	66	44	65	63	39	34	43	52.5
	Minimum ...	23	27	31	33	32	27	31	18	16	31	21	40	30	24	28	35	22	31	36	34	42	50	28	46	30	34	31	30	11	2	26	29.0
Rolla	Maximum...	58	34	36	46	46	46	42	27	31	37	47	45	42	49	52	45	55	60	52	60	59	60	58	67	60	45	62	55	23	28	35	47.2
	Minimum ...	23	26	29	33	35	30	27	21	23	25	21	37	32	24	35	31	24	35	31	32	43	45	30	43	28	34	38	23	6	3	24	28.7
Springfield	Maximum...	46	38	41	43	48	48	41	22	33	32	46	42	43	54	58	48	52	59	57	56	56	59	60	67	55	41	62	50	11	28	40	46.3
	Minimum ...	21	30	29	32	33	35	21	18	18	27	25	34	30	30	38	34	31	37	38	41	44	44	36	45	30	32	38	11	5	2	22	29.4
Southwest Plain																																	
Appleton City	Maximum...	47	38	37	36	42	47	48	25	31	33	47	43	45	54	47	50	53	52	50	61	59	61	64	64	62	50	64	57	26	27	49	47.2
	Minimum ...	19	24	30	30	31	30	24	19	19	20	25	35	28	24	30	26	25	32	27	33	45	49	31	45	22	30	33	26	7	− 3	23	27.1
Clinton	Maximum...	48	40	35	38	41	46	40	26	32	36	45	42	43	52	45	48	52	52	52	54	56	62	62	68	63	46	65	53	27	27	42	46.4
	Minimum ...	20	25	32	32	33	31	25	20	21	28	25	33	30	25	32	25	24	32	30	30	44	48	29	38	22	26	35	27	5	− 5	23	27.3
Harrisonville §§	Maximum...	29	34	33	34	40	46	29	23	32	34	44	38	43	54	42	50	54	52	48	61	55	61	63	67	31	50	68	46	16	30	51	43.8
	Minimum ...	16	16	26	27	30	28	27	15	16	20	26	27	28	23	31	22	22	26	24	24	30	45	29	32	16	16	20	33	5	− 6	− 3	22.3
Lamar §§	Maximum...	33	49	37	38	46	50	35	25	35	33	50	43	45	57	56	49	54	59	55	61	61	62	67	70	36	49	62	54	14	33	44	47.2
	Minimum ...	22	22	33	32	32	29	32	22	19	22	24	24	29	26	27	30	25	27	32	32	40	47	32	34	27	26	34	38	10	4	5	27.0
Lamonte	Maximum...	45	35	34	39	40	46	41	31	31	35	45	42	40	50	44	49	54	50	49	63	54	59	62	69	42	63	64	50	17	28	49	45.8
	Minimum ...	19	24	29	31	32	29	22	17	21	27	29	34	30	24	31	23	28	34	26	31	43	42	29	41	21	23	28	14	7	1	20	26.0
Marshall	Maximum...	45	31	32	38	39	46	43	31	30	31	43	42	37	50	44	48	54	51	48	63	58	59	61	69	45	49	64	60	15	29	50	45.3
	Minimum ...	19	28	23	31	33	30	19	18	20	28	28	34	32	24	33	25	30	35	25	32	44	49	31	45	21	24	35	5	6	2	25	26.7
Nevada	Maximum...	49	45	35	35	43	50	44	27	33	35	45	45	55	50	45	52	51	51	60	60	60	65	67	62	50	62	56	25	30	49	47	47.8
	Minimum ...	20	25	30	31	30	30	25	20	20	29	23	34	28	27	30	27	26	35	27	28	45	50	32	45	21	32	36	24	8	− 1	26	27.8
Warrensburg	Maximum...	49	35	32	37	40	46	42	25	28	33	45	42	42	50	44	48	54	51	46	60	55	60	61	68	59	48	64	48	17	28	51	45.4
	Minimum ...	17	22	17	20	30	29	21	15	20	25	28	32	29	24	29	22	28	32	24	29	43	43	29	43	19	20	33	16	5	− 1	22	24.7
Warsaw	Maximum...	58	47	37	40	48	51	45	26	32	34	48	44	43	55	52	50	55	55	55	63	57	62	62	71	65	51	64	58	26	30	47	49.4
	Minimum ...	19	25	31	32	33	27	26	18	20	24	25	34	30	18	25	25	18	34	25	26	42	46	25	47	22	29	37	26	6	− 5	25	26.3
Northwest Plateau																																	
Chillicothe §§	Maximum...	27	31	33	36	36	49	49	25	30	36	39	38	35	45	42	49	55	57	46	60	52	55	59	67	33	52	66	35	17	32	51	43.1
	Minimum ...	15	15	25	26	31	25	24	14	15	23	24	28	26	19	20	19	20	23	21	21	23	41	28	29	15	15	19	34	3	− 3	0	20.6
Grant City	Maximum...	25	28	30	34	35	50	43	22	29	33	31	32	34	35	36	42	51	48	45	54	49	51	55	61	36	47	62	52	10	32	44	39.9
	Minimum ...	11	19	23	29	30	26	17	12	21	27	26	25	24	7	29	15	24	26	20	27	38	42	26	36	13	18	36	8	2	− 2	25	21.9
Kansas City (a)	Maximum...	26	33	32	34	36	48	34	26	32	34	46	40	40	55	44	49	56	54	47	59	53	59	64	69	37	51	70	52	14	33	54	44.5
	Minimum ...	15	25	30	32	32	31	19	18	23	30	30	34	27	24	33	24	34	33	26	27	41	40	35	27	18	23	37	11	6	5	29	26.4
Kidder §§	Maximum...	25	30	32	33	34	48	28	24	29	33	38	36	34	48	39	46	53	53	44	58	52	54	53	65	30	49	63	33	11	32	51	40.6
	Minimum ...	14	13	24	25	30	26	26	14	14	23	27	27	28	20	21	20	21	29	21	22	30	39	23	29	15	16	21	31	4	− 1	2	21.1
Lexington §§	Maximum...	29	32	33	35	38	18	31	24	29	35	45	39	40	52	43	49	55	55	49	62	54	60	61	62	32	50	68	45	18	31	52	43.7
	Minimum ...	18	17	28	28	32	30	31	17	17	23	27	29	33	26	26	23	24	30	24	24	32	46	32	33	19	19	23	38	6	2	5	24.6
Maryville	Maximum...	25	27	29	33	33	51	38	22	30	36	35	35	35	41	38	47	55	50	47	56	48	53	59	63	40	53	67	55	16	33	54	42.1
	Minimum ...	10	19	23	27	30	24	17	12	21	27	26	26	26	12	31	14	25	26	21	26	36	41	27	40	14	19	32	11	4	0	27	22.4
Oregon	Maximum...	30	39	31	33	33	53	38	24	30	37	43	39	40	49	43	51	59	56	49	57	50	56	62	64	38	55	69	59	16	34	56	44.9
	Minimum ...	11	19	23	28	30	29	17	14	20	27	26	32	29	23	32	21	32	30	22	31	39	42	31	35	14	20	35	12	5	0	27	24.4
St. Joseph..	Maximum...	26	31	31	33	33	51	33	24	31	35	42	38	36	49	42	48	57	58	46	56	50	56	62	65	33	53	67	51	15	33	55	43.2
	Minimum ...	12	24	28	31	31	30	16	14	22	29	27	32	29	25	29	22	33	30	24	29	40	38	34	22	16	22	35	9	5	3	29	24.8
Trenton	Maximum...	40	30	31	35	36	47	38	21	29	33	33	34	35	39	38	44	46	46	46	56	56	51	56	62	60	47	60	60	12	29	51	42.0
	Minimum ...	15	20	28	30	30	26	21	15	20	27	29	27	26	15	31	17	24	30	22	24	37	45	29	44	16	19	32	11	3	− 2	19	23.5

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

(a) Place of observations changed, Jan 1, 1934; see explanation, page 4, Climatological Data for January 1934.

WBO, St. Louis, 2-21-34—900.

551.05
JMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

19 **MISSOURI SECTION**
ROSCOE NUNN
ST. LOUIS, MO.

JUN 28 1934

VOL. XXXVIII FEBRUARY 1934 NO. 2

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GENERAL SUMMARY

While the temperature for the State as a whole averaged nearly normal (actually, 0.5° below normal), it was marked by strong fluctuations, also by strong contrasts of conditions in one section as compared with another. Mild weather prevailed the first week; the 9th and 10th were unusually cold; the 11th to 17th, very mild; the 19th to the end of the month, very cold, except one or two moderate days. The east-central and southeastern portions of the State averaged decidedly colder, as compared with normal, than the western and northwestern portions; for example, at Kansas City the average was 2.2° above normal, while at St. Louis it was 3.4° below normal.

During the severe cold period of the 26-28th, inclusive, which was introduced with heavy snowfall, temperatures showed strong local differences. At a few stations some of the lowest temperatures ever recorded so late in the winter occurred on the morning of the 27th; for example, 26° below zero at Louisiana, 24° below at Elsberry, 25° below at Bethany, 13° below at Kansas City, 22° below at Farmington, and 20° below at Goodland. The exceedingly cold area around Louisiana (middle northeastern part of the State) and the one around Farmington (middle southeast) were particularly noteworthy, as St. Louis and other stations between the two very cold areas had much less severe cold.

This was the fifth successive month with deficient precipitation. It was unusually light this month in all parts of the State, except two southeastern stations. Total precipitation for the State, for the five months, October 1933 to February 1934, averaged 7.85 inches, whereas the normal average is 11.66 inches. Therefore, the last five months have received only 67 per cent of normal precipitation. The snowfall this month was considerably more than normal and the heaviest February snowfall since 1929.

The period of rain and snow from the 18th to 26th was very beneficial to wheat and pastures. Surface moisture has been sufficient to keep wheat generally in fair to good condition, although subsoil moisture is very deficient. Farm work generally was well advanced at the close of the month.

Rivers and small streams remained unusually low throughout the month. At St. Louis, the average stage was the lowest on record for February (years 1861-1934). There was considerable ice in the rivers the first few days of February and again following the severe cold of the 26-28th, but during most of the month the rivers were unusually free from ice.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 32.5°, or 0.5° below normal. The highest monthly mean was 38.6° at Neosho, and the lowest monthly mean was 27.8° at Kidder. The highest temperature recorded was 79° at Birchtree on the 14th, and the lowest was 26° below zero at Louisiana on the 27th. The greatest daily range was 60° at Chillicothe on the 28th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 1.27 inches, or 0.74 inch less than normal. The greatest local monthly amount was 3.15 inches at Parma, and the least local monthly amount was 0.34 inch at Lucerne. The greatest amount in any twenty-four hours was 2.00 inches at New Madrid on the 25th. The average number of days with 0.01 inch or more of precipitation was 5. The snowfall averaged 7.0 inches, or 1.8 inches more than normal. The greatest monthly snowfall was 20.5 inches at Mexico, and the least, a trace at Campbell and Caruthersville.

(Continued on page 9)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.23	30.82	27	29.78	14	9.3	26	nw.	12	76	57	54	74
Kansas City ...	30.24	30.77	26	29.78	14	9.9	32	nw.	3	75	50	52	69
St. Joseph	30.24	30.72	27	29.82	14	9.3	27	nw.	3	76	48	51	78
St. Louis....	30.23	30.84	27	29.76	12	11.8	28	n.	18	71	56	58	59
Springfield	30.20	30.78	27	29.70	25	10.5	30	n.	18	76	60	62	54
Cairo, Ill.....	30.22	30.85	27	29.72	25	9.6	30	nw.	18	74	55	55	64
Keokuk, Iowa.	30.28	30.83	27	29.74	12	8.7	24	n.	3	74	57	56	72

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	33.0	0.0	73	−17	2.04	+0.03	3.16	0.61	....	7	..	..	..
1889....	29.3	− 3.7	73	− 9	2.57	+0.56	5.97	0.54	....	7	..	..	..
1890....	35.5	+ 2.5	81	− 8	2.24	+0.23	7.00	0.30	....	7	..	..	..
1891....	32.7	− 0.3	78	−13	2.28	+0.27	4.26	1.02	2.4	6	..	..	..
1892....	37.7	+ 4.7	71	2	4.15	+2.14	8.83	1.00	....	9	7	6	16
1893....	27.9	− 5.1	65	−20	1.98	−0.03	5.36	0.20	4.6	6	10	7	11
1894....	30.8	− 2.2	72	−12	2.52	+0.51	7.72	0.65	11.2	6	10	8	10
1895....	23.6	− 9.4	77	−28	0.55	−1.46	1.80	T.	3.3	5	10	10	8
1896....	35.6	+ 2.6	81	−10	1.61	−0.40	4.00	0.22	4.1	5	12	8	9
1897....	34.8	+ 1.8	74	−15	2.30	+0.29	7.88	0.54	8.2	7	7	7	14
1898....	35.4	+ 2.4	78	− 9	1.62	−0.39	3.53	0.21	0.8	5	13	6	9
1899....	20.4	−12.6	72	−32	2.17	+0.16	6.84	0.71	5.3	6	12	8	8
1900....	26.2	− 6.8	70	−16	3.92	+1.91	7.13	1.10	16.6	10	10	6	12
1901....	28.1	− 4.9	76	−19	1.63	−0.38	5.04	0.50	7.6	6	13	7	8
1902....	24.0	− 9.0	72	−17	1.50	−0.51	3.17	0.14	5.5	5	11	8	9
1903....	29.8	− 3.2	74	−25	2.92	+0.91	7.31	0.53	5.8	7	11	6	11
1904....	30.0	− 3.0	82	−18	0.91	−1.10	3.80	T.	1.5	5	11	8	10
1905....	21.5	−11.5	69	−40	1.64	−0.37	3.16	0.47	13.2	8	11	6	11
1906....	33.7	+ 0.7	73	−13	2.28	+0.27	4.40	0.85	4.8	7	15	6	7
1907....	34.8	+ 1.8	77	−15	1.65	−0.36	5.37	0.05	4.5	6	12	5	11
1908....	35.6	+ 2.6	78	− 7	4.32	+2.31	9.35	0.73	4.1	9	13	6	10
1909....	38.8	+ 5.8	71	− 4	3.38	+1.37	8.87	0.45	3.1	9	13	5	10
1910....	28.3	− 4.7	72	−24	1.98	−0.03	6.40	0.07	10.2	6	13	5	10
1911....	38.1	+ 5.1	87	0	3.64	+1.63	7.45	0.85	6.7	8	12	5	11
1912....	28.3	− 4.7	72	−12	2.45	+0.44	4.58	0.64	14.5	6	10	7	12
1913....	29.8	− 3.2	78	− 9	2.21	+0.20	4.78	0.55	8.5	7	12	5	11
1914....	28.3	− 4.7	75	−11	2.71	+0.70	5.23	0.80	14.0	7	12	6	10
1915....	39.4	+ 6.4	72	7	3.18	+1.17	4.94	0.85	4.1	8	9	5	14
1916....	31.4	− 1.6	78	−12	0.98	−1.03	3.00	0.21	5.0	5	13	6	10
1917....	30.5	− 2.5	83	−22	0.41	−1.60	2.76	T.	1.4	2	14	7	7
1918....	34.9	+ 1.9	85	−25	1.11	−0.90	2.15	0.00	0.6	4	15	6	7
1919....	35.3	+ 2.3	71	−10	1.98	−0.03	3.70	0.67	6.4	7	13	4	11
1920....	34.5	+ 1.5	78	− 5	0.57	−1.44	2.94	T.	1.2	4	11	6	12
1921....	40.1	+ 7.1	86	5	0.94	−1.07	5.52	0.02	1.8	4	14	6	8
1922....	35.4	+ 2.4	80	− 5	1.79	−0.22	4.28	0.84	1.9	5	14	6	8
1923....	30.2	− 2.8	75	− 9	1.37	−0.64	4.80	0.10	1.4	5	13	5	10
1924....	33.8	+ 0.8	79	− 5	1.84	−0.17	3.38	0.60	8.1	7	14	4	11
1925....	38.7	+ 5.7	78	1	1.85	−0.16	5.11	0.45	1.7	6	12	6	10
1926....	39.4	+ 6.4	76	− 4	2.08	+0.07	4.39	0.53	2.9	6	11	6	11
1927....	41.3	+ 8.3	78	1	1.08	−0.93	3.26	0.22	2.3	5	10	8	10
1928....	37.0	+ 4.0	73	− 2	2.28	+0.27	4.10	1.03	1.8	7	12	6	11
1929....	25.0	− 8.0	64	−23	1.92	−0.09	5.90	0.53	9.4	7	10	5	13
1930....	44.5	+11.5	89	− 5	1.71	−0.30	4.42	0.39	1.3	4	13	8	7
1931....	40.9	+ 7.9	75	5	2.40	+0.39	5.07	0.45	0.3	6	12	6	10
1932....	42.4	+ 9.4	83	− 3	1.41	−0.60	5.25	0.23	2.0	6	12	7	10
1933....	32.2	− 0.8	78	−22	1.35	−0.66	4.05	0.21	4.2	5	14	7	7
1934....	32.5	− 0.5	79	−26	1.27	−0.74	3.15	0.34	7.0	5	15	6	7
Period.	**33.0**	.....	**89**	**−40**	**2.01**	.....	**9.35**	**0.00**	**5.2**	**6**	**12**	**6**	**10**

Climatological Data for February 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	33.0	+ 3.2	70	14	−17	27	42	0.95	−0.84	0.54	11.6	7	19	4	5	nw.	O. K. Benecke
Clifton Hill	Randolph	781	35	31.4	+ 1.2	70	14	−19	27	39	1.68	+0.25	0.60	20.0	5	15	7	6	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	31.5	− 0.2	74	14	−14	27	39	1.06	−0.98	0.55	9.4	4	16	5	7	nw.	U. S. Weather Bureau
Downing	Schuyler	876	13	28.6	− 3.7	72	14	−13	27	40	0.69	−0.63	0.30	10.2	3	20	5	3	sw.	James Taylor
Elsberry	Lincoln	449	3	28.8	.....	70	14	−24	27	46	1.00	.....	0.45	8.5	4	9	14	5	n.	Ray E. Mills
Fayette	Howard	661	54	33.0	+ 2.4	77	14	−16	27	50	1.00	−0.80	0.30	9.7	6	..	..	..	.....	J. D Settle
Fulton	Callaway	818	46	29.3	− 3.8	76	14	−20	27	52	1.40	−0.36	0.65	8.5	5	17	6	5	n.	Clyde C. Herring
Gorin	Scotland	700	47	...	.....	..	..	....	..	..	0.75	−0.69	0.57	9.0	2	13	12	3	nw.	W. L Harker
Hannibal	Marion	759	42	30.0	+ 0.3	71	14	−10	27	36	0.90	−0.96	0.38	10.9	3	16	6	6	n.	Hannibal Water Dept.
Jefferson City	Cole	557	44	31.6	− 0.5	77	14	− 9	27†	47	1.18	−0.74	0.40	7.5	4	10	9	9	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	45	29.4	+ 2.3	72	14	−12	27	40	1.07	−0.63	0.60	10.8	3	16	4	8	e.	Prof. J S. Stokes
Louisiana	Pike	469	40	29.1	− 1.8	70	14	−26	27	46	0.49	−1.79	....	8.6	3	21	4	3	e.	Stark Bro's Nurseries
Macon	Macon	875	35	28.6	− 1.0	70	14	−10	27	43	0.72	−1.10	0.45	11.5	4	16	8	4	w.	W. C. Brown
Mexico	Audrain	800	45	29.4	− 0.7	73	14	−17	27†	55	1.92	−0.18	1.50	20.5	5	19	4	5	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	....	..	..	1.05	−0.44	....	9.0	3	15	7	6	s.	J. S. Conway
St. Charles	St. Charles	520	46	29.7	− 3.6	75	14	−11	27	46	1.33	−1.16	0.56	8.5	5	17	6	5	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	31.4	− 3.4	72	14	2	27	37	1.26	−1.30	0.59	8.5	6	14	5	9	s.	**Section Center**
St. Louis University	St. Louis City	578	22	30.0	− 2.2	70	14	0	27	35	1.34	−0.60	0.65	9.2	6	17	5	6	nw.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	....	..	..	0.97	−0.96	....	11.0	4	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	36	30.0	+ 0.3	68	14	−16	27	40	1.15	−0.64	0.50	10.0	3	15	9	4	e.	Frank Hall
Unionville	Putnam	1,062	41	30.4	+ 3.7	68	14	−12	27	38	0.90	−0.87	0.50	9.0	2	20	5	3	.....	Geo. W. Davis
Warrenton	Warren	816	52	31.4	+ 0.5	73	14	− 6	27	33	1.45	−0.60	0.50	11.0	4	12	10	6	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	27.5	− 0.8	67	14	− 7	27	36	0.91	−0.64	0.54	8.1	3	13	7	8	n.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**30.2**	**− 0.4**	**77**	**14**	**−26**	**27**	**55**	**1.08**	**−0.72**	**1.50**	**10.5**	**4**	**16**	**7**	**5**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	35.0	.....	71	14	4	27	44	2.31	.....	1.31	T.	7	17	4	7	n.	Jeff. King
Caruthersville	Pemiscot	265	38	38.2	− 2.1	72	14	4	27	36	2.05	−1.57	....	T.	4	14	7	7	.....	Sam Smith
Doniphan	Ripley	344	30	34.9	− 4.4	77	14	2	27	49	1.73	−1.32	0.85	1.7	6	16	2	10	n.	W. W. Martin
Jackson	Cape Girardeau	428	43	34.0	− 2.5	72	14	− 3	27	41	1.24	−1.60	0.46	5.5	4	8	9	11	n.	John G. Putz
Marble Hill	Bollinger	470	39	34.2	− 2.4	77	14	− 6	27	46	1.32	−1.93	0.52	4.0	3	11	7	10	n.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	2.01	−0.93	1.54	2.5	4	16	4	8	n.	John A. Spence
Poplar Bluff	Butler	339	29	33.0	− 5.1	69	14	2	27	46	2.05	−0.86	1.50	1.5	4	20	1	7	e.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	36.6	− 0.6	75	14	3	27	40	1.28	−1.78	0.65	1.8	4	12	8	8	n.	John A. LaFont
Cairo, Ill	Alexander, Ill	356	62	34.5	− 4.0	72	14	4	27	35	2.01	−1.12	1.32	1.3	6	9	7	12	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**35.0**	**− 3.0**	**77**	**14**	**− 6**	**27**	**49**	**1.86**	**−1.12**	**2.00**	**2.0**	**5**	**14**	**5**	**9**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	53	30.3	− 3.8	75	14	−14	27	45	1.51	−1.43	....	4.7	5	17	1	10	w.	Arcadia College
Birchtree (near)	Shannon	1,000	39	34.8	− 1.5	79	14	− 1	27	41	2.02	−0.46	1.30	3.0	4	19	2	7	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	....	..	..	1.56	.....	0.63	5.5	4	18	3	7	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	....	..	..	1.48	.....	0.77	5.0	3	15	6	7	sw.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	30	38.4	+ 2.7	74	14†	9	26†	44	1.35	−0.43	0.42	0.2	5	17	4	7	n.	H. E. Dean
Eldon	Miller	934	39	31.6	− 1.5	77	14	− 8	27	47	1.77	−0.03	0.82	6.1	5	13	9	6	ne.	E. H. Shepherd
Farmington	St. Francois	918	23	32.2	− 4.7	75	14	−22	27	46	1.34	−1.62	0 90	4.5	3	18	7	3	n.	H. O. Miller
Goodland	Iron	1,000	41	31.8	− 2.5	78	14	−20	27	55	1.67	−0.65	0.70	7.3	5	17	4	7	n.	F. M. Adams
Greenville	Wayne	381	25	32.9	− 2.9	74	14	− 8	27	50	0.36	−2.64	0.23	3.0	2	17	5	6	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	....	..	..	1.25	−0.59	0.47	0.5	4	10	9	9	sw.	A. W. Madison
Koshkonong	Oregon	958	33	36.8	− 2.3	76	14	1	27	36	2.03	−0.72	0.80	8.0	5	12	6	10	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	32.5	− 1.9	76	14	− 9	27	49	2.27	−0.02	....	7.5	7	11	6	11	.....	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	36.1	− 0.9	74	14	− 3	27	37	1.62	−0.15	0.50	10.0	6	18	4	6	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	34.0	− 1.1	75	14	− 3	27	37	1.27	−0.95	0.52	3.1	5	14	7	7	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	38.6	+ 1.0	76	14	6	27	45	1.39	−0.85	0.61	T	4	18	4	6	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	33.0	− 3.3	73	14	−11	27	35	1.55	−0.60	0.57	8.0	6	11	6	11	nw.	F. H. Lane
Salem	Dent	1,173	30	32.4[a]	− 3.4	75	14	−17	27	40	1.59	−0.68	0.70	6.5	5	15[a]	4[a]	8[a]	n.	E. E. Martin
Seligman	Barry	1,542	33	38.2[a]	+ 0.7	74	14	5	27	37	1.28	−0.61	0.45	0.5	6	16[a]	3[a]	8[a]	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	28	33.7	− 1.3	74	14	− 9	27	40	1.60	−0.57	....	2.5	6	12	8	8	se.	A. L. Hailey
Springfield	Greene	1,324	46	35.1	− 0.1	74	14	0	27	36	1.38	−0.97	0.54	4.9	7	12	7	9	n.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	33.8	.....	77	14	−10	27	40	1.78	.....	1.08	5.7	6	14	5	9	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**34.2**	**− 1.6**	**79**	**14**	**−22**	**27**	**55**	**1.53**	**−0.74**	**1.45**	**4.6**	**5**	**15**	**5**	**8**	**n.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	35.2	+ 1.3	75	14	− 6	27	40	1.08	−0.70	0.66	3.0	5	10	15	3	ne.	W. G. Bigelow
Clinton	Henry	765	41	34.1	+ 0.5	73	14	−11	27	40	1.62	−0.35	0.80	6.0	5	12	9	7	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	31.4	+ 0.7	78	14	−10	27	51	0.87	−0.99	0.41	5.0	6	14	6	8	nw.	John H. Patterson
Lamar	Barton	980	46	35.8	+ 0.5	75	3	− 1	27	46	1.22	−0.87	0.45	7.2	5	19	4	5	nw	Jesse A. Mann
Lamonte	Pettis	867	33	33.1	− 0.1	76	14	−12	27	42	1.17	−0.72	0.40	10.0	4	14	6	8	nw.	J. E. Wheeler
Marshall	Saline	779	47	34.0	+ 3.1	75	14	− 6	27	39	0.91	−0.83	0.31	9.0	3	20	6	2	nw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	36.2	+ 2.3	73	3†	− 5	27	38	1.75	−0.02	1.00	5.5	4	17	2	9	n.	George A. Kaupp
Warrensburg	Johnson	878	47	34.0	+ 1.5	77	14	− 6	27	43	0.61	−1.42	0.30	8.0	4	18	2	8	ne.	E. A. Markey
Warsaw	Benton	687	33	34.4	− 1.2	76	14	−16	27	49	1.42	−0.91	0.60	5.0	5	15	4	9	n.	Everett Martin
Division means	**and extremes**	.....	..	**34.2**	**+ 1.0**	**78**	**14**	**−16**	**27**	**51**	**1.14**	**−0.74**	**1.00**	**6.5**	**5**	**15**	**6**	**7**	**nw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	30.0	+ 2.5	72	14	−25	27	45	0.50	−0.95	0.30	5.0	2	15	10	3	ne.	A. S. Cumming
Chillicothe	Livingston	779	25	28.4	− 3.6	73	14	−23	27	60	1.48	−0.38	1.36	9.0	3	19	6	3	n.	Wm. J. Olenhouse
Conception	Nodaway	980	45	29.5	+ 1.3	65	3	−14	26	40	0.60	−0.59	0.30	8.0	4	12	12	4	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	31.2°	− 3.1	72	3	−21	27	46	0.57	−0.79	0.30	6.5	6	14	6	8	n.	Fred L. Stiff
Grant City	Worth	1,134	30	29.0	+ 0.4	64	3	−18	27	39	0.61	−0.52	0.40	7.2	4	8	15	5	ne.	Howard Rybolt
Kansas City (a)	Jackson	963	45	33.4	+ 2.2	76	3	−13	27	43	0.81	−0.94	0 48	5.2	5	12	8	8	n.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	27.8	− 0.6	68	31	−12	27	49	0.76	−0.75	0.30	9.7	7	17	4	7	se.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	....	..	..	0.92	−0.41	0 38	9.4	5	18	9	6	nw.	John M. Martin
Lexington	Lafayette	688	49	32.1	+ 1.1	78	14	− 7	27	49	1.29	−0.69	0.73	12.2	7	17	10	1	w.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	31.2	+ 5.4	71	14	−11	27	44	1.14	−0.25	0.75	11.3	6	13	5	10	n.	J. R. Brink
Oregon	Holt	1,048	78	33.2	+ 4.4	72	14	− 9	26	40	1.07	−0.53	0.44	10.5	5	19	3	6	ne.	Mina Wright
St. Joseph	Buchanan	967	24	32.3	0.0	71	14	−10	27	39	0.88	−0.49	....	8.6	5	14	8	6	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	30.0	+ 1.0	68	13	−12	27	38	0.80	−0.29	0.30	7.5	4	18	7	3	sw.	Albert Volker
Trenton	Grundy	822	38	30.8	+ 1.4	70	14	−19	27	41	0.68	−0 85	0.29	8.0	4	18	9	1	n.	W. H. Estes
Division means	**and extremes**	.....	..	**30.7**	**+ 1.0**	**78**	**14**	**−25**	**27**	**60**	**0.86**	**−0.62**	**1.36**	**8.4**	**5**	**15**	**8**	**5**	**n.**	
State means	**and extremes**	.....	..	**32.5**	**− 0.5**	**79**	**14**	**−26**	**27**	**60**	**1.27**	**−0.74**	**2.00**	**7.0**	**5**	**15**	**6**	**7**	**n.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Precipitation for February 1934

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Northeast Plain																																	
Bethel	Mississippi																			.18						**	.89						1.07
Boonville	Missouri																		.14	.30			.02		T.	.37	.12						0.95
Bowling Green	Mississippi	.02																		.15			.02		**	**	**	1.19					1.38
Brunswick	Grand											.05							.15	.08			.03		.07	.54	.03						0.95
Canton	Mississippi																		.08	.27			.03			.51	.15						1.04
Clifton Hill	Chariton											.18							.60				.05		.45	.40							1.68
Columbia***	Missouri								T.		T.	T.							.55			.01	T.	T.	.32	.18							1.06
Downing	Mississippi											T.							.12				T.	T.	.30	.27							0.69
Edina	....do												T.							.18			T.			.49	.14						0.81
Elsberry	....do											T.							.45			.05	T.		.30	.20							1.00
Ewing	....do																		.02	.35						.38	.40						1.15
Farber	....do																			.19			T.			**	.48						0.67
Fayette	Missouri																		.25	.15			.02		.25	.30	.03						1.00
Fulton	....do																		.36	.29		T.	.05	.05		.65							1.40
Gorin	Mississippi											T.							T.	.18			T.		.57	T	T.						0.75
Hannibal	....do											T.							.15				T.		.38	.37	T.						0.90
Hermann	Missouri	.01										T.							.02	.55			.12		T.	.37	.01						1.08
Jefferson City	....do																		.32	.40					T.	.16	.30						1.18
Kahoka	Mississippi											T.							.10	.10						**	.60						0.80
Kirksville	....do																		.07				T.		.60	.40							1.07
Linneus	Grand										.02							**	.10			T.		T.	**	**	1.00						1.12
Louisiana	Mississippi																		.05				T.		**	.44	T.						0.49
Lucerne	Grand											T.							.02						T.	.32							0.34
Macon	Chariton											T.							.20	.03			T.		.04	.45	T.						0.72
Memphis	Mississippi											T.							T.	.10			T.	T.		.54	.06						0.70
Mexico	....do	.02											T.							.20			.05		T	.15	1.50						1.92
Milan	Grand											.08							.10	T.					.02	1.05	.30						1.55
Monroe City	Mississippi																		.30						**	.75							1.05
New London	....do	.11																		.14			.13			**	.84						1.22
Palmyra	....do	.03																		.23						.28	.35						0.89
Paris	....do																			.24			.02			.42	.30						0.98
Perry	....do																		T.	.30						**	.70						1.00
Philadelphia	....do											T.							T.	.30						.36	.40						1.06
St. Charles	Missouri											.07								.56			.08			.54	.08	T.					1.33
St. Louis***	Mississippi										T.	.08							.43			.02	.02		.55	.16	T						1.26
St. Louis University*	....do											.05							.41			.01	.05		.65	.17							1.34
Shelbina	....do																		.22				T.		**	**	.75						0.97
Stellenville	....do											T.							.35					T.	.50	.30							1.15
Troy	....do	T.																		.38			.11			.40	.01						0.90
Union	Meramec	T.										.05								.66			.14			.56							1.41
Unionville	Chariton																		T.	T				T.	.40	.50							0.90
Valley Park	Meramec	T.										.10								.64			.10			.58	.03						1.45
Warrenton	Mississippi																		.45	T.		.10	T.		.50	.40							1.45
West Ely	....do	02										T								.41	.03					.77	.14						1.37
Winfield	....do																			.43	.38		.18	.19		**	.50						1.68
Keokuk, Ia.***	....do											T.						T.	.24			T.		T.	.36	.31	T.						0.91
Southeast Lowlands																																	
Bragg City	St. Francis																																
Campbell	....do											.03							.18	.05		.03	.71		.40	.91							2.31
Cape Girardeau	Mississippi											T.	.02							.19			.10			1.10	.06						1.47
Caruthersville	....do																					**	.50		**	1.55							2.05
Dexter	St. Francis											T								.15			.42			1.24							1.81
Doniphan	Black											.04							.04			.09			.85	.69			.02				1.73
Fisk	St. Francis																			.11			.13			.42		T	T.				0.66
Jackson	Mississippi											.05							.32				T.		.41	.46							1.24
Marble Hill	....do											T.							.52						.30	.50							1.32
Morehouse	....do											.08							.19	T.	T.	T.	1.54		.20	T.							2.01
New Madrid	....do											.03								.18			.41			2.00	.26						2.88
Parma	St. Francis																			.43			.80			1.92							3.15
Poplar Bluff	Black											.05								.10			.40			1.50							2.05
Sikeston	Mississippi											.03							.18			.42			.65								1.28
Cairo, Ill.***	....do										T.	.03							.16			.28	.20		.52	.82	T.						2.01
Ozark Plateau																																	
Arcadia	St. Francis	T.										.03	T.							.34			.25		T.	**	.89						1.51
Birchtree (near)	Black																					.40	.32		.30	1.00							2.02
Buffalo	Osage																		.10	.63			.28			.55							1.56
Caplinger Mills	....do																		.77	T.		.20			T.	.51	T.						1.48
Dean	Neosho											T							.25			.38	.12		.18	.42							1.35
Eldon	Missouri																		.82	.38			.13			.27	.17						1.77
Farmington	St. Francis											T.							.32		T.	T.			.90	.12							1.34
Fredericktown	....do																			.35			.10			1.00	.03						1.48
Galena	White																		.15			.08	.27			.29							0.79
Goodland	Black											.15							.40			.80			.70	.12							1.67
Greenville	St. Francis																		T						.13	.23							0.36
Hailey	White																		.24				.47		.18	.36							1.25
Koshkonong	Black																						.38	.28	.49	.80			.08				2.03
Lakeside	Osage																																
Lebanon	....do		T.						T.	.08		.03							.54	.45		.04	.15		.10	.38	.05						1.74
Leeper	Black											T.							.76	.15		.18	T.			**	.94	.16						2.27
Lockwood	Osage											T.								.05			.28			1.45	T.						1.78
Mountain Grove	White						T.				T.	.05							.50			.49	.10		.40	.08							1.62
Neosho	Neosho										T.	T.							.13	T.		.35	.14		.13	.52							1.27
Owensville	Gasconade	.17										T.							.61			.32	T.		.16	.30							1.39
Rolla	Meramec	.04										.11							.51	.77			.11	T.	.70	.10							2.47
St. Thomas (near)	Osage											T.							.32	.34			.24			.57	.04						1.55
Salem	Meramec											.05							.45	.53			.02		.16	.30	.02						1.53
Seligman	Neosho										T.	.02							.43	T.		.32			.70	.12							1.59
Seymour (near)	White											.08							.27			.08	.20		.20	.45							1.28
Springfield	....do											.06							.24			.28	.04		**	.98							1.60
Stover	Missouri										.01	.08						T.	.40			.25	.02		.35	.27	T.						1.38
Versailles	Osage																			.62			.06			.18							0.86
Williamsville	Black											.08							1.08	.06			.13		.31	.20	.01						1.78
Willow Sprgs. (near)	White											.05							.06				.36			.89	.30						1.69
Southwest Plain																							.44			.92							1.47
Appleton City	Osage						T.		T.			T.							.66			.03	.02		.26	.11							1.08
Clinton	....do																		.80			.10	.10		.50	.12							1.62
Concordia	Missouri											T.						T.	T.						**	**	.80						0.80
Harrisonville	Osage											.02							.41	.03			.02		**	.39							0.87

Continued on next page

Daily Precipitation for February 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Southwest Plain—Concluded																															
Joplin ‖	Neosho						.06												.49			.34	.01		.27	.50						1.67
Lamar ‖	do											T.							.45	T.		.12	.05		.25	.35						1.22
Lamonte	Missouri											T							.40				.12		.40	.25						1.17
Marshall	do											T.							.31			T.		T.	.30	.30						0.91
Nevada	Osage																		1.00			T.	.07		.62	.06						1.75
Warrensburg	Missouri																		.25				.03		.30	.03						0.61
Warsaw	Osage																		.60			.35	.05		.32	.10						1.42
Waverly ‖	Missouri											T.							.10	T.			.02		.04	.36	.07					0.59
Northwest Plateau																															
Bethany	Grand											T.							T.			T.			.30	.20						0.50
Chillicothe ‖	do											.04							.08				T		T.	1.36						1.48
Conception	Missouri											.05							T			.05		T.	.30	.20						0.60
Edgerton	do											.09							.02			.01	.05		.30	.10	T.					0.57
Gallatin ‖	Grand											.04							.02	.04					.10	.45	.08					0.73
Grant City	do											.02						T.	.04			T.	T		.40	.15						0.61
Kansas City***(a)	Missouri								T.			.09							.11			.03	T.	T.	.46	.12	T.					0.81
Kidder ‖	Grand											.08							.02	.02			.04		.15	.30	.15					0.76
King City	Missouri											.11							.05				.03		.35	.38						0.92
Lexington ‖	do											.04							.08	.22			.06		.11	.73	.05					1.29
Maryville ‖	do											.02						T.	.13				.06		.13	.75	.05					1.14
Oregon	do											.07							.10			.06			.44	.40						1.07
St. Joseph***	do								T.			.04						T.	.06			.03		T.	.51	.24	T.					0.88
Tarkio	do											T							.25			.10			.30	.15						0.80
Trenton	Grand											T.							.12			.01			.29	.26						0.68

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated
(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for February 1934
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Lakeside (Osage Dam)	Evaporation							.034	.061					.016	.078	.129	.124	.111	.062														
	Mean temperature	36	44	46	37	38	35	43	29	26	24	30	42	42	52	44	44	44	36	20	26	30	28	30	23	17	11	8	15	..	..	..	32.2
	Wind movement	111	72	65	106	44	82	39	43	110	108	66	63	72	53	53	47	66	85	113	73	73	79	67	74	111	117	76	130	..	..	..	2,198

Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.

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MISCELLANEOUS PHENOMENA

Duststorms.—3d, 4th, 11th, 12th.

Fogs.—Dense, 1st, 18th, 26th, 27th.

Halos.—Solar, 17th, 20th, 21st, 26th; lunar, 4th, 11th, 19th, 27th, 28th.

Sleet.—6th, 10th, 11th, 18th, 21st, 24th, 25th.

Smoke.—Dense, 27th.

Thunderstorms.—Local, 22d, 24th, 25th.

Windstorms.—No damaging winds reported.

Glaze.—Freezing rain coated roads and all exposed surfaces on the 10th in various sections, particularly severe in the Springfield area, and on the morning of the 25th at Cairo, Ill., and in Southeastern Missouri.

Daily Temperatures for February 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	50	57	68	68	48	42	52	49	38	36	51	55	60	70	66	59	56	55	28	39	43	43	32	31	17	15	21	37	..	..	..	45.9
	Minimum ...	23	28	26	27	26	26	25	24	14	12	23	33	25	31	37	27	27	22	7	14	30	16	19	12	10	−3	−17	17	..	..	..	20.0
Columbia.	Maximum...	40	57	63	44	46	38	59	33	27	31	46	54	58	74	53	59	58	51	23	37	40	31	32	21	14	12	25	38	..	..	..	41.6
	Minimum ...	26	34	32	30	28	25	30	22	15	12	28	34	27	35	32	29	29	16	8	14	26	22	21	14	10	−1	−14	15	..	..	..	21.4
Fayette	Maximum...	49	60	68	45	47	32	62	35	30	37	51	57	60	77	57	63	59	42	19	41	44	34	34	23	19	10	21	41	..	..	..	43.5
	Minimum ...	24	32	32	32	32	30	34	30	18	12	26	36	27	27	27	39	24	29	30	7	14	31	20	20	15	10	−2	−16	14	..	..	22.4
Hannibal	Maximum...	44	51	55	54	44	40	46	38	26	35	47	50	50	71	62	50	52	52	32	35	38	37	26	22	16	12	21	37	..	..	..	40.8
	Minimum ...	20	31	25	29	28	22	24	21	8	8	26	36	22	35	35	30	24	21	6	9	27	17	15	8	10	−1	−10	11	..	..	..	19.2
Jefferson City §§	Maximum...	43	59	62	48	49	45	62	32	28	36	45	55	58	77	57	62	60	47	26	36	38	34	37	24	17	15	23	38	..	..	..	43.3
	Minimum ...	24	27	27	29	27	25	26	26	9	9	13	33	27	33	40	30	27	32	8	8	17	22	21	20	13	2	−9	−9	..	..	..	19.9
Kirksville.	Maximum...	47	51	61	56	43	43	46	35	27	37	54	50	55	72	62	54	52	49	26	39	40	33	27	23	14	11	20	37	..	..	..	41.6
	Minimum ...	19	26	25	27	27	23	23	14	9	6	20	35	23	32	30	30	23	19	5	9	25	14	10	5	6	−1	−12	7	..	..	..	17.1
Louisiana	Maximum...	45	50	55	52	45	42	45	37	27	33	42	50	53	70	53	50	48	42	22	35	40	30	29	15	15	12	20	35	..	..	..	39.0
	Minimum ...	25	22	20	31	27	22	20	24	9	7	29	30	28	30	39	24	30	40	9	6	25	20	14	12	12	−2	−26	12	..	..	..	19.2
Macon §§	Maximum...	41	53	62	44	46	41	52	34	26	35	49	52	56	70	52	56	55	31	25	37	41	29	28	10	15	10	27	38	..	..	..	39.8
	Minimum ...	20	22	25	26	28	25	23	21	10	8	14	31	24	27	34	31	25	29	5	9	20	15	14	9	8	−5	−10	0	..	..	..	17.4
Mexico §§	Maximum...	40	59	61	47	50	42	54	34	29	27	48	57	55	73	55	59	60	45	24	38	41	33	34	15	15	15	25	38	..	..	..	41.9
	Minimum ...	23	23	26	27	28	23	24	24	10	8	9	25	26	25	36	27	25	26	5	10	17	18	19	15	10	−1	−17	−17	..	..	..	16.9
St. Louis	Maximum...	39	56	53	50	49	38	51	34	24	31	40	53	50	72	56	45	52	49	21	33	41	34	34	24	19	15	20	35	..	..	..	39.9
	Minimum ...	29	28	31	33	31	28	29	19	10	11	28	34	32	35	36	30	28	20	12	14	32	21	22	15	13	6	2	9	..	..	..	22.8
Unionville	Maximum...	48	48	65	60	47	46	48	45	38	40	55	56	63	68	63	50	54	50	25	46	40	30	28	30	12	8	16	35	..	..	..	43.4
	Minimum ...	23	27	27	28	27	20	23	10	10	8	23	34	33	34	30	30	26	18	5	10	23	12	5	6	5	−7	−12	8	..	..	..	17.4
Warrenton	Maximum...	38	54	57	55	46	41	53	44	28	33	42	52	52	73	65	55	55	51	24	32	37	33	31	29	15	14	19	35	..	..	..	41.5
	Minimum ...	25	27	26	29	28	24	25	26	10	9	28	32	34	40	40	32	24	24	7	10	30	19	18	12	13	2	−6	9	..	..	..	21.3
Southeast Lowlands																																	
Campbell	Maximum...	47	65	54	52	56	43	55	48	40	31	31	59	59	71	64	62	61	55	43	40	45	41	41	35	33	22	20	34	..	..	..	46.9
	Minimum ...	22	21	24	35	24	26	21	29	15	17	27	23	24	30	39	25	27	40	17	11	25	30	20	25	18	11	4	15	..	..	..	23.0
Caruthersville	Maximum...	45	64	62	54	54	52	55	55	46	34	35	57	55	72	70	59	60	59	35	38	47	43	49	38	34	25	23	37	..	..	..	48.5
	Minimum ...	36	28	29	39	29	29	29	39	21	22	25	27	30	39	42	32	33	35	23	16	29	34	25	31	24	15	4	19	..	..	..	28.0
Doniphan	Maximum...	49	67	57	51	59	50	58	48	38	28	36	60	62	77	65	61	57	49	40	41	44	46	43	35	32	22	25	34	..	..	..	47.6
	Minimum ...	23	21	25	34	21	25	20	30	18	20	26	20	22	28	38	22	34	30	18	11	23	20	18	26	21	11	2	16	..	..	..	22.2
Jackson	Maximum...	41	54	54	49	54	48	54	50	37	33	35	56	52	72	66	54	56	52	44	37	47	45	39	36	24	21	23	33	..	..	..	45.2
	Minimum ...	21	21	22	36	25	27	25	30	14	13	29	22	26	31	39	23	24	43	17	13	29	26	18	23	19	11	−3	14	..	..	..	22.8
Poplar Bluff	Maximum...	45	67	55	48	49	47	52	52	28	30	31	53	58	69	57	57	57	46	35	38	38	38	43	30	30	22	22	32	..	..	..	43.9
	Minimum ...	20	21	24	34	23	23	21	27	16	18	28	21	23	30	30	24	28	35	17	12	26	29	18	24	20	9	2	15	..	..	..	22.1
Sikeston	Maximum...	45	64	64	63	54	55	57	57	46	31	33	58	58	75	74	59	58	57	43	43	47	47	38	38	26	32	21	33	..	..	..	49.1
	Minimum ...	25	24	27	26	26	25	27	29	11	10	29	24	29	35	42	30	28	42	18	12	22	29	21	26	22	12	3	17	..	..	..	24.0
Cairo, Ill.	Maximum...	43	62	52	48	53	45	54	47	27	34	33	56	52	72	59	52	58	51	28	36	47	38	37	32	32	19	22	34	..	..	..	43.7
	Minimum ...	27	27	30	35	29	30	31	23	16	15	28	27	34	40	40	31	30	26	17	15	32	29	25	24	19	8	4	17	..	..	..	25.8
Ozark Plateau																																	
Arcadia §§	Maximum...	42	60	55	48	53	48	55	37	30	28	40	55	56	75	60	57	52	47	30	36	39	36	35	22	20	20	23	32	..	..	..	42.5
	Minimum ...	19	22	22	22	23	25	23	29	14	11	13	26	30	30	40	22	23	23	14	11	13	24	11	15	19	8	−14	−11	..	..	..	18.1
Birchtree	Maximum...	44	63	55	50	59	48	58	52	35	33	39	56	55	79	61	65	60	59	32	39	35	35	41	35	30	30	22	30	..	..	..	46.4
	Minimum ...	27	23	26	33	30	28	24	32	11	16	26	26	32	38	41	24	29	28	17	13	29	19	17	23	17	8	−1	13	..	..	..	23.2
Eldon §§	Maximum...	42	59	65	46	49	45	63	32	32	32	45	55	60	77	56	62	62	43	25	42	35	33	37	23	14	14	25	39	..	..	..	43.3
	Minimum ...	24	27	28	30	27	25	20	27	12	12	12	30	30	30	39	29	28	27	9	8	20	22	20	21	14	3	−8	−7	..	..	..	20.0
Farmington	Maximum...	37	60	55	45	52	45	55	48	35	30	36	55	54	75	65	56	53	48	34	34	40	36	35	28	25	20	24	37	..	..	..	43.5
	Minimum ...	19	22	22	35	25	28	28	32	12	8	20	24	32	35	35	22	22	34	9	11	30	28	14	17	14	9	−22	20	..	..	..	20.9
Koshkonong	Maximum...	45	65	58	52	57	50	60	48	49	28	36	57	58	76	65	65	60	56	33	43	37	36	43	35	30	19	26	32	..	..	..	47.1
	Minimum..	29	29	32	35	28	30	39	39	18	18	25	28	32	41	47	35	31	32	18	14	30	28	21	26	18	8	1	14	..	..	..	26.6
Lebanon §§	Maximum...	51	60	61	48	53	45	61	36	43	34	42	56	54	76	58	68	58	43	28	40	34	34	41	21	25	11	25	36	..	..	..	44.4
	Minimum ...	27	24	27	28	26	30	27	24	17	15	16	28	27	27	31	28	34	26	11	14	24	24	18	18	15	5	−9	−6	..	..	..	20.6
Mountain Grove	Maximum...	46	62	56	52	54	46	59	49	38	30	41	54	58	75	62	64	57	50	33	39	34	34	43	30	29	18	22	27	..	..	..	45.1
	Minimum ...	27	29	31	30	24	26	29	29	16	14	24	27	28	42	42	27	30	21	12	15	30	22	15	24	11	5	−3	14	..	..	..	22.9
Neosho	Maximum...	45	65	70	69	70	56	58	58	44	41	40	56	64	76	74	68	68	64	31	46	45	40	43	42	35	18	37	38	..	..	..	52.2
	Minimum ...	25	28	29	32	25	28	28	27	27	23	30	27	22	40	36	25	30	25	14	18	32	26	21	29	15	7	6	25	..	..	..	25.0
Rolla	Maximum...	38	57	57	54	49	43	59	53	31	31	39	53	54	73	65	60	58	55	26	37	35	33	34	33	21	15	22	35	..	..	..	43.6
	Minimum ...	30	25	26	31	28	25	28	28	15	12	26	29	28	38	42	28	29	25	11	15	31	22	18	20	14	6	−11	11	..	..	..	22.5
Springfield	Maximum...	40	61	68	53	48	49	60	48	36	28	38	52	59	74	58	63	61	55	29	39	36	32	39	32	30	12	24	31	..	..	..	44.8
	Minimum ...	38	34	36	31	31	28	34	27	19	17	25	27	33	47	41	34	34	19	12	20	31	22	23	26	8	4	0	18	..	..	..	25.4
Southwest Plain																																	
Appleton City	Maximum...	45	64	74	64	50	44	61	55	32	36	47	57	63	75	65	64	67	61	25	40	39	37	35	34	22	12	24	34	..	..	..	47.4
	Minimum ...	28	31	34	28	25	26	27	27	19	16	27	29	28	36	33	27	31	22	9	17	32	20	21	22	11	0	−6	20	..	..	..	23.0
Clinton	Maximum...	42	60	60	57	48	52	58	48	36	38	42	42	62	73	65	67	62	57	23	40	42	38	30	30	20	16	23	37	..	..	..	45.3
	Minimum ...	28	32	28	30	26	26	27	27	18	15	28	32	28	38	40	27	29	23	10	17	31	20	21	20	12	0	−11	18	..	..	..	22.9
Harrisonville §§	Maximum...	45	64	75	44	51	46	63	31	34	38	53	57	65	78	59	65	68	31	28	43	44	33	31	20	12	15	26	33	..	..	..	44.7
	Minimum ...	24	24	31	25	25	23	25	24	15	13	14	29	25	27	38	27	27	29	6	7	24	10	10	16	9	−4	−10	−2	..	..	..	18.2
Lamar §§	Maximum...	47	64	75	48	51	55	62	37	40	38	43	59	64	74	60	70	70	48	29	42	40	34	44	39	20	16	32	40	..	..	..	47.9
	Minimum ...	29	28	35	31	26	26	29	30	22	18	18	30	28	28	40	28	31	37	14	14	27	23	22	26	15	4	−1	3	..	..	..	23.6
Lamonte	Maximum...	41	59	71	46	46	46	61	41	32	41	49	54	62	76	63	61	63	53	26	40	42	34	33	27	17	11	29	38	..	..	..	45.1
	Minimum ...	25	31	29	27	25	24	27	25	16	13	27	29	27	35	38	26	28	20	5	13	33	18	20	16	10	−2	−12	17	..	..	..	21.1
Marshall	Maximum...	47	58	70	66	46	44	59	55	33	36	48	54	61	75	68	60	60	55	26	38	43	39	32	29	17	15	22	37	..	..	..	46.2
	Minimum ...	25	31	31	27	27	26	27	25	15	13	26	32	27	37	37	31	29	21	8	13	32	18	21	14	10	−2	−6	16	..	..	..	21.8
Nevada	Maximum...	45	63	73	60	43	45	62	51	35	41	44	54	64	73	61	65	69	61	26	44	41	38	41	34	28	14	27	37	..	..	..	47.8
	Minimum ...	27	35	35	30	24	27	31	26	21	16	31	32	27	41	38	32	32	23	10	19	32	21	21	26	12	0	−5	22	..	..	..	24.5
Warrensburg	Maximum...	45	60	73	66	48	47	62	51	33	40	49	55	62	77	66	62	64	57	28	40	42	39	33	32	19	14	25	35	..	..	..	47.3
	Minimum ...	25	31	30	27	25	24	26	24	14	12	26	30	26	36	38	29	27	19	6	12	29	17	18	15	9	−4	−6	16	..	..	..	20.8
Warsaw	Maximum...	43	61	74	67	50	44	63	56	35	36	46	55	61	76	69	63	65	60	27	40	40	37	39	34	23	16	28	37	..	..	..	48.0
	Minimum ...	28	30	25	27	21	24	22	27	12	14	28	31	24	42	31	22	30	24	9	14	31	20	16	20	13	−1	−16	17	..	..	..	20.9
Northwest Plateau																																	
Chillicothe §§	Maximum...	43	55	69	46	45	45	54	34	30	36	54	54	63	73	54	59	57	29	30	43	43	32	29	15	10	12	23	39	..	..	..	42.0
	Minimum ...	20	19	26	25	25	24	23	26	12	11	11	26	24	24	28	26	24	24	3	3	17	13	14	9	6	−7	−23	−21	..	..	..	14.7
Grant City	Maximum...	45	52	64	54	35	38	40	40	29	30	50	56	55	62	62	50	49	49	29	39	39	30	27	20	9	11	21	36	..	..	..	40.0
	Minimum ...	19	31	38	25	27	23	25	19	13	14	26	34	23	30	30	30	24	15	5	10	23	10	11	7	5	−11	−18	12	..	..	..	17.9
Kansas City (a)	Maximum...	45	59	76	45	45	49	60	35	33	37	52	53	66	74	53	60	67	56	28	44	43	32	31	23	14	11	26	34	..	..	..	44.7
	Minimum ...	25	33	33	29	26	26	30	26	18	18	29	35	29	37	33	30	29	18	11	21	23	16	22	12	9	−8	−13	24	..	..	..	22.2
Kidder §§	Maximum...	40	54	68	44	41	43	51	34	29	35	51	53	61	68	50	58	57	25	28	43	42	28	27	11	12	8	22	39	..	..	..	40.1
	Minimum ...	20	21	29	26	26	22	20	23	11	12	13	22	25	26	33	23	23	24	6	5	19	11	13	9	6	−9	−12	−10	..	..	..	15.6
Lexington §§	Maximum...	45	61	75	42	48	48	60	37	32	38	57	57	64	78	56	62	63	31	30	40	44	32	31	17	19	16	27	37	..	..	..	44.5
	Minimum ...	23	24	32	26	26	25	27	25	15	14	15	29	29	29	38	32	27	28	8	10	24	16	17	15	10	−4	−7	−1	..	..	..	19.7
Maryville	Maximum...	46	54	66	57	40	47	50	40	34	42	56	54	67	71	61	58	56	49	31	44	40	30	25	22	14	13	25	37	..	..	..	43.9
	Minimum ...	19	32	28	23	27	22	27	21	14	16	25	32	23	34	29	27	25	17	4	16	24	10	14	9	5	−10	−11	13	..	..	..	18.4
Oregon	Maximum...	46	57	71	57	41	49	54	39	37	44	57	53	68	72	54	62	57	53	33	45	42	31	32	21	14	15	26	36	..	..	..	45.2
	Minimum ...	21	36	36	24	29	24	30	24	15	16	27	35	28	41	32	33	28	18	6	19	22	11	19	10	6	−9	−5	19	..	..	..	21.2
St. Joseph.	Maximum...	41	56	69	41	42	46	55	35	32	40	54	53	67	71	52	59	61	48	30	46	43	29	28	19	16	11	24	36	..	..	..	43.0
	Minimum ...	23	38	34	26	27	26	30	24	15	17	29	36	28	36	36	34	29	16	9	18	20	14	19	8	6	−4	−10	20	..	..	..	21.6
Trenton	Maximum...	49	48	67	64	39	42	45	45	32	37	52	51	60	70	66	57	50	50	29	39	41	31	30	23	13	10	20	38	..	..	..	42.8
	Minimum ...	20	29	26	26	26	26	25	22	14	12	25	37	23	30	31	28	25	21	6	14	26	14	16	9	8	−6	−19	9	..	..	..	18.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

(a) Place of observations changed, Jan 1, 1934; see explanation, page 4, Climatological Data for January 1934.

WBO, St. Louis, 3-19-34—900.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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VOL. XXXVIII MARCH 1934 No 3

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GENERAL SUMMARY

The month will be remembered as a rather cold March. There were brief intervals of mild, spring-like weather, but a persistent tendency to subnormal temperatures characterized the month. Relatively, it was not quite so cold in the northwestern counties as in other sections of the State, the Northwest Plateau averaging 1.8° colder than normal, while the State as a whole averaged 2.4° below normal. The lowest temperatures occurred about the 9-10th, when 3° below zero was registered at Downing and Steffenville and near zero, or slightly above, at several other stations in the upper northern counties. No severe cold occurred in the second half of the month, but freezing temperatures were registered as late as the 31st. The continued subnormal temperature conditions were beneficial in preventing undue advancement of fruit buds.

Precipitation for the State as a whole was again considerably less than normal. This was the sixth successive month with deficient precipitation. The normal precipitation for the State for the six months, October 1933 to March 1934, is 14.80 inches, but the actual amount received was 10.21 inches, or 69 per cent of the normal. The March precipitation was very light in the Northwest Plateau, averaging only 0.47 inch, as compared with a normal of 2.17 inches. In the Southeast Lowlands the average was 5.20 inches, or 0.49 inch more than normal. In the other three divisions of the State the precipitation was decidedly less than normal. Snowfall averaged more than usual for March at most stations, but it was unusually light in the northwestern counties.

The precipitation was well distributed through the month and came mostly in the form of gentle rains or snow, with the result that a high percentage of it soaked in the ground. However, subsoil moisture continued decidedly deficient over most of the State.

Vegetation, at the end of March, was somewhat backward. Wheat and other winter grains and pastures were good where moisture was sufficient. Farm work was well up as a rule. Oat sowing was about two-thirds done. Potatoes and early gardens were mostly planted. Preparation of land for corn was well along for this date. Fruit prospects were mostly satisfactory, except for peaches, which had been killed the last of February in large areas.

The principal rivers and most small streams remained low. At St. Louis the average stage for March was the lowest March average on record (years 1861-1934). During the first few days of the month there was considerable ice in the Missouri and the Mississippi rivers. An ice gorge in the Missouri caused a local flood in the vicinity of Iatan and Bean Lake, Platte County, about March 5-7th, inundating 8,280 acres of land, and causing total losses estimated at about $28,589.41.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 41.2°, or 2.4° below normal. The highest monthly mean was 48.4° at Caruthersville, and the lowest monthly mean was 35.9° at Kidder. The highest temperature recorded was 82° at Edgerton and St. Joseph on the 20th, and the lowest was 3° below zero at Downing and Steffenville on the 10th. The greatest daily range was 64° at Jefferson City on the 20th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 2.36 inches, or 0.78 inch less than normal. The greatest local monthly amount was 7.78 inches at Bragg City, and the least local monthly amount was 0.05 inch at Bethany.

(Continued on page 14)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.17	30.61	9	29.62	4	10.0	27	n.	26	78	52	58	64
Kansas City ...	30.14	30.70	9	29.52	4	12.0	32	n.	13	75	52	50	64
St. Joseph	30.14	30.69	9	29.53	17	9.9	28	n.	13	73	46	46	64
St. Louis	30.14	30.56	14	29.64	4	12.7	35	sw.	12	74	51	56	51
Springfield	30.12	30.59	10	29.67	4	11.3	25	nw.	9	80	60	61	54
Cairo, Ill.....	30.14	30.51	14	29.69	4	11.2	31	n.	9	78	57	55	62
Keokuk, Iowa.	30.18	30.61	14	29.61	5	9.5	30	nw.	5	72	54	62	57

COMPARATIVE DATA FOR MARCH

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	38.5	− 5.1	90	1	4.02	+0.88	7.67	1.76	....	10	..	..	..
1889....	44.3	+ 0.7	84	13	1.98	−1.16	5.92	0.09	....	5	..	..	..
1890....	37.3	− 6.3	79	−11	2.61	−0.53	14.20	0.77	5.7	8	..	..	..
1891....	36.6	− 7.0	78	−11	3.01	−0.13	5.88	1.00	7.1	10	..	..	..
1892....	38.9	− 4.7	87	5	3.11	−0.03	5.75	1.08	....	8	8	10	13
1893....	40.5	− 3.1	86	0	2.86	−0.28	5.10	1.10	3.2	7	11	10	10
1894....	47.7	+ 4.1	89	2	2.93	−0.21	7.97	0.39	0.2	6	15	9	7
1895....	42.4	− 1.2	98	0	2.14	−1.00	5.47	0.19	4.4	9	14	7	10
1896....	39.2	− 4.4	82	2	2.05	−1.09	8.70	0.52	5.2	8	11	9	11
1897....	44.2	+ 0.6	82	− 5	6.07	+2.93	15.23	1.51	1.0	12	9	9	13
1898....	44.7	+ 1.1	83	9	7.09	+3.95	15.48	1.63	0.6	11	11	7	13
1899....	37.4	− 6.2	78	− 8	2.93	−0.21	7.03	1.09	8.9	10	9	11	11
1900....	40.4	− 3.2	88	− 4	1.48	−1.66	3.41	0.40	0.2	6	15	9	7
1901....	42.7	− 0.9	85	− 1	3.74	+0.60	6.28	1.96	1.8	8	11	8	12
1902....	45.3	+ 1.7	85	1	3.49	+0.35	7.67	0.46	0.8	9	10	10	11
1903....	46.8	+ 3.2	81	9	3.35	+0.21	8.63	0.85	1.1	8	13	7	11
1904....	44.8	+ 1.2	87	8	4.14	+1.00	11.49	1.48	1.2	9	11	9	11
1905....	50.8	+ 6.7	88	10	2.99	−0.15	7.08	0.23	T.	8	11	8	12
1906....	34.6	− 9.0	75	− 5	3.93	+0.79	8.83	1.43	8.6	11	6	7	18
1907....	53.9	+10.3	95	16	2.82	−0.32	5.68	1.15	1.0	7	14	7	10
1908....	50.1	+ 6.5	89	14	2.58	−0.56	6.65	0.34	1.0	7	14	7	10
1909....	44.5	+ 0.9	81	9	3.07	−0.07	6.97	0.60	0.6	6	13	9	9
1910....	55.8	+12.2	96	15	0.66	−2.48	3.17	0.00	0.1	2	20	7	4
1911....	46.8	+ 3.2	91	5	1.85	−1.29	3.37	0.18	1.4	5	16	8	7
1912....	35.2	− 8.4	89	− 4	4.62	+1.48	7.83	0.99	16.5	11	12	6	13
1913....	40.6	− 3.0	84	−12	4.36	+1.22	8.83	1.52	5.0	9	12	8	11
1914....	43.2	− 0.4	87	− 2	2.75	−0.39	5.80	0.91	4.7	8	13	7	11
1915....	36.4	− 7.2	70	6	1.50	−1.64	3.67	0.35	7.9	6	7	8	16
1916....	47.0	+ 3.4	95	− 2	2.53	−0.61	5.45	0.17	3.1	7	14	8	9
1917....	45.2	+ 1.6	86	− 7	2.91	−0.23	6.22	0.76	1.5	7	15	7	9
1918....	50.9	+ 7.3	95	8	0.94	−2.20	3.80	T.	0.1	4	18	6	7
1919....	46.3	+ 2.7	90	− 2	2.40	−0.74	8.67	0.37	0.7	6	15	8	8
1920....	44.6	+ 1.0	86	− 6	5.01	+1.87	9.10	1.35	1.4	8	15	6	10
1921....	51.9	+ 8.3	90	11	4.69	+1.55	11.23	0.65	0.5	10	13	9	9
1922....	45.6	+ 2.0	80	3	6.46	+3.32	13.29	1.45	2.2	12	11	6	14
1923....	40.4	− 3.2	83	−11	4.12	+0.98	8.30	1.57	2.3	8	14	6	11
1924....	38.4	− 5.2	80	8	2.55	−0.59	5.58	1.14	9.4	8	8	8	15
1925....	47.7	+ 4.1	86	− 5	1.95	−1.19	5.16	0.10	0.8	5	17	8	6
1926....	39.6	− 4.0	83	8	2.89	−0.25	5.53	0.74	7.0	8	13	6	12
1927....	45.9	+ 2.3	80	0	5.87	+2.73	11.24	1.69	3.7	11	12	8	11
1928....	46.3	+ 2.7	89	10	1.54	−1.60	3.56	0.11	2.4	5	15	9	7
1929....	48.6	+ 5.0	97	11	3.30	+0.16	6.13	0.47	T.	8	12	8	11
1930....	43.2	− 0.4	80	6	1.37	−1.77	4.50	0.04	1.4	4	18	6	7
1931....	39.5	− 4.1	70	10	3.02	−0.12	6.03	1.23	8.8	8	11	7	13
1932....	38.3	− 5.3	81	− 2	1.89	−1.25	5.09	0.30	2.8	7	12	9	10
1933....	44.1	+ 0.5	87	5	3.53	+0.39	10.39	1.56	2.0	10	11	8	12
1934....	41.2	− 2.4	82	− 3	2.36	−0.78	7.78	0.05	4.9	7	13	8	10
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	43.6	.....	98	−12	3.14	.....	15.48	0.00	3.3	8	13	8	10

Climatological Data for March 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	41.2	− 0.7	74	20†	11	10	46	1.65	−0.86	0.48	6.3	12	14	4	13	ne.	O. K. Benecke
Clifton Hill	Randolph	731	35	39.5	− 2.7	73	20	8	10	41	1.63	−1.01	0.61	8.2	9	13	8	10	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	39.8	− 2.8	76	20	13	10	39	2.91	−0.03	1.32	8.7	12	11	10	10	n.	U. S. Weather Bureau
Downing	Schuyler	876	13	37.8	− 3.8	71	20	− 3	10	46	1.67	−1.26	0.29	4.3	10	15	5	11	s.	James Taylor
Elsberry	Lincoln	449	3	39.1	.....	72	13†	2	10	45	2.77	.....	0.98	7.5	7	8	15	8	s.	Ray E. Mills
Fayette	Howard	661	54	40.3	− 1.6	77	20	11	10	43	1.89	−0.91	0.64	9.2	12	..	..	..	.....	J. D Settle
Fulton	Callaway	818	46	39.2	− 4.9	75	20	11	10	53	2.89	−0.13	1.28	7.9	7	16	5	10	ne.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	1.14	−1.28	0.27	6.0	6	8	18	5	se.	W. L Barker
Hannibal	Marion	759	42	39.0	− 2.0	72	20	3	10	41	2.05	−0.55	0.93	15.5	11	15	3	13	n.	Hannibal Water Dept.
Jefferson City	Cole	557	44	39.8	− 3.8	78	20	11	10	64	2.56	−0.54	1.12	7.3	7	10	11	10	.....	Mrs. Frank Kliegel
Kirksville	Adair	969	45	38.0	− 1.7	72	20	− 1	10	41	0.72	−2.00	0.27	6.5	6	10	11	10	n.	Prof. J. S. Stokes
Louisiana	Pike	469	40	39.6	− 3.9	74	20	4	10†	46	1.87	−1.23	1.00	6.7	8	21	2	8	n.	Stark Bro's Nurseries
Macon	Macon	875	35	37.0	− 5.2	73	20	6	10	57	1.84	−0.78	0.61	11.3	8	13	7	11	w.	W. C. Brown
Mexico	Audrain	800	45	37.7	− 4.3	75	20	9	10†	60	2.70	−0.13	0.80	13.0	8	14	6	11	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	2.14	−0.58	0.82	14.8	8	12	11	8	s.	J. S. Conway
St. Charles	St. Charles	520	46	39.6	− 4.9	74	13†	11	19	55	3.49	+0.45	1.27	3.5	9	10	13	8	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	40.8	− 3.3	73	13	13	10	41	2.96	−0.42	1.46	4.5	13	12	8	11	ne.	**Section Center**
St. Louis University	St. Louis City	578	22	40.4	− 3.2	73	13	11	10	42	2.25	−1.13	1.38	5.1	8	14	8	9	n.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	2.18	−0.61	0.78	12.0	7	..	..	..	...	J. C Jewett
Steffenville	Lewis	650	36	37.4	− 4.8	72	20	− 3	10	40	3.05	+0.09	0.70	19.0	12	14	8	9	s.	Frank Hall
Unionville	Putnam	1,062	41	37.4	− 1.5	76	20	0	10	45	0.95	−1.47	0.50	4.0	6	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	40.7	− 1.8	73	20	7	10	38	3.68	+0.34	1.25	11.0	9	6	14	11	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	36.7	− 2.2	69	20	0	10	37	1.77	−0.61	0.34	9.5	12	8	6	17	n.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**39.0**	**− 3.1**	**78**	**20**	**− 3**	**10**	**64**	**2.03**	**−0.70**	**1.72**	**8.8**	**9**	**12**	**9**	**10**	**n.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	45.9	.....	74	17	17	10	43	7.65	.....	3.07	2.0	8	16	7	8	s.	Jeff. King
Caruthersville	Pemiscot	265	38	48.4	− 3.0	77	17	18	10	42	7.33	+2.82	3.06	0.7	10	16	5	10	.....	Sam Smith
Doniphan	Ripley	344	30	46.4	− 2.6	74	30	15	10	42	4.91	+0.80	2.30	1.5	9	16	8	7	n.	W. W. Martin
Jackson	Cape Girardeau	428	43	45.3	− 1.9	75	17	12	10	48	3.76	−0.54	1.96	1.0	7	6	8	17	s.	John G. Putz
Marble Hill	Bollinger	470	39	44.6	− 3.0	76	17	10	10	47	2.54	−1.87	1.56	1.3	6	9	8	14	n.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	4.70	+0.14	2.12	1.0	7	16	7	8	sw.	John A. Spence
Poplar Bluff	Butler	339	29	43.6	− 5.0	74	17	14	10	42	5.05	+0.49	1.65	1.2	10	18	2	11	e.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	46.8	− 1.8	78	17†	15	10	43	4.29	−0.14	1.83	1.5	10	14	9	8	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	62	44.4	− 2.8	74	17	14	10	36	3.86	+0.11	1.71	1.4	16	8	10	13	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**45.7**	**− 2.9**	**78**	**17†**	**10**	**10**	**48**	**5.20**	**+0.49**	**3.47**	**1.3**	**9**	**13**	**7**	**11**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	53	40.2	− 4.4	73	17	10	1	52	2.61	−1.19	0.98	2.6	7	16	4	11	n.	Arcadia College
Birchtree (near)	Shannon	1,000	39	44.0	− 3.3	75	21	12	19	42	2.92	−1.23	1.33	2.7	6	20	1	10	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	1.94	.....	0.76	3.0	7	17	7	7	.....	C. M McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	2.13	.....	0.77	3.0	6	10	10	11	sw.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	30	44.8	− 4.0	76	15†	13	10	46	1.73	−1.79	0.73	3.5	8	15	3	13	sw.	H. E. Dean
Eldon	Miller	934	39	39.8	− 3.8	75	20	12	1	59	2.45	−0.64	1.23	8.6	6	10	13	8	ne.	E. H. Shepherd
Farmington	St. Francois	918	23	42.4	− 4.1	73	13†	10	10†	40	2.20	−1.21	1.10	2.5	5	15	5	11	s.	H. O. Miller
Goodland	Iron	1,000	41	42.4	− 2.6	75	13	10	10†	50	2.55	−1.58	1.25	1.0	4	12	6	13	s.	F. M. Adams
Greenville	Wayne	381	25	43.7	− 4.0	76	17	12	10	47	3.93	−0.57	1.67	1.0	4	17	5	9	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	...	.....	..	..	..	..	..	1.88	−1.29	0.98	4.0	5	14	10	7	se.	A. W. Madison
Koshkonong	Oregon	958	33	46.4	− 3.0	75	17†	14	10	39	3.68	−0.25	1.21	1.0	9	18	4	9	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	40.1	− 4.9	73	20	10	10	53	2.57	−0.97	0.95	9.5	5	18	5	8	e.	Mrs Lou Mulcare
Lockwood	Dade	1,078	28	41.5	− 2.8	80	16	15	10	45	2.10	−0.73	0.92	6.5	8	17	7	7	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	42.9	− 2.5	77	13	10	10†	40	3.37	−0.75	1.42	7.7	9	17	3	11	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	45.4	− 2.7	78	16	11	10†	49	1.78	−1.70	0.62	0.9	9	16	6	9	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	42.8	− 2.7	72	13†	12	10	39	3.13	−0.59	1.13	7.0	8	4	8	19	sw.	F. H. Lane
Salem	Dent	1,173	30	42.4	− 4.0	74	13	9	19	40	3.19	−0.43	1.28	0.8	7	12	10	9	s.	E. E. Martin
Seligman	Barry	1,542	33	45.0	− 1.6	74	16	11	10	41	3.03	−0.49	1.33	9.0	8	14[b]	4[b]	11[b]	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	42.1	− 3.3	78	17	7	19	45	2.40	−1.47	1.11	3.0	4	12	7	12	se.	A. L. Hailey
Springfield	Greene	1,324	46	42.2	− 3.0	74	20	12	10	40	2.76	−0.63	1.73	5.2	9	16	5	10	s.	U. S. Weather Bureau
Versailles	Morgan	1,087	2	41.8	.....	77	20	11	10	43	2.40	.....	0.91	9.1	12	10	10	11	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**42.9**	**− 3.3**	**80**	**16**	**7**	**19**	**69**	**2.66**	**−0.93**	**1.73**	**4.4**	**7**	**14**	**7**	**10**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	42.2	− 2.9	76	16†	11	10	46	1.56	−1.62	0.74	1.5	5	7	19	5	ne.	W. G. Bigelow
Clinton	Henry	765	41	40.7	− 4.3	76	16	12	10	41	2.02	−1.09	0.90	5.5	5	11	10	10	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	38.6	− 2.7	78	20	7	10	55	1.56	−1.12	0.62	4.0	5	12	7	12	s.	John H. Patterson
Lamar	Barton	980	46	42.4	− 3.6	78	16†	12	10	57	1.89	−1.61	0.52	2.0	5	17	3	11	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	42.0	− 2.0	78	20†	12	10	47	3.10	+0.20	1.74	8.6	6	13	8	10	nw.	J. E. Wheeler
Marshall	Saline	779	47	41.0	− 2.0	75	20	12	10	47	1.88	−0.91	0.78	7.5	6	20	6	5	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	43.0	− 1.9	77	16†	10	9	45	1.61	−1.34	0.80	2.0	4	12	9	10	s.	George A. Kaupp
Warrensburg	Johnson	878	47	40.5	− 3.5	76	16†	10	10	44	0.82	−1.85	0.43	6.0	3	14	5	12	ne.	E. A. Markey
Warsaw	Benton	687	33	43.3	− 3.7	78	20	11	10	46	1.40	−2.18	0.53	3.5	6	10	6	15	s.	Everett Martin
Division means	**and extremes**	.....	..	**41.5**	**− 3.0**	**78**	**16†**	**7**	**10**	**57**	**1.65**	**−1.26**	**1.74**	**4.5**	**5**	**13**	**8**	**10**	**s.**	
Northwest Plateau																				
Bethany	Harrison	916	39	38.9	− 1.4	77	20	5	10	46	0.05	−2.25	0.05	0.5	1	12	10	9	nw.	A. S. Cumming
Chillicothe	Livingston	779	25	37.0	− 4.1	73	12†	8	10	50	0.49	−1.99	0.37	5.3	4	19	10	2	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	45	38.9	− 0.9	77	20	4	10	55	0.06	−1.66	0.06	T.	1	6	12	13	sw.	Fr. Adelheim Hess
Edgerton	Platte	856	14	41.4[b]	− 1.8	82	20	9	10	..	0.58	−1.59	0.25	2.0	6	20	2	9	s.	Fred L. Stiff
Grant City	Worth	1,134	30	37.6	− 3.7	75	20	2	10	52	0.17	−1.88	0.08	0.5	3	7	12	12	sw.	Howard Rybolt
Kansas City (a)	Jackson	963	45	41.8	− 0.9	79	20	14	10	45	0.65	−1.88	0.30	1.0	8	8	14	9	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	35.9	− 4.9	78	20	7	10	56	0.58	−1.61	0.48	1.5	2	12	7	12	sw.	Roscoe L Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	0.29	−1.62	0.07	T.	7	7	16	8	n.	John M. Martin
Lexington	Lafayette	688	49	38.7	− 4.7	77	20	11	10	52	1.65	−0.89	0.51	6.0	10	14	12	5	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	39.8	+ 1.9	79	20	5	10	50	0.30	−1.54	0.08	1.8	4	10	11	16	s.	J. R. Brink
Oregon	Holt	1,048	78	41.7	+ 2.1	81	20	8	10†	54	0.27	−1.81	0.15	1.0	4	13	12	6	sw.	Mina Wright
St. Joseph	Buchanan	967	24	40.6	− 1.6	82	20	10	10	49	0.33	−1.87	0.12	2.3	7	11	11	9	ne.	U. S. Weather Bureau
Tarkio	Atchison	916	31	38.1	− 2.0	81	20	7	10†	58	0.52	−1.20	0.25	5.5	4	7	15	9	sw.	Albert Volker
Trenton	Grundy	822	38	39.9	− 1.2	75	20	8	10	45	0.46	−1.96	0.27	2.4	8	10	13	8	s.	W. H. Estes
Division means	**and extremes**	.....	..	**39.3**	**− 1.8**	**82**	**20**	**2**	**10**	**58**	**0.47**	**−1.70**	**0.51**	**2.1**	**5**	**11**	**11**	**9**	**sw.**	
State means	**and extremes**	.....	..	**41.2**	**− 2.4**	**82**	**20**	**− 3**	**10**	**64**	**2.36**	**−0.78**	**3.47**	**4.9**	**7**	**13**	**8**	**10**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Precipitation for March 1934

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Bethel	Mississippi		.26								.11								.62					.22	.12			.46					1.79
Boonville	Missouri		.58		.03			.20				.08						T.	.35						.02		.05	.44				.01	1.76
Bowling Green	Mississippi		.32	.03				.04											.85					.06			.12	.56					1.98
Brunswick	Grand		.46	.06	.05			.10		T.		.02						.02	.48					.02	.03		.07	.28				.06	1.65
Canton	Mississippi		.29	.05		.10		.01			.17								.83					.40	.10			.54				.09	2.58
Clifton Hill	Chariton		.15		.14	.04		.04		T.		.04						.61					T.		.06		.45				.10		1.63
Columbia***	Missouri	.26	.21	.02				.20		T.	.09	.03				T.		.65					.02	T.	.01	.07	1.25				.10		2.91
Downing	Mississippi		.29	.05	.05		T.	.05		.06		T.						.23					.10	.10	T.		.06			T.	.08	T.	1.07
Edina	....do		.20	T.		.16		T.			.23							T.	.10				T.	.18	.06		T.	.16				.06	1.15
Elsberry	....do		.20					.20		.05								T	.98				T.	T.	.02		.86	.46					2.77
Ewing	....do		.32								.07								.65					.14	.25			.22					1.65
Farber	....do		.32					.06			T.								.60								.03	.30				.02	1.33
Fayette	Missouri		.52	.03	.06	.01		.18				.05						.06	.58						.02		.05	.26				.07	1.89
Fulton	....do		.36	T.				.12				.06							.82						.01		.24	1.28					2.89
Gorin	Mississippi		.27		T	.27		T.		.22		T.						T.					T.	.15	T.		.15				.08	1.14
Hannibal	....do		.37	T.	T.	.01		T		.07		T.						.39	.54				.08	.07	.09		.37	.01				.05	2.05
Hermann	Missouri		.33		.02			.11			T.	T.	T						1.03						T.		.11	1.22				.03	2.85
Jefferson City	....do		.37					.02		T.		.15							.70							T.	.15	1.12				.05	2.56
Kahoka	Mississippi		.25		.03	.15				**	.28												T.	.08				.16				.04	0.99
Kirksville	....do			.15						.27								T.				.05	.11		.06		.08					0.72
Linneus	Grand	.28			T.						.01		T					.11	.03			.02	**	.19			**	.14		T.	.04	.35	1.17
Louisiana	Mississippi	.20								.01								**	.60				.05		.01		**	1.00					1.87
Lucerne	Grand		.23							.14									.15						.04							.05	0.61
Macon	Chariton	.33	.28		.05						T.								.61					.05	.12			.33				.07	1.84
Memphis	Mississippi		.20	T.	T.	T.	T.			T.	.10	T.							.17	T.			T.	.20	T.			.10			T.	.43	1.20
Mexico	....do		.45					.50			.05	T.							.80			T.		T.	.05		.15	.65				.05	2.70
Milan	Grand		.24							.10	.05	.07	T.					12					.05	.07				.21				.08	0.99
Monroe City	Mississippi		.49		.05					.04		.03						.82					.08		.10		.53						2.14
New London	....do		.38								.07								1.10					.19				.97					2.71
Palmyra	....do		.31	.04		.16					.03								.40					.20	.09			.54					1.77
Paris	....do		.42		.06			.05			.02								.47					.14	.04		.16	.65				.06	2.07
Perry	....do		.52	T.	T.			.08			T.								.44					.12			.16	.26			T.	T.	1.58
Philadelphia	....do		.05		.15						T.								.63					T.	.13			.40					1.36
St. Charles	Missouri		.38					.29	.05		.01								1.00					.07	T.		.39	1.27				.03	3.49
St. Louis	Mississippi	.17	.27		T.		T.	.08	T.	.09						T.		.53	.03				.04	.14	.01	.09	1.46	.04			T.	.01	2.96
St. Louis University*	....do	.15	.15					.09		.10								.27					.02		T.	.09	1.38					.06	2.25
Shelbina	....do		.78		.06	.10													.60						.20			.40				.04	2.18
Steffenville	....do	.30	.10	.05	.15	.10	T.			.30								.70	.30				.15	.05	.27		.58	T.				T.	3.05
Troy	....do		.48						.34										.87					T.			.13	.87				.01	2.70
Union	Meramec		.27							.04		.01							.82					.18			.36	1.72				.02	3.42
Unionville	Chariton	.25	.25	.02						.30		.03											.10	T.									0.95
Valley Park	Meramec		.32					T.	.11		.08								.76					.33	T.		.35	1.30				T.	3.25
Warrenton	Mississippi		.50		.02			.25		.10	T					T.		.04	.86					T.	T.		1.25	.58				.08	3.68
West Ely	....do		.27	T.		.03		T.			.04								.71					.08	.10		.12	.70				.04	2.09
Winfield	....do																																
Keokuk, Ia. ***	....do	.09	.25	.11	.03	.05	.28			.24								.24				T.	.11	.05			.22			T.	.10		1.77
Southeast Lowlands																																	
Bragg City	St. Francis		.45	.12					1.05										.90	T.				1.00	1.06		2.60	.60					7.78
Campbell	....do	.45	.74					.21	1.10										1.31					.05	.72		3.07						7.65
Cape Girardeau	Mississippi		.31	.03					.07		.01		T.		.01				.81					.12	.03		1.21	.59					3.19
Caruthersville	....do		.85	.15					.40		.02	T.							.45	.05				.59	1.70		3.06	.06					7.33
Dexter	St. Francis		.38	T.					.45										.90					.90		.15	2.00	.47					5.25
Doniphan	Black	T.	.35					.05	.48			.02							1.13					.08	.82	.10	2.40						4.91
Fisk	St. Francis		.43	.13			T.		.14		T.	.06							.35	.03				.53	.17		1.17	1.11					4.12
Jackson	Mississippi		.46					.04	.09		.03	T.							1.15					.03	T.		1.96						3.76
Marble Hill	....do							.04	.12		.08	.16							.58								1.56						2.54
Morehouse	....do		.59	T.				.12	.35			T.							1.31					T.	.19		2.12	.02					4.70
New Madrid	....do		.36	.16					1.10		.05	.02	.02						.68	.37				.03	.30	.31	2.90	.57	.01				6.88
Parma	St. Francis		.47	22					1.31										1.15	.10				.05	.47	.05	2.41	.42					6.65
Poplar Bluff	Black		.37	.08					.59			.02							1.00	30				.25	.24	T.	1.65	.55					5.05
Sikeston	Mississippi	.18	.15	.15				.45				.06							.20					.50	.25		1.83	.52					4.29
Cairo, Ill. ***	....do	.28	.26	.01		.01	.01	.23	.07	T.	.02	.01		T.		T		.02	1.01				.01	.06	.13	.52	1.21	T.					3.86
Ozark Plateau																																	
Arcadia	St. Francis		.25						.06	T.	.05	T.	T						.85	T.				.03	T.	T.	.39	.98	T.				2.61
Birchtree (near)	Black		.25					T	.12			T.							1.33						.07		1.10	.05					2.92
Buffalo	Osage		.43				.16		.03										.25								.19	.76				.12	1.94
Caplinger Mills	....do	.05	.38			.07		T.										.68						T.	T.	.77				.18		2.13
Dean	Neosho	.12	.24			T.			T.	T.								.28	.22						.08	.65	.06			.08		1.78
Eldon	Missouri		.32			T.		T.	.01			T.							.72								.09	1.23				.08	2.45
Farmington	St. Francis	.10	T.	T				.10	T			T.							.70						T.		1.10	.20					2.20
Fredericktown	....do		.28						.08										.50	.13							.50	.75					2.24
Galena	White		.23			.05														.58							.70	.87				.04	2.47
Goodland	Black								.10		T.		T.						1.25								**	1.20					2.55
Greenville	St. Francis		.93					T.											1.20	.13						T.	1.67						3.93
Hailey	White	.27				.24													.18					.21			.98						1.88
Koshkonong	Black		.34					.11	.23			.04							1.17						.39	.15	1.21	.04					3.68
Lakeside	Osage		.48		.01	T.		.01	.01		T.	.07							.69					.40	T.		.23	1.25				.04	3.19
Lebanon	....do		.52		T.	T.						.40							.48						T.		.42	.95					2.57
Leeper	Black		.26	.01			.04		.09		T.	.02							1.30	T.					T.	T.	.63	1.06					3.41
Lockwood	Osage		.51			.13	T.	T.	.03									.20	.06						T.		.92	.13				.12	2.10
Mountain Grove	White	.02	.25				.03	.02	.06		T	.24							1.42							T.	1.02	.81					3.37
Neosho	Neosho		.34		.06			T.	.03	T.								.17	.18					.05		.62	.22				.11		1.78
Owensville	Gasconade		.55						T.			T.							.60					.21			.25	1.45					3.06
Rolla	Meramec		.33			T.			.18		T.	.03							.86					.12			.39	1.13				.09	3.13
St. Thomas (near)	Osage		.55						.01		T.	.05							.72					.09			.14	.95					2.51
Salem	Meramec		.16						.08	.10	T.	.03							1.28					T.			1.18	.36					3.19
Seligman	Neosho		.18															.35	.98						.20	.05	.82	.40				.05	3.03
Seymour (near)	White		.20					T.	T.			T.							1.01						T.		1.11	.08					2.40
Springfield	....do	.11	.07	T.	T	T.		.01	T.	T	T.							.60	.06					T.	.05	.06	1.73				.07		2.76
Stover	Missouri			.09	.20							.02							.20								.28	.50				.20	1.49
Versailles	Osage		.38	T.	.03	.02		.01				.05						.23	.34						.01		.91	.29				.09	.04	2.40
Williamsville	Black		.26	.09			.04		.18		.02	.02							1.19	.03				.04	.19		.76	.82						3.64
Willow Sprgs. (near)	White		.23				.03		.14			.08							1.33							.06	.41	.83						3.11
Southwest Plain																																	
Appleton City	Osage	T.	.37	T.			T.	T.	T.									.26	.02						T.		.74				.17		1.56
Clinton	....do		.50					.02											.37								.90				.23		2.02
Concordia	Missouri							.24										.05	.38						.03		.21	.80						1.71
Harrisonville	Osage		.51																.40						T.		.24	.88				.03		1.56

Continued on next page

Daily Precipitation for March 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin	Neosho	.04	.32		.04													.14							.06		.54				.35		1.49
Lamar	do		.32																.25								.15	.52				.15	1.39
Lamonte	Missouri	.20						.47										.32	.12								1.74				.25		3.10
Marshall	do		.78	T.	T		.05				T.							.30	.20				T.		T.		.40				.15		1.88
Nevada	Osage		.38															.26									.80				.17		1.61
Warrensburg	Missouri			T.														.33							T		.43				.06		0.82
Warsaw	Osage	T.	.32	T.				.02										.16	.15								.53	T.			.22		1.40
Waverly	Missouri		.40	.02				T.										T.	.35				T.		.04		.10	.28				.05	1.24
Northwest Plateau																																	
Bethany	Grand	T.								.05		T.						T.					T.	T.	T.					T		0.05
Chillicothe	do		.37	T.		.01		T.		T.		T.											.08	T.	.03		T.	T.					0.49
Conception	Missouri									T.								T.					T.	T.	T.						.06		0.06
Edgerton	do		.25					T.		T.								.04					.06	.05	.12						.06		0.58
Gallatin	Grand		.28							.03									.03				T.	T.	.08							.06	0.48
Grant City	do					T.				.01		T.						T.					.08	T.	T.						.08		0.17
Kansas City***(a)	Missouri	.21	.09	T.	T.		T.	.11		T.								.05					T.	.03	.01		.08				.07		0.65
Kidder	Grand		.48															T.	T.				T.	T.	.10		T.			T.		T.	0.58
King City	Missouri		.05	.02						T.								.07					.05	.03	.01						.06		0.29
Lexington	do		.37	.06				.23										.05	.27				.04		.07		.12	.39				.05	1.65
Maryville	do		T.								T.								.05				T.	.08	.04							.13	0.30
Oregon	do			.01						T.								T.					T.	.09	.02						.15		0.27
St. Joseph***	do	.03	.02	T.	T.		T.	T.		T.								.05					.05	.12	T.					T	.07	.09	0.43
Tarkio	do			.10														T.					.10	.07							.25		0.52
Trenton	Grand		.27					T.		.04		.04						.02				T.	.03	.02	.02		T			T.	.02		0.46

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. T. Trace, or less than 0.01 inch.
†† Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated
(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for March 1934

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation					.118	.119	.125	.062	.072				.152	.230	.140	.135	.218				.270	.171	.119	.024	.087	.054	.086	.081	.109	.179	.162	4.005
	Mean temperature	34	40	44	48	48	43	35	34	38	25	30	46	54	42	48	52	50	28	36	50	54	43	32	36	40	35	30	42	50	52	44	41.4
	Wind movement	88	69	27	63	75	73	85	101	70	131	84	62	88	130	70	72	113	140	66	43	98	85	115	84	84	88	69	65	88	49	128	2,613

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from Page 11

The greatest amount in any twenty-four hours was 3.47 inches at New Madrid on the 26-27th. The average number of days with 0.01 inch or more of precipitation was 7. The snowfall averaged 4.9 inches, or 1.6 inches more than normal. The greatest monthly snowfall was 19.0 inches at Steffenville, and the least, a trace at Conception and King City.

MISCELLANEOUS PHENOMENA

Duststorms.—Locally on 13th, 16th, 17th.

Fogs.—Dense, 1st, 2d, 3d, 26th.

Frosts.—Killing frost or freezing temperatures occurred frequently throughout the month.

Halos.—Solar, 1st, 4th, 10th, 12th, 21st, 24th, 25th, 29th, 30th; lunar, 25th, 26th, 28th. 30th, 31st.

Hail.—Light at Lakeside, Poplar Bluff, and Cairo on 22d.

Sleet.—5th, 6th, 7th, 8th, 17th, 18th, 22d, 23d, 24th, 26th, 27th, 30th.

Thunderstorms —Local, 4th, 5th, 6th, 7th, 16th, 17th, 18th, 22d, 23d, 31st.

Windstorms.—No damaging windstorms reported.

ERRATA

January 1934, page 2—days with 0.01 inch or more of precipitation at Goodland should be 6. Page 5—minimum temperature on the 5th at Columbia should be 34.
February 1934, page 10—maximum temperature on the 25th at Columbia should be 15.

Daily Temperatures for March 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	43	51	55	62	61	50	46	44	43	34	38	69	70	54	65	70	70	32	53	74	74	62	38	40	50	53	41	52	70	64	44	53.9
	Minimum ...	28	35	36	33	39	28	28	21	21	11	23	28	45	24	32	31	24	16	18	35	51	28	25	27	22	32	21	21	33	36	27	28.4
Columbia.	Maximum...	44	51	54	62	50	46	34	38	37	31	35	67	70	48	59	71	65	27	51	76	66	44	35	39	49	40	32	52	69	64	46	50.1
	Minimum ...	30	36	40	36	37	33	27	23	17	13	23	31	38	29	35	37	26	19	16	39	44	29	26	27	26	31	21	20	42	34	29	29.5
Fayette	Maximum...	45	54	57	64	54	49	38	44	32	34	37	70	74	51	63	71	68	33	54	77	68	44	35	39	49	37	37	55	71	59	46	51.9
	Minimum ...	27	35	34	33	29	29	27	21	29	11	23	27	47	27	32	29	25	18	13	34	48	32	26	27	24	35	20	19	37	43	29	28.7
Hannibal	Maximum...	40	46	51	60	55	45	41	39	35	30	37	69	70	49	59	59	68	29	42	72	69	55	34	36	46	43	36	48	65	65	49	49.7
	Minimum ...	29	35	36	36	39	33	27	20	16	3	23	28	45	27	34	36	27	19	8	32	50	25	28	25	22	31	19	17	36	48	27	28.3
Jefferson City §§	Maximum...	47	49	59	65	53	52	36	40	50	34	39	70	73	50	64	75	66	30	52	78	77	40	35	43	49	38	36	56	71	71	56	53.4
	Minimum ...	12	29	35	36	41	32	29	23	23	11	12	22	31	28	27	33	37	20	14	14	34	33	26	26	25	27	19	19	26	38	29	26.2
Kirksville	Maximum...	38	48	48	59	54	46	36	42	40	28	35	69	65	47	60	65	63	36	57	72	68	47	34	36	47	48	46	53	68	63	44	50.4
	Minimum ...	26	34	36	32	37	27	24	16	16	− 1	18	28	45	23	31	33	25	14	18	34	44	23	21	22	17	19	20	18	33	34	24	25.5
Louisiana	Maximum...	42	48	50	60	53	48	43	40	33	30	44	68	67	52	55	60	68	40	44	74	68	53	40	40	45	39	33	45	67	70	52	50.7
	Minimum ...	27	34	37	34	42	32	28	24	19	4	24	30	48	28	34	38	32	19	4	28	50	29	23	27	23	32	22	11	35	37	32	28.6
Macon §§	Maximum...	43	44	55	61	48	45	33	40	25	31	40	68	70	47	61	67	35	30	52	73	66	28	36	37	46	36	36	52	67	58	50	47.7
	Minimum ...	26	30	35	32	38	29	26	18	24	6	14	23	39	24	32	32	32	15	15	16	46	26	23	24	20	32	18	19	30	48	26	26.4
Mexico §§	Maximum...	44	51	53	63	53	54	38	40	37	36	41	70	72	49	62	68	64	28	48	75	66	35	35	39	47	39	39	50	70	70	52	51.2
	Minimum ...	10	28	34	34	35	30	26	20	21	9	10	25	30	26	27	32	36	19	9	15	36	28	23	23	21	26	17	15	20	38	28	24.2
St. Louis	Maximum...	49	48	55	62	53	50	35	38	45	30	36	63	73	47	60	64	71	30	45	70	70	42	34	41	46	38	32	50	66	72	49	50.5
	Minimum ...	26	37	39	45	45	34	28	27	15	13	25	28	40	31	33	43	30	20	18	34	42	30	26	29	29	31	25	24	37	43	33	31.0
Unionville	Maximum...	40	45	48	57	54	42	38	40	32	30	35	70	64	47	66	65	62	35	65	76	67	43	36	36	46	44	45	55	68	63	45	50.3
	Minimum ...	25	33	34	30	33	28	22	15	15	0	15	30	40	20	32	33	23	10	20	35	40	20	20	10	14	30	30	18	35	27	22	24.5
Warrenton	Maximum...	44	45	52	61	59	47	47	34	42	30	37	65	71	55	60	65	67	32	44	73	70	61	32	40	47	44	33	49	67	70	62	51.8
	Minimum ...	28	34	38	39	41	33	27	23	20	7	24	27	45	28	31	38	31	23	10	35	56	29	24	27	23	33	22	15	34	45	29	29.6
Southeast Lowlands																																	
Campbell	Maximum...	46	52	62	66	65	65	57	48	54	48	61	62	68	65	59	70	74	69	51	68	69	65	44	40	47	62	53	52	65	70	63	59.4
	Minimum ...	27	35	37	40	40	34	33	27	23	17	24	19	37	36	24	32	51	26	22	29	50	41	32	31	32	40	33	24	28	35	44	32.4
Caruthersville	Maximum...	48	55	60	62	64	67	64	42	53	51	36	58	68	64	58	71	77	69	46	67	72	69	55	41	44	62	62	53	67	73	69	59.6
	Minimum ...	33	41	45	46	45	40	38	31	30	18	26	29	42	38	33	43	55	27	25	32	52	47	35	33	37	42	34	27	36	44	47	37.1
Doniphan	Maximum...	45	50	62	68	65	68	64	50	55	50	48	60	70	62	60	72	70	56	70	69	70	65	52	43	48	49	49	54	68	74	68	59.8
	Minimum ...	25	38	44	40	33	34	34	30	20	15	26	20	40	36	21	32	51	29	29	27	55	45	34	32	35	40	34	23	27	33	43	33.1
Jackson	Maximum...	46	47	59	63	61	62	57	44	51	46	34	57	69	65	66	70	75	73	52	67	72	68	43	43	51	49	43	56	69	73	73	58.2
	Minimum ...	25	36	37	45	40	39	32	29	23	12	21	24	39	34	27	32	52	25	19	27	50	37	30	32	32	40	32	23	29	39	41	32.4
Poplar Bluff	Maximum...	45	47	58	56	58	65	49	49	50	50	37	51	68	55	58	70	74	70	56	60	59	59	45	40	46	46	41	53	60	68	65	55.1
	Minimum ...	25	36	41	41	37	35	30	28	20	14	24	21	36	35	21	32	54	28	22	27	55	41	33	32	35	35	28	23	28	35	43	32.1
Sikeston	Maximum...	45	52	61	65	68	65	62	46	53	49	35	56	68	68	58	69	78	78	41	66	69	68	53	42	46	60	60	52	66	70	78	59.6
	Minimum ...	30	37	41	45	41	41	36	29	23	15	24	25	37	35	29	35	52	35	22	30	49	40	32	32	32	34	33	25	32	40	44	34.0
Cairo, Ill	Maximum...	49	54	58	62	61	61	49	43	49	30	33	55	67	49	56	69	74	38	43	66	69	58	39	39	48	60	40	53	68	70	59	53.8
	Minimum ...	33	40	41	46	46	45	32	31	22	14	24	28	43	34	33	45	38	26	22	34	53	37	32	31	34	38	29	26	37	46	45	35.0
Ozark Plateau																																	
Arcadia §§	Maximum...	45	46	58	64	58	62	34	43	53	35	35	59	72	49	60	69	73	30	52	70	70	47	35	44	48	39	39	56	69	70	49	52.7
	Minimum ...	10	29	33	37	43	37	33	26	23	11	13	23	29	30	26	33	36	26	15	18	32	34	29	28	29	30	29	18	25	38	36	27.7
Birchtree	Maximum...	43	48	60	65	61	69	64	45	53	43	39	61	73	57	61	70	73	41	51	72	75	67	46	47	45	43	43	57	67	69	60	57.0
	Minimum ...	24	35	35	47	41	34	32	26	21	13	23	25	40	32	27	35	41	25	12	30	52	42	31	29	32	37	29	19	27	29	33	30.9
Eldon §§	Maximum...	47	48	55	62	52	56	42	44	52	34	38	67	71	51	63	73	63	32	54	75	70	53	40	42	48	36	34	62	71	67	52	53.4
	Minimum ...	12	28	35	38	38	35	30	24	23	13	13	20	30	29	29	33	37	21	15	16	38	34	27	27	25	27	20	17	19	37	30	26.3
Farmington	Maximum...	47	47	58	65	60	55	49	40	50	40	35	60	73	68	60	67	69	45	40	70	70	60	41	41	47	45	41	48	68	73	65	54.6
	Minimum ...	23	35	35	38	35	34	32	24	28	10	23	25	42	30	28	37	40	10	28	30	35	32	30	30	29	36	28	19	29	43	37	30.2
Koshkonong	Maximum...	48	48	59	65	62	70	62	45	52	47	44	61	74	69	61	74	75	59	53	74	75	67	49	39	45	47	45	60	69	72	64	59.2
	Minimum ...	25	36	41	42	43	42	33	27	27	14	24	26	41	33	29	41	54	25	15	35	54	37	33	30	34	38	31	23	35	41	37	33.7
Lebanon §§	Maximum...	43	44	54	57	54	60	36	42	52	32	36	61	72	50	64	72	69	31	53	73	70	54	34	42	47	36	35	58	71	63	60	52.4
	Minimum ...	19	29	37	36	39	33	32	23	23	10	12	29	36	27	32	34	40	19	12	20	36	36	29	28	28	30	20	20	28	35	29	27.8
Mountain Grove	Maximum...	40	49	57	62	57	68	59	44	54	34	43	63	77	61	61	70	69	34	50	72	73	61	45	41	46	39	42	56	68	68	56	55.5
	Minimum ...	25	34	40	37	39	35	29	23	23	10	21	26	39	28	28	38	32	21	10	36	53	39	30	32	30	29	22	22	34	42	31	30.3
Neosho	Maximum...	47	48	60	61	61	73	73	45	52	35	47	68	74	74	66	78	76	33	57	76	74	70	66	44	45	42	44	62	73	71	60	59.9
	Minimum ...	29	36	41	28	30	31	33	24	24	11	24	30	47	31	30	32	27	19	11	37	52	41	35	29	34	32	23	29	36	37	32	30.8
Rolla	Maximum...	47	47	55	60	58	55	52	39	50	30	35	64	72	67	67	70	69	34	46	72	69	65	40	42	49	47	34	58	70	70	57	54.5
	Minimum ...	28	35	38	38	41	35	30	22	24	12	24	26	44	29	32	40	34	22	13	33	56	34	27	29	28	33	23	20	34	46	32	31.0
Springfield	Maximum...	41	45	55	58	54	68	52	41	50	31	43	65	70	50	63	73	64	29	48	74	68	58	42	41	44	38	38	57	69	64	56	53.2
	Minimum ...	28	36	42	37	39	39	25	28	16	12	27	30	41	31	33	43	24	19	18	40	54	40	30	28	33	29	23	27	39	34	29	31.3
Southwest Plain																																	
Appleton City	Maximum...	45	57	56	61	56	54	51	45	48	30	45	67	74	55	66	76	70	28	59	76	70	61	40	39	47	46	35	57	71	63	50	54.8
	Minimum ...	27	36	39	33	39	32	29	22	24	11	23	30	43	26	30	36	24	19	19	36	51	26	28	27	25	30	19	23	39	36	29	29.7
Clinton	Maximum...	46	56	56	60	58	49	48	43	42	30	42	63	75	54	65	76	66	31	52	74	64	50	38	35	47	47	36	49	60	59	46	52.2
	Minimum ...	26	36	38	32	38	30	30	21	21	12	24	28	40	26	30	36	25	20	18	40	48	35	28	27	25	25	19	23	37	37	30	29.2
Harrisonville §§	Maximum...	44	58	54	63	48	48	35	45	48	34	45	70	73	50	64	77	36	35	62	78	69	47	41	42	50	35	35	59	71	45	49	51.9
	Minimum ...	28	24	34	32	35	28	25	17	20	7	10	26	36	20	25	33	33	14	16	23	44	34	25	24	20	32	18	21	21	39	25	25.3
Lamar §§	Maximum...	45	52	58	60	55	68	37	45	57	34	47	67	75	55	65	78	64	31	60	78	72	57	43	44	49	40	38	63	73	55	60	55.6
	Minimum ...	26	30	39	33	32	32	33	25	25	12	13	26	36	30	29	34	44	22	19	21	42	40	32	29	29	30	21	21	30	42	30	29.3
Lamonte	Maximum...	46	56	59	62	58	55	49	48	45	35	41	68	70	50	62	75	64	30	58	78	78	60	68	41	49	44	34	67	71	58	49	55.6
	Minimum ...	27	34	38	38	38	38	27	27	19	12	23	29	40	25	33	33	23	17	18	42	40	38	27	27	24	30	15	20	20	33	29	28.5
Marshall	Maximum...	44	51	52	63	47	46	46	44	35	43	44	69	70	54	63	73	71	38	54	75	72	61	35	38	50	36	36	54	70	68	46	53.2
	Minimum ...	28	35	39	35	36	30	27	22	22	12	20	27	44	25	34	37	24	22	17	39	50	30	25	26	24	24	20	21	40	35	28	28.9
Nevada	Maximum...	46	48	58	62	52	60	50	45	54	50	45	67	74	51	66	77	68	31	59	77	70	58	42	42	49	46	36	61	72	59	52	55.7
	Minimum ...	28	36	43	34	37	30	30	22	10	20	23	33	45	26	38	34	23	20	21	40	51	39	30	29	25	30	19	24	40	38	29	30.3
Warrensburg	Maximum...	45	55	55	62	51	48	46	43	45	34	43	69	73	52	65	76	65	31	57	76	68	50	39	41	49	45	36	58	70	62	49	53.5
	Minimum ...	27	34	39	33	35	30	26	19	19	10	20	27	42	23	30	34	21	15	17	38	47	29	25	24	21	29	18	20	39	34	26	27.5
Warsaw	Maximum...	47	54	57	63	58	55	49	43	46	35	45	69	73	56	64	76	71	30	59	78	73	62	40	43	49	47	37	60	71	65	65	56.1
	Minimum ...	27	36	42	40	40	30	31	22	24	11	23	28	48	27	34	30	25	20	15	36	55	37	29	28	26	32	19	23	40	38	29	30.5
Northwest Plateau																																	
Chillicothe §§	Maximum...	42	56	53	62	49	43	32	43	26	36	43	73	68	51	64	73	82	40	64	58	64	80	34	51	50	39	46	59	71	43	46	49.5
	Minimum ...	18	28	31	31	33	27	25	16	21	8	13	26	42	20	28	29	30	12	14	25	36	28	23	22	18	28	20	19	28	37	24	24.5
Grant City	Maximum...	37	55	49	59	44	44	35	40	40	32	34	72	61	45	56	71	71	28	59	75	69	44	28	34	43	43	43	59	68	65	41	49.8
	Minimum ...	25	34	36	30	33	25	22	13	16	2	23	30	42	15	32	32	19	8	19	36	44	24	21	19	18	33	19	21	43	28	23	25.8
Kansas City (a)	Maximum...	46	56	53	63	48	46	33	45	39	34	47	73	68	51	65	77	69	39	68	79	68	44	37	38	50	42	41	62	73	62	50	53.7
	Minimum ...	31	35	42	35	37	33	28	21	17	14	23	37	37	24	39	34	24	14	24	44	44	28	26	27	23	33	24	26	48	30	29	30.0
Kidder §§	Maximum...	45	55	50	62	47	41	31	42	25	32	40	73	65	47	63	73	30	36	60	78	63	31	32	36	49	41	43	58	70	38	45	48.4
	Minimum ...	20	28	34	33	34	22	25	16	16	7	11	23	36	20	20	32	29	10	12	22	39	29	23	22	18	22	19	20	24	36	23	23.4
Lexington §§	Maximum...	45	57	55	62	50	47	30	43	35	35	42	70	71	52	62	72	36	39	61	77	70	33	40	41	52	35	38	59	72	43	46	50.6
	Minimum ...	23	29	36	37	38	31	27	20	20	11	12	25	37	23	25	27	36	16	17	25	43	33	25	26	22	27	21	22	26	42	28	26.8
Maryville	Maximum...	46	59	49	62	49	42	36	45	41	35	46	75	64	50	64	74	69	39	65	79	72	46	32	39	52	44	49	65	71	66	43	53.8
	Minimum ...	27	35	35	29	32	27	23	15	16	5	24	31	40	17	31	32	19	7	21	36	44	25	23	19	19	32	17	22	45	28	24	25.8
Oregon	Maximum...	45	62	53	62	51	50	40	47	37	35	48	76	68	51	66	77	72	42	68	81	74	48	33	42	55	43	52	66	72	59	49	55.6
	Minimum ...	29	35	40	35	34	28	25	17	18	8	21	35	41	19	36	39	18	8	24	41	43	27	24	19	20	33	18	25	49	28	25	27.8
St. Joseph	Maximum...	47	61	50	62	47	45	32	45	38	33	46	76	63	50	65	76	69	37	64	82	64	41	32	39	51	43	46	64	71	52	49	52.9
	Minimum ...	30	36	40	35	33	31	26	19	16	10	28	37	33	22	38	40	20	11	24	43	40	26	25	22	22	30	22	24	48	28	26	28.4
Trenton	Maximum...	42	55	54	57	57	45	37	42	41	31	39	72	72	46	63	69	69	36	63	75	74	51	30	35	46	46	43	56	67	67	42	52.3
	Minimum ...	30	34	35	35	37	27	26	18	19	8	25	28	46	22	31	29	24	13	18	36	44	27	24	24	20	35	20	20	39	33	24	27.5

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4. Climatological Data for January 1934.

WBO, St. Louis, 4-20-34—875.

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N M S

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII APRIL 1934 No. 4

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

Outstanding features of the weather for April 1934 in Missouri were, (1) the very mild periods of the 1st-5th and 8-10th; (2) the very cool periods of the 12-14th, 20th-21st, and 24-28th; (3) the marked deficiency in rainfall in all the five divisions of the State; (4) the absence of damaging frost.

The month will probably be considered by many who experienced it as an unseasonably cool April, because of the low temperatures prevailing the last nineteen days; but a heavy excess of temperature was accumulated in the first ten days, which caused the average for the month to be somewhat above normal. Although light to moderate frosts occurred during the last two weeks, even as late as the 29th, there was no serious damage from frost in any part of the State.

The rainfall was unusually light in all sections, excepting a few limited areas; but the rains came at timely intervals and for the most part fell slowly, thus giving best results for the small amounts received, and keeping the surface soil in fairly good condition for young crops. However, little or nothing was added during April to the subsoil moisture, which continued very deficient to the end of the month. For the last eleven months, June 1933 to April 1934, inclusive, the total precipitation was 25.12 inches, which is 10.20 inches less than the normal, or 71 per cent of normal. For the period January 1 to April 30, the precipitation has been only 65 per cent of normal.

The month was unusually free from damaging windstorms. Minor damage occurred in parts of St. Louis in the thunderstorm on the night of the 10th. Duststorms occurred on various dates, the one on the 11th being reported "probably the worst ever experienced here" by observers at Springfield.

At the end of April corn planting was well advanced, probably equal to normal or better, and early planted was coming up well where moisture was sufficient. Wheat was in fairly good condition for the most part, but was making poor progress during the last week of April, owing to dry, cool weather. Oats, alfalfa, pastures, and garden truck were making slow growth.

Rivers were very low all through the month. Hannibal, Grafton, and St. Louis on the Mississippi River and Hermann, Mo., on the Missouri, had the lowest stages of record for April.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 56.5°, or 1.2° above normal. The highest monthly mean was 62.9° at Caruthersville, and the lowest monthly mean was 53.6° at Grant City and Kidder. The highest temperature recorded was 90° at Jackson on the 4th, and the lowest was 24° at Elsberry on the 25th. The greatest daily range was 51° at Greenville on the 14th.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 2.41 inches, or 1.48 inches less than normal. The greatest local monthly amount was 4.70 inches at Lockwood, and the least local monthly amount was 0.65 inch at Tarkio. The greatest amount in any twenty-four hours was 2.71 inches at Gorin on the 4th. The average number of days with 0.01 inch or more of precipitation was 7. The snowfall averaged only a trace, or 0.6 inch less than normal. Only three stations, in the Northeast Plains section, reported any snowfall.

MISCELLANEOUS PHENOMENA

Duststorms.—2d, 10th, 11th, 12th, 14th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 25th.

Fogs.—Dense, 2d, 5th, 7th, 16th, 23d.

(Continued on page 19)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.99	30.40	27	29.54	10	9.6	32	nw.	11	70	42	41	80
Kansas City ...	29.98	30.42	27	29.55	10	11.5	40	nw.	11	68	42	41	76
St. Joseph	29.98	30.43	27	29.53	10	10.1	33	nw.	11	63	38	35	80
St. Louis....	29.98	30.38	28	29.50	10	12.5	35	nw.	10	64	53	57	66
Springfield	29.99	30.35	28	29.64	10	10.2	29	nw.	11	69	51	48	59
Cairo, Ill.....	29.99	30.39	30	29.57	11	9.8	32	nw.	11	68	45	45	68
Keokuk, Iowa.	29.98	30.39	27	29.50	10	9.5	26	nw.	12	66	44	45	65

COMPARATIVE DATA FOR APRIL

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	57.9	+ 2.6	94	20	1.83	−2.06	3.91	0.80	....	5	..	..	..
1889....	55.7	+ 0.4	90	27	2.52	−1.37	5.40	0.67	....	8	..	..	..
1890....	56.2	+ 0.9	93	25	3.17	−0.72	7.00	0.00	....	8	..	..	..
1891....	56.8	+ 1.5	93	15	3.90	+0.01	9.50	0.90	T.	9	..	..	..
1892....	53.1	− 2.2	90	24	5.66	+1.77	9.14	2.50	0 0	11	9	8	13
1893....	53.9	− 1.4	95	19	7.84	+3.95	17.49	1.24	0.0	12	8	9	13
1894....	56.1	+ 0.8	95	20	3.17	−0.72	6.84	0.90	T.	8	12	10	8
1895....	57.9	+ 2.6	100	24	1.95	−1.94	4.41	0.02	T.	7	14	8	8
1896....	61.9	+ 6.6	92	17	3.51	−0.38	7.42	1.11	0.0	9	11	12	7
1897....	54.4	− 0.9	88	21	4.55	+0.66	8.21	1.20	T.	10	10	11	9
1898....	52.5	− 2.8	90	14	3.65	−0.24	6.65	0.87	T.	10	12	9	9
1899....	54.0	− 1.3	96	6	3.70	−0.19	6.88	1.62	3.8	8	12	9	9
1900....	56.7	+ 1.4	89	21	3.36	−0.53	6.76	1.34	0.7	9	11	10	9
1901....	53.3	− 2.0	94	24	2.85	−1.04	5.41	0.89	1.8	8	14	7	9
1902....	53.9	− 1.4	95	19	2.66	−1.23	7.13	0.72	T.	11	13	11	6
1903....	55.9	+ 0.6	91	26	3.54	−0.35	7.94	1.32	1.2	9	11	10	9
1904....	49.0	− 6.3	84	19	5.75	+1.86	11.03	2.25	2.7	9	15	6	9
1905....	54.9	− 0.4	92	20	3.19	−0.70	7.79	0.07	0.3	6	14	8	8
1906....	59.5	+ 4.2	93	22	2.24	−1.65	4.31	0.91	0.0	6	17	7	6
1907....	48.7	− 6.6	89	16	3.43	−0.46	5.75	1.08	T.	8	11	8	11
1908....	56.6	+ 1.3	90	18	5.30	+1.41	12.44	0.37	T.	11	11	8	11
1909....	54.8	− 0.5	93	19	4.35	+0.46	8.49	1.31	T.	8	13	9	8
1910....	54.8	− 0.5	97	21	3.51	−0.38	6.66	1.30	0.9	11	12	7	11
1911....	53.5	− 1.8	91	20	4.99	+1.10	9.30	1.29	T.	10	12	8	10
1912....	56.0	+ 0.7	89	24	5.98	+2.09	12.18	1.18	0.7	10	13	7	10
1913....	56.2	+ 0.9	94	25	3.33	−0.56	4.98	1.25	T.	7	16	5	9
1914....	55.2	− 0.1	91	18	3.14	−0.75	7.58	0.75	T.	8	12	7	11
1915....	61.9	+ 6.6	96	18	2.03	−1.86	4.27	0.90	T.	7	16	8	6
1916....	53.5	− 1.8	93	21	3.23	−0.66	5.70	1.20	1.9	10	11	8	11
1917....	53.2	− 2.1	89	19	5.97	+2.08	10.82	3.47	1.2	12	12	6	12
1918....	50.8	− 4.5	93	19	5.10	+1.21	12.14	1.64	0.9	11	12	6	12
1919....	55.3	0.0	94	20	3.01	−0.88	5.72	1.48	T.	9	12	7	11
1920....	50.2	− 5.1	89	4	3.95	+0.06	8.19	1.41	4.8	11	11	7	12
1921....	56.0	+ 0.7	91	19	5.37	+1.48	8.42	1.86	1.1	10	13	7	10
1922....	57.3	+ 2.0	91	24	6.21	+2.32	14.34	1.72	T.	11	13	6	11
1923....	54.2	− 1.1	92	14	3.12	−0.77	6.08	1.12	0.4	8	14	8	8
1924....	56.6	+ 1.3	95	11	2.07	−1.82	6.32	0.48	T.	6	14	8	8
1925....	61.0	+ 5.7	92	24	4.11	+0.22	8.14	1.90	0.0	10	12	9	9
1926....	49.9	− 5.4	91	11	2.46	−1.43	4.96	0.50	2.4	8	14	6	10
1927....	57.7	+ 2.4	94	18	8.46	+4.57	18.25	3.95	T.	14	10	7	13
1928....	51.6	− 3.7	88	16	4.79	+0.90	9.62	1.01	0.2	8	13	7	10
1929....	57.4	+ 2.1	96	27	6.15	+2.26	10.58	3.51	0.0	12	11	8	11
1930....	59.1	+ 3.8	96	23	2.03	−1.86	7.72	0.22	0.0	8	14	8	8
1931....	54.8	− 0.5	90	22	3.07	−0.82	6.23	1.01	T.	9	14	6	10
1932....	57.6	+ 2.3	95	22	2.57	−1.32	5.79	1.12	0.0	8	14	8	8
1933....	54.9	− 0.4	88	22	3.53	−0.36	7.85	0.71	0.7	10	11	9	10
1934....	56.5	+ 1.2	90	24	2.41	−1.48	4.70	0.65	T.	7	16	8	6
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
Period.	55 3	.....	100	4	3.89	.....	18 25	0 00	0.6	9	13	8	9

Climatological Data for April 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	57.8	+ 3.6	83	11	30	12	40	1.90	−1.65	0.63	0	6	15	8	7	sw.	O. K. Benecke
Clifton Hill	Randolph	731	35	56.0	+ 2.5	81	3	30	21	43	2.81	−1.05	1.27	0	6	16	9	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	56 3	+ 1.4	82	10	32	25	35	1.28	−2.49	0.60	0	6	17	10	3	nw.	U. S. Weather Bureau
Downing	Schuyler	876	18	54.2[a]	+ 1.0	81	9†	26	21	41	2.11	−1.65	1.18	T	6	15	9	6	w.	James Taylor
Elsberry	Lincoln	449	3	54.5	.....	82	3	24	25	44	1.37	.....	0.47	0	6	12	12	6	n	Ray E. Mills
Fayette	Howard	661	54	56.0	+ 1.8	83	4†	25	12	44	1.56	−2.06	0.86	0	7	..	..	..	.....	J. D Settle
Fulton	Callaway	818	46	54.8	+ 0.2	83	4	30	1†	44	1.03	−3.15	0.30	0	8	16	9	5	nw.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	3.67	−0.16	2.71	0	4	16	12	2	nw.	W. L Harker
Hannibal	Marion	759	42	56.4	+ 3.0	82	3	31	21	36	1.70	−1.49	0.57	0	8	14	5	11	nw	Hannibal Water Dept.
Jefferson City	Cole	557	44	55.7	− 0.3	87	3†	30	1	39	1.57	−2.28	0.59	0	9	17	8	5	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	54.2	+ 2.3	81	30	28	21	39	3.03	−0.56	2.31	0	4	15	6	9	w.	Prof. J S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	2.66	.....	1.91	0	5	18	6	6	nw.	J. Robert Hall
Louisiana	Pike	469	40	55.2	+ 1.2	80	3†	25	25	43	3.05	−0.39	1.00	0	5	18	9	3	s.	Stark Bro's Nurseries
Macon	Macon	875	35	54.4	+ 1.3	82	3	29	1†	37	2.54	−0.82	1.17	0	6	15	10	5	w.	W. C. Brown
Mexico	Audrain	800	45	55.2	+ 1.4	84	3	29	25	41	1.94	−1.72	0.76	0	8	17	4	9	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	2.36	−1.35	0.80	0	6	8	11	11	n.	J. S Conway
St. Charles	St. Charles	520	46	56.2	+ 0.6	83	11	30	25	40	2.20	−1.45	0.78	0	8	15	11	4	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	57.0	+ 0.9	82	4	36	12	29	2.40	−1.41	0.88	0	8	16	7	7	s.	**Section Center**
St. Louis University	St. Louis City	578	22	56.8	+ 1.6	81	3	36	12	30	2.29	−1.65	0.90	0	7	19	8	3	nw.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	2.36	−1.22	0.87	0	7	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	36	55.0	+ 1.9	83	30	29	13†	38	2.80	−0.89	1.45	T.	5	14	12	4	s.	Frank Hall
Unionville	Putnam	1,062	41	55.4	+ 4.4	86	9	28	21†	40	1.87	−1.85	0.80	0	5	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	56.2	+ 1.4	81	3†	32	25	34	1.58	−2.58	0.65	0	6	11	13	6	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	54.1	+ 1.8	80	9	31	21	34	2.64	−0.35	1.35	0	7	13	5	12	nw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**55.6**	**+ 1.7**	**87**	**3†**	**24**	**25**	**44**	**2.13**	**−1.54**	**2.71**	**T.**	**6**	**15**	**9**	**6**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	59.0	.....	85	4	34	25	41	2.22	.....	0.81	0	9	19	5	6	s.	Jeff. King
Caruthersville	Pemiscot	265	38	62.9	+ 2.7	87	4	38	13	38	2.18	−2.27	0.80	0	7	10	11	9	.....	Sam Smith
Doniphan	Ripley	344	30	59.7	+ 1.2	88	10	32	25	48	2.44	−2.94	0.82	0	7	13	10	7	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	59.4	+ 2.3	90	4	31	14	47	4.17	−0.37	1.61	0	8	8	8	14	s.	John G. Putz
Marble Hill	Bollinger	470	39	58.4	+ 1.2	88	4	29	14	47	3.35	−1.37	1.32	0	6	12	14	4	w.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	2.80	−2.78	1.64	0	6	18	10	2	s.	John A. Spence
Poplar Bluff	Butler	329	29	57.1	− 2.4	80	15	33	14	46	2.65	−2.05	1.40	0	8	19	8	3	w.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	60.4	+ 2.3	86	4	35	13†	45	2.87	−1.61	2.00	0	8	15	12	3	.....	John A. LaFont
Cairo, Ill	Alexander, Ill	356	62	59.4	+ 1.3	85	4	39	12	35	1.69	−2.03	1.17	0	9	10	8	12	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**59.5**	**+ 1.2**	**90**	**4**	**29**	**14**	**48**	**2.49**	**−2.12**	**2.00**	**0**	**8**	**14**	**9**	**7**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	54.8	− 0.5	83	4†	30	28	43	3.52	−1.16	1.50	0	7	16	10	4	w.	Arcadia College
Birchtree (near)	Shannon	1,000	39	57.5	+ 0.4	84	10	33	14†	42	2.65	−2.15	1.07	0	6	19	7	4	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	4.02	.....	1.03	0	7	19	7	4	.....	C. M McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	3.12	.....	1.62	0	7	14	14	2	sw.	Ozark Utilities Co.
Dean ‡‡	McDonald	1,000	30	58.7	+ 2.0	85	10	30	13	40	2.95	−1.65	1.05	0	7	17	8	5	nw.	H. E. Dean
Eldon	Miller	934	39	54.1[a]	− 1.3	83	10	30	1	42	1.35	−3.21	0.61	0	6	11	15	4	sw.	E. H. Shepherd
Farmington	St. Francois	918	23	56.6	− 0.3	81	5†	28	25	43	3.44	−0.80	1.46	0	4	21[a]	4[a]	4[a]	s.	H. O. Miller
Goodland	Iron	1,000	41	56.8	+ 1.8	85	10	26	14	50	4.00	−1.00	1.10	0	7	19	5	6	s.	F. M. Adams
Greenville	Wayne	381	25	56.6	0.0	86	4	27	14	51	2.76	−2.23	1.11	0	4	21	6	3	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	3.33	−1.69	1.80	0	8	16	8	6	e.	A. W Madison
Koshkonong	Oregon	958	33	60.0[a]	+ 1.5	85	10	37	13	38	2.97	−2.30	0.95	0	7	16	6	8	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	56.0	+ 0.5	83	4	31	25	39	4.01	−0.35	1.02	0	8	23	2	5	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	57.6	+ 1.1	84	10	34	13	36	4.70	+0.39	2.01	0	9	20	4	6	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	56.4	+ 1.5	82	10	32	25	36	2.71	−2.25	0.94	0	11	16	4	10	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	58.9	+ 0.6	85	10	33	7†	39	1.64	−2.80	0.49	0	8	18	4	8	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	57.5	+ 1.6	84	10	34	28	39	3.46	−1.16	1.19	0	10	5	10	15	nw.	F. H. Lane
Salem	Dent	1,173	30	56.1	+ 0.1	82	3†	30	25	43	4.08	−0.55	1.37	0	10	11	15	4	s.	E. E. Martin
Seligman	Barry	1,542	33	58.4[b]	+ 1.8	83	10	34	13†	33	3.07	−1.27	1.23	0	9	16[b]	5[b]	7[b]	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	28	54.8	− 0.9	79	4†	30	25	38	4.57	+0.28	1.63	0	11	14	8	8	nw.	A. L. Hailey
Springfield	Greene	1,324	46	56.8	+ 0.8	81	10	37	13	27	3.77	−0.09	1.20	0	10	16	7	7	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	57.2	.....	84	4†	30	25	40	1.63	.....	0.68	0	9	18	7	5	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**56.9**	**+ 0.6**	**86**	**4**	**26**	**14**	**51**	**3.05**	**−1.50**	**2.01**	**0**	**8**	**17**	**7**	**6**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	57.4	+ 1.3	83	10	33	21	37	1.70	−2.71	1.05	0	6	9	19	2	sw.	W. G. Bigelow
Clinton	Henry	765	41	57.2	+ 0.9	82	3	33	13	40	1.49	−2.82	0.42	0	8	14	11	5	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	54.2	+ 0.3	84	10	27	1	40	1.77	−1.77	0.59	0	10	13	4	13	sw.	John H. Patterson
Lamar	Barton	980	46	56.2	− 0.4	82	3†	31	1	39	3.31	−1.17	1.05	0	9	16	8	6	se.	Jesse A. Mann
Lamonte	Pettis	867	33	56.4	+ 1.2	82	10	31	25	40	3.75	−0.16	1.35	0	5	19	5	6	sw.	J. E. Wheeler
Marshall	Saline	779	47	57.3	+ 2.5	81	3†	32	13†	37	3.05	−0.79	1.29	0	6	19	9	2	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	57.4	+ 1.7	82	3†	36	13†	33	2.03	−2.17	0.65	0	8	18[a]	6[a]	5[a]	sw.	George A. Kaupp
Warrensburg	Johnson	878	47	56.2	+ 0.1	82	10	32	13	41	2.15	−1.20	0.77	0	7	20	5	5	nw.	E. A. Markey
Warsaw	Benton	687	33	57.5	+ 0.8	85	10	31	25	44	2.16	−2.42	1.10	0	8	16	5	9	s.	Everett Martin
Division means	**and extremes**	.....	..	**56.8**	**+ 0.9**	**85**	**10**	**27**	**1**	**44**	**2.29**	**−1.76**	**1.35**	**0**	**7**	**16**	**8**	**6**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	54.4	+ 2.9	83	9	26	25	46	2.36	−0.91	1.53	0	3	19	8	3	nw.	A. S Cumming
Chillicothe	Livingston	779	25	53.8	+ 0.7	85	9	25	1	45	2.08	−2.21	0.90	0	5	19	9	2	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	45	55.8	+ 3.6	83	10	28	13	38	1.98	−0.87	1.52	0	3	12	14	4	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	56.5[b]	+ 2.7	84	10	26	25	44	2.65	−0.80	1.50	0	7	21	2	7	sw.	Fred L. Stiff
Grant City	Worth	1,134	30	53.6	+ 1.4	79	18	26	21	43	1.51	−1.51	0.82	0	5	10	10	10	sw.	Howard Rybolt
Kansas City (a)	Jackson	963	45	57.7	+ 2.9	86	10	36	21	40	2.40	−0.74	1.75	0	6	12	9	9	nw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	53.6	+ 1.4	82	10	25	1	42	1.84	−1.34	0.70	0	4	17	8	5	s.	Roscoe L Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	2.39	−0.88	1.92	0	3	8	15	7	nw.	John M. Martin
Lexington	Lafayette	688	49	55.2	+ 0.6	82	3	28	1	37	2.23	−1.49	0.86	0	7	16	12	2	w.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	55.6	+ 4.8	85	10	26	21	45	0.67	−2.38	0.42	0	5	13	13	4	n.	J. R. Brink
Oregon	Holt	1,048	78	57.3	+ 4.6	86	10	31	13†	39	1.27	−2.05	0.92	0	4	20	8	2	sw.	Mina Wright
St. Joseph	Buchanan	987	24	56.8	+ 2.5	85	10	34	21	38	3.36	+0.16	1.80	0	5	18	6	6	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	54.6	+ 2.4	85	10	28	24	45	0.65	−2.50	0.32	0	3	19	7	4	nw.	Albert Volker
Trenton	Grundy	822	38	55.8	+ 3.1	82	9	29	21	40	2.63	−0.84	1.58	0	6	16	10	4	n.	W. H. Estes
Division means	**and extremes**	.....	..	**55.4**	**+ 2.6**	**86**	**10**	**25**	**1**	**46**	**1.98**	**−1.36**	**1.92**	**0**	**5**	**16**	**9**	**5**	**nw.**	
State means	**and extremes**	.....	..	**56.5**	**+ 1.2**	**90**	**4**	**24**	**25**	**51**	**2.41**	**−1.48**	**2.71**	**T.**	**7**	**16**	**8**	**6**	**nw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing: for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Precipitation for April 1934

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri	.15				.12					.02						.23		T.								.18	.45					1.15
Bowling Green	Mississippi	**	.10			.50											.28										.31	.04					1.23
Brunswick	Grand	.34			.37	.38					.15						.03										.63						1.90
Canton	Mississippi	**	.52		.95	.04					.11						.02										.32						1.96
Clifton Hill	Chariton	.41			1.27	.21					.21						.01										.70						2.81
Columbia***	Missouri	.08			.16		T.	T.		.17		T.				.26		T.					.01			T.	.60						1.28
Downing	Mississippi	.45			1.18	.08						.01				.02											.37						2.11
Edina	....do	.43			1.98	.07	T.				.29						T.										.37						3.14
Elsberry	....do	.08				.18	.22					T.				.22	.20										.47						1.37
Ewing	....do	.70	.05		.90	.03					.05																.30						2.03
Farber	....do	.19				.20					.02						.25										.44						1.10
Fayette	Missouri	.80	.01		.02	.07					.15						.15										.86						1.56
Fulton	....do	.18				.24		.02	.01		.23	.02	T.				.30							.03									1.03
Gorin	Mississippi	.51			2.71	T.					.11	T.				T.											.34						3.67
Hannibal	....do	.33			.30	.29					.12	.03					.06										.55	.02					1.70
Hermann	Missouri		.01			.93	.15	.09			.07	.19					.32							.01			.08	.70					2.55
Jefferson City	....do	.14	.05			.32		.07			.15	.04					.21										.04	.55					1.57
Kahoka	Mississippi	.57	.04		2.00	.07						.04					.02										.40						3.14
Kirksville	....do	.45			2.31	.20										.07																	3.03
Linneus	Grand				1.91	.03	T.				.44						.03										.25						2.66
Louisiana	Mississippi	.75			1.00					.30						.60											.40						3.05
Lucerne	Grand	.64			.70												.03										.19						1.53
Macon	Chariton	.46			1.17	.35					.13						.03										.40						2.54
Madison	Mississippi	.49	.01		1.01	.20					.10						.09										.60						2.60
Memphis	....do		T.		1.75	.11	T						T.				T.										.52						2.38
Mexico	....do	.15	.05		.02	.50					.13						.23										.76	.10					1.94
Milan	Grand	.55			2.10	.12											.05										.27						3.09
Monroe City	Mississippi	.39			.80	.45				.15						.11											.46						2.36
New London	....do	.07			.13	.36				.14																	.47	.11					1.28
Palmyra	....do	.16	.04		.46						.25						.03										.60						1.54
Paris	....do	.16			.30	.55					.11						.09										.36						1.57
Perry	....do		.20		.09	.30					.07		T.				.13										.36						1.15
Philadelphia	....do	.04			.40	.30																					.72						1.46
St. Charles	Missouri					.12	.36	.22	.02			.02					.68										.41	.37					2.20
St. Louis***	Mississippi	T.		T.	.02	.09	.56	T.	.01		.12	.01				.71		T.				T.	T.	T.			.88						2.40
St. Louis University*	....do	T.		T.	.07	.07	.45				.07	.01				.72											.90						2.29
Shelbina	....do	.48	.04		.87	.32					.18						.04										.43						2.36
Shelbyville	....do	.53			.99	.23					.12																.62						2.49
Steffenville	....do	.50			1.45	.25						T.					.05										.55						2.80
Troy	....do	.02				.51	.10	.10					.03				.37										.39	.45					1.97
Union	Meramec			T.		.32	.67	.18	.02		.03	.15	T.				.67							.04			.40	.87					3.35
Unionville	Chariton	.70		.03	.80	.04																					.30						1.87
Valley Park	Meramec		T.	T.		.40	.56	.24	.05			.04	.05				.63										T.	1.16					3.13
Warrenton	Mississippi	T.			T.	.22	.17				T.	.05	T.			.25	.24										.66						1.58
West Ely	....do	.21	.04		.42	.11					.02		.02				T.										.44	.02					1.28
Keokuk, Ia.***	....do	.63		.27	1.08	.01				.15		T.				.02				T.							.48						2.64
Southeast Lowlands																																	
Bragg City	St. Francis					1.10		.09				.10				.12												1.00					2.41
Campbell	....do				.81	.12	.11		.05			.06					.11		.05				.25					.66					2.22
Cape Girardeau	Mississippi						.27	.10				.18	.06			.02	.28						.16					1.58					2.65
Caruthersville	....do				.80		.12				.17					.16							.15			.63	.15					2.18
Dexter	St. Francis					.28																	.18					1.25					1.71
Doniphan	Black				T.	.10	.69					.09				.02	.42		T.				.30					.82					2.44
Fisk	St. Francis					.22	.43	.19									.22						.22					1.69					2.97
Jackson	Mississippi						1.17	.09	.11			.25					.55						.18			.21	1.61						4.17
Marble Hill	....do						1.32	.04				.31					.68									.32	.68						3.35
Morehouse	....do					.05	.08	T.				.19					.11							.23				1.64					2.30
New Madrid	....do					.34		.05	.10	.01		.15					.10			.05					.25			1.00	.08				2.13
Parma	St. Francis					.23	.03					.08					.13						.20					.98					1.65
Poplar Bluff	Black					.10	.40	.09	.05			.14				T.	.22								.25			1.40					2.65
Sikeston	Mississippi					.05		.10	.02			.30				.04	.06								.30			2.00					2.87
Cairo, Ill.***	.. .do	T.			T.	.08	.06		.02		T.	.06				.01	.06		T.		T.		.23			.94	.23					1.69
Ozark Plateau																																	
Arcadia	St. Francis					T.	1.23	.16	.15	T.						.03	.35		T.				.10			T.	1.50					3.52
Birchtree (near)	Black					.08	1.07					.47											.50			.32	.21					2.65
Buffalo	Osage	.01			.92			.24			.26					1.03	.68						T.				.88					4.02
Caplinger Mills	....do	.06		T.	.48		.18								T.	1.62		.02					T.			**	.76					3.12
Dean	Neosho				1.05		.72	T.			.33					.12	.35	.14					T.		T.	T.	.24					2.96
Eldon	Missouri	.14				.18					.15					.21											.06	.61					1.35
Farmington	St. Francis					1.30	.35									.33						T.					1.46						3.44
Fredericktown	....do						1.63	.15	.17		.11						.23						.20					1.27					3.76
Galena	White	.04					1.19	.33		.17				.23	.09				.14	.58		.27						.23					3.27
Goodland	Black						1.10		.10		.30					.45	.30									1.05	.70					4.00
Greenville	St. Francis						.93									.57							.15				1.11					2.76
Hailey	White				1.80	.21	.18	.03			.29	.08				T.	.56	.18															3.33
Koshkonong	Black				.15	.24	.95										.13		.18				.55					.77					2.97
Lakeside	Osage	.09				.96	T.	.03			.52					.15	.35		T.							.14	.47						2.71
Lebanon	....do					.52	.08	.22			.31	T.				1.02	.62									.32	.92						4.01
Leeper	Black					.38	.84	.21	.05			.05				.03	.47						.14				.84						3.01
Lockwood	Osage	.11			.78	T.	.22	T.			.18				T.	2.01	.07	.08					.63			T.	.62						4.70
Mountain Grove	White				.05	.26	.35	.02	.02		.18					.69	.25						.20			.33	.36						2.71
Neosho	Neosho				.43	.06	.18									.30	.22	.10	.04						T.	T.	.31						1.64
Owensville	Gasconade					.40	.11					T.				.08	.45										.16	.96						2.16
Rolla	Meramec		T.		T.	.16	.46		.09		.23	.12				.48	.54						.03			.16	1.19						3.46
St. Thomas (near)	Osage		.03			.40	.04	.03			.23					T.	.47									T.	.61						1.81
Salem	Meramec				.10		.96	.03			.23	.10				1.15	.11						.03			.65	.72						4.08
Seligman	Neosho				.94	.29	.23	.05			.60					.28	.24	.12								T.	.32						3.07
Seymour (near)	White				1.63	.17	.20	.19			.24	.08				1.06	.30						.21			.09	.40						4.57
Springfield***	....do	.01		T	1.08	.14	.17				.25				T.	1.20		.02					.26	T.		.30	.34						3.77
Stover	Missouri					.49					.45						.10											.65					1.69
Versailles	Osage	.10			.31	T.	.02				.32	T.				.14	.03						.02			.68	.01						1.63
Williamsville	Black					.08	.80	.91				.11					.41						.25				.58						3.14
Willow Sprgs. (near)	White					.06	.78	.15	.03		.18	.01					.38						.37				.28						2.24
Southwest Plain																																	
Appleton City	Osage	.09			1.05		.31									.08		.05									.12						1.70
Clinton	.... do	.10			.42		.27				.08					.20	.05	.11									.26						1.49
Concordia	Missouri	.45			.28						.25						.10										.67						1.75
Harrisonville	Osage	.18			.16	.43	.04	.03			.18						.15		.04								.39	.17					1.77
Joplin	Neosho	.11			.45		.25				.08					.93		.08							T.		.02	.32					2.24

Continued on next page

Daily Precipitation for April 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																	
Lamar‖	Neosho	T.				.93	.03	.10			.15					1.05	.25		.15				.40					.25					3.31
Lamonte	Missouri				.53						1.12					1.35		.10									.65					3.75
Marshall	do	.75			1.15	.14					.06					.05		T.									.90					3.05
Nevada	Osage	.18			.66		.12				.35					.10	T.	.07					T.				.40	.15				2.03
Warrensburg	Missouri	.36			.77		.02				.24					.16		.05									.55					2.15
Warsaw	Osage	.05			1.10		.31				.24					.10		T.	.01								.13	.22				2.16
Waverly ‖	Missouri	.36			.49	.16					.12						.02										.85	.07				2.07
Northwest Plateau																																	
Bethany	Grand	.59			1.53							T.														T.	.24					2.36
Chillicothe ‖‖	do	.44			.90	T.					.24						.04										.46					2.08
Conception	Missouri	.46			1.49	.03										T.										T.				T.		1.98
Edgerton	do	.42		.16	1.34	.01				.03						.10											.59				T.		2.65
Gallatin ‖	Grand	.70			.68																						.37						1.75
Grant City	do	.46		T.	.82	.01						T				.02										T.	.20						1.51
Kansas City***(a)	Missouri	.22		.88	.87	T.	T.			.01						.06		T.								T.	.36				T.		2.40
Kidder ‖‖	Grand	.62			.70						T.						.07										.45				T.		1.84
King City	Missouri	.42			1.92											T.											.05						2.39
Lexington ‖	do	.18			.65	.21					.31						.07										.77	.04					2.23
Maryville‖‖	do	.42			.15	.04	.01									T.			T.								.05						0.67
Oregon	do	.33			.92											.01											.01				T.		1.27
St. Joseph***	do	.29		.83	.42	T.										.02										T.	1.80				T.		3.36
Tarkio	do	.21			.32											.12																	0.65
Trenton	Grand	.62		T.	1.58	.02					.05	T.				.01											.35				T.		2.63

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated
(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for April 1934
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.054	.099	.231	.163	.276	.082	.029	.083	.146	.332	.313	.350	.221	.191	.118	.014	.142	.149	.271	.300	.238	.227	.197	.256	.215	.235	.063	.183	.204	.328	....	5.710
	Mean temperature	50	58	62	68	60	49	52	56	61	67	58	46	47	56	52	54	57	64	57	50	50	55	60	54	52	55	52	52	60	66	..	55.9
	Wind movement	75	52	114	59	64	78	56	41	32	112	101	206	132	77	43	49	39	55	75	147	110	95	61	100	74	68	57	78	56	92	..	2,398

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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Frost.—Light, 7th, 8th, 12th, 13th, 14th, 16th, 20th, 21st, 24th, 25th, 28th; heavy, 14th, 21st, 25th, 27th, 28th, 29th; killing, 12th, 13th, 14th, 21st, 24th, 25th.

Halos.—Solar, 3d, 4th, 10th, 17th, 21st, 22d, 25th, 27th, 30th; lunar, 2d, 4th, 21st, 22d, 26th.

Hail.—Light, at Kansas City on 3d and 26th; Appleton City, Grant City, Lakeside, Lamonte, and Warsaw on 4th; Jackson on 6th; Edgerton on 9th; Lamonte, St. Louis, Warrenton, and Warsaw on 10th; moderate, eight miles northeast of Warrensburg on 10th; slight damage.

Haze.—Dense, 11th, 12th, 22d, 23d.

Sleet.—12th.

Thunderstorms.—Local, 1st, 3d, 5th, 6th, 9th, 21st, 22d, 25th, 27th; more or less general, 4th, 10th, 11th, 26th.

Windstorms.—Thunderstorm squall accompanied by light hail night of the 10th smashed windows and blew down electric wires in various parts of St. Louis. At Brunswick limbs were broken from fruit trees by wind on the 11th.

ERRATA

March 1934, page 12.—Total snowfall unmelted at Columbia should be 8.8.

Daily Temperatures for April 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	65	80	82	78	67	65	64	73	81	80	83	61	60	73	74	68	70	78	81	62	65	70	77	70	67	67	66	70	79	82	..	71.9
	Minimum	40	41	60	59	54	43	37	42	50	48	50	30	33	33	46	36	46	54	47	36	32	51	48	41	31	50	40	36	44	54	..	43.7
Columbia	Maximum	63	78	80	81	70	54	62	71	82	82	68	52	55	69	62	64	69	74	62	57	57	68	76	58	65	62	56	68	77	79	..	67.4
	Minimum	45	46	65	58	54	44	43	45	53	55	41	36	34	34	44	37	50	56	42	36	33	52	49	40	32	50	42	38	47	55	..	45.2
Fayette	Maximum	67	80	82	83	70	56	64	74	83	82	61	56	58	73	65	69	71	78	65	60	59	71	78	62	67	65	57	69	79	81	..	69.5
	Minimum	42	36	62	61	54	44	36	41	46	48	52	25	34	31	43	35	42	54	47	35	32	50	44	39	28	49	41	31	40	51	..	42.4
Hannibal	Maximum	62	76	82	79	70	63	63	70	81	76	78	52	54	68	64	66	70	77	72	55	55	67	74	67	65	65	63	68	77	80	..	68.6
	Minimum	40	44	63	57	55	43	39	49	52	50	42	33	32	36	46	39	47	55	47	36	31	49	47	38	33	46	38	38	46	54	..	44.2
Jefferson City §§	Maximum	65	78	87	87	74	50	62	72	82	83	59	55	57	74	56	67	72	76	63	57	58	70	85	62	67	57	59	68	77	86	..	68.8
	Minimum	30	40	51	62	53	46	40	42	50	55	55	35	34	35	40	39	40	47	47	36	33	35	49	41	33	38	41	35	43	52	..	42.6
Kirksville	Maximum	61	76	79	75	63	55	65	72	80	76	74	53	56	69	67	67	72	77	68	59	57	69	72	60	66	72	62	69	78	81	..	68.3
	Minimum	38	41	59	49	49	40	36	42	42	44	45	31	30	30	33	38	45	50	45	33	28	33	47	36	29	46	35	37	41	54	..	40.2
Louisiana	Maximum	65	76	80	78	69	60	63	70	80	78	75	55	55	69	63	66	70	75	65	55	52	65	74	65	66	62	57	60	80	78	..	67.5
	Minimum	43	33	60	60	52	45	36	45	48	48	52	35	33	37	45	38	42	52	49	40	34	48	40	39	25	47	40	29	42	50	..	42.9
Macon §§	Maximum	63	77	82	74	64	55	65	72	80	78	57	54	55	70	58	67	71	77	60	58	59	69	74	59	66	68	56	70	78	81	..	67.2
	Minimum	29	42	57	57	52	41	37	46	54	46	47	33	32	35	45	37	39	50	45	34	29	36	50	37	32	31	37	38	45	54	..	41.6
Mexico §§	Maximum	65	78	84	82	73	54	65	74	82	83	58	55	56	72	60	68	75	61	63	57	60	70	78	62	67	62	63	69	79	81	..	68.5
	Minimum	30	41	43	59	54	43	41	44	48	49	50	34	33	34	44	38	42	50	46	36	30	37	48	38	29	46	39	37	43	51	..	41.9
St. Louis	Maximum	68	74	81	82	74	61	58	65	78	81	68	52	54	71	63	64	68	78	64	54	55	68	80	60	63	55	55	64	73	72	..	66.8
	Minimum	41	48	62	62	59	48	46	50	51	60	40	36	38	42	45	43	52	57	45	43	38	48	51	45	40	46	40	42	48	51	..	47.2
Unionville	Maximum	66	76	80	76	70	56	66	74	86	84	78	54	55	70	65	66	70	75	66	57	65	67	68	64	64	67	64	70	78	84	..	69.4
	Minimum	30	40	60	46	45	38	45	48	60	44	45	38	30	34	36	37	45	47	43	32	28	45	47	36	28	45	32	37	44	54	..	41.3
Warrenton	Maximum	62	76	81	81	75	69	58	68	80	79	79	49	52	70	68	62	69	77	71	55	55	65	78	74	63	60	57	65	74	77	..	68.3
	Minimum	42	42	61	61	55	45	45	45	47	49	48	34	34	38	47	40	45	53	46	39	33	45	46	40	32	42	40	36	42	51	..	44.1
Southeast Lowlands																																	
Campbell	Maximum	72	80	84	85	79	71	62	71	69	84	75	57	61	75	77	69	76	79	69	62	62	71	78	73	70	81	58	64	76	68	..	71.9
	Minimum	44	46	62	55	58	53	49	47	44	54	55	38	35	35	55	50	43	51	55	40	37	43	44	49	34	44	45	37	35	45	..	46.1
Caruthersville	Maximum	78	81	84	87	82	72	65	71	79	84	81	62	63	80	78	70	76	82	80	69	65	69	82	80	67	83	82	63	73	75	..	75.4
	Minimum	49	49	63	61	59	57	52	52	50	56	61	41	38	44	57	52	49	55	59	45	42	47	49	54	45	45	48	41	44	49	..	50.4
Doniphan	Maximum	75	80	83	85	78	70	58	71	85	88	82	60	60	79	79	71	74	81	80	71	63	75	83	74	69	82	72	65	71	70	..	74.5
	Minimum	41	40	63	53	58	55	50	45	40	40	60	40	34	33	59	40	41	52	50	38	38	44	41	51	32	46	48	34	34	46	..	44.9
Jackson	Maximum	74	80	83	90	80	76	59	70	79	84	84	55	60	78	75	67	77	82	79	79	60	78	81	75	68	62	58	67	75	74	..	73.6
	Minimum	44	39	63	55	59	51	47	47	42	43	53	36	37	31	57	47	41	55	54	40	38	44	41	45	32	49	45	32	36	49	..	45.1
Poplar Bluff	Maximum	65	79	79	79	73	73	55	65	68	79	71	56	51	79	80	73	67	79	77	54	57	71	79	66	61	69	58	63	72	72	..	68.7
	Minimum	44	42	64	53	58	46	47	45	43	51	55	38	35	33	47	50	44	53	53	42	42	43	44	51	34	46	44	36	36	47	..	45.5
Sikeston	Maximum	76	79	83	86	81	76	62	70	79	84	76	57	60	79	77	73	75	82	73	64	58	70	80	76	80	79	69	63	72	69	..	73.6
	Minimum	46	49	60	56	58	55	50	51	48	55	56	37	35	36	55	48	45	55	55	40	40	46	46	49	35	46	45	37	39	47	..	47.3
Cairo, Ill	Maximum	76	79	82	85	78	70	60	65	77	80	71	54	58	76	75	62	72	79	67	54	55	67	78	63	62	66	55	61	70	66	..	68.8
	Minimum	49	56	64	64	62	53	51	51	53	58	44	39	39	41	59	51	48	57	52	44	43	46	51	49	42	51	45	40	45	52	..	50.0
Ozark Plateau																																	
Arcadia §§	Maximum	69	76	79	83	73	57	54	68	78	83	60	52	56	76	65	64	72	77	64	53	59	70	81	64	68	62	55	65	72	72	..	67.6
	Minimum	36	35	40	52	57	57	46	41	40	48	53	35	37	34	41	44	39	44	52	40	39	41	38	45	31	40	46	30	34	41	..	41.9
Birchtree	Maximum	68	77	82	81	74	67	58	69	68	84	76	58	58	75	72	66	73	76	68	56	60	71	79	74	67	69	63	67	71	72	..	70.0
	Minimum	41	40	62	55	56	49	46	41	41	53	58	40	35	33	53	45	42	53	48	43	39	45	40	47	35	47	46	33	35	48	..	45.0
Eldon §§	Maximum	66	78	80	82	71	50	60	72	81	83	59	52	55	75	56	66	70	75	..	50	59	67	78	60	69	59	55	69	77	79	..	[a]67.3
	Minimum	30	39	39	61	53	40	39	40	45	47	51	36	34	34	28	39	40	45	50	..	34	34	47	41	32	35	41	35	35	51	..	[a]40.9
Farmington	Maximum	67	74	80	80	81	75	67	63	73	81	75	52	60	65	70	72	64	78	70	56	54	56	81	68	65	58	68	68	72	70	..	68.8
	Minimum	35	42	65	62	67	47	45	40	48	59	47	35	40	42	35	60	42	45	50	40	38	45	38	40	28	43	38	35	38	40	..	44.3
Koshkonong	Maximum	71	78	82	80	75	67	65	68	80	85	78	57	59	78	75	67	74	75	73	60	61	70	81	75	69	82	62	61	..	75	..	[a]71.8
	Minimum	47	50	66	60	57	52	48	46	48	56	56	39	37	45	56	47	46	54	54	41	41	45	43	49	41	51	46	38	..	43	..	[a]48.3
Lebanon §§	Maximum	65	78	78	83	67	49	60	69	78	82	60	53	67	77	59	65	69	71	61	55	59	67	76	68	69	77	59	69	74	76	..	68.0
	Minimum	48	42	53	52	55	49	44	39	50	54	56	35	35	38	53	43	43	52	45	36	35	39	46	40	31	45	42	36	44	44	..	44.1
Mountain Grove	Maximum	67	76	80	81	72	60	55	70	78	82	72	51	57	73	62	64	68	72	63	55	59	69	78	64	68	74	62	65	71	73	..	68.0
	Minimum	46	47	60	56	54	45	44	38	50	54	49	35	34	40	51	43	46	50	47	37	35	45	47	41	32	50	44	36	40	47	..	44.8
Neosho	Maximum	68	76	77	81	68	66	58	73	81	85	83	62	63	77	73	65	63	70	68	72	65	70	78	76	72	83	77	72	77	77	..	72.5
	Minimum	48	39	65	58	54	49	33	34	47	53	45	42	37	38	51	47	48	51	54	39	33	48	45	41	37	55	47	33	40	48	..	45.3
Rolla	Maximum	64	77	79	82	71	66	57	68	80	84	80	55	55	75	71	63	70	74	71	59	57	67	77	74	67	66	57	67	74	76	..	69.4
	Minimum	47	38	63	57	54	46	45	41	44	56	54	36	35	36	52	42	45	53	49	37	36	48	47	43	35	51	43	34	50	52	..	45.6
Springfield	Maximum	65	76	78	79	65	58	55	68	77	81	69	48	57	70	60	62	61	68	60	54	58	66	75	57	66	78	55	65	73	75	..	66.0
	Minimum	51	50	64	58	57	45	40	44	54	56	45	39	37	45	47	44	51	53	46	38	38	51	50	46	42	51	44	40	47	52	..	47.5
Southwest Plain																																	
Appleton City	Maximum	68	77	81	77	68	60	60	71	79	83	78	55	61	74	67	66	65	74	70	62	62	71	79	67	68	70	60	68	77	78	..	69.9
	Minimum	45	44	61	57	51	42	39	41	51	51	54	40	34	37	45	38	48	52	44	36	33	49	48	42	35	52	42	35	44	53	..	44.8
Clinton	Maximum	63	74	82	80	70	60	57	75	78	78	77	64	65	60	60	60	68	74	64	60	60	74	80	65	69	66	63	70	80	80	..	69.1
	Minimum	43	52	62	59	52	52	42	42	48	52	52	48	33	35	45	37	46	50	44	37	34	51	50	40	34	52	42	34	40	54	..	45.4
Harrisonville §§	Maximum	67	78	82	67	63	58	63	74	82	84	57	56	61	74	62	67	63	74	65	63	65	72	78	63	67	63	59	71	78	74	..	68.3
	Minimum	27	44	50	55	49	40	37	41	50	46	51	37	31	34	42	35	36	47	43	33	30	37	42	36	32	38	37	35	41	45	..	40.0
Lamar §§	Maximum	68	79	82	80	68	55	61	72	81	82	62	56	63	75	52	64	61	71	64	60	62	69	75	64	70	80	57	67	77	80	..	68.6
	Minimum	31	46	52	58	56	48	37	38	43	53	54	41	35	37	46	41	41	52	46	37	37	37	50	43	39	41	46	37	40	51	..	43.8
Lamonte	Maximum	65	80	81	80	75	70	69	80	80	82	68	53	56	73	63	66	69	75	61	61	61	69	75	60	68	63	61	69	78	79	..	69.7
	Minimum	45	42	62	57	51	38	38	40	41	48	47	36	34	35	44	36	46	48	45	38	32	48	46	39	31	51	39	36	44	53	..	43.0
Marshall	Maximum	64	79	81	79	68	63	61	80	81	81	78	56	56	71	68	67	68	75	74	59	59	75	76	69	66	66	66	69	77	80	..	70.4
	Minimum	42	42	65	60	55	43	39	44	45	51	50	35	32	37	38	38	50	51	46	36	32	50	50	42	34	49	41	38	46	46	..	44.2
Nevada	Maximum	67	77	82	77	68	61	60	72	79	82	76	54	62	72	60	64	62	72	64	62	64	70	80	65	68	77	55	67	77	82	..	69.3
	Minimum	49	48	52	57	54	45	37	43	51	50	53	40	36	40	46	37	49	52	46	37	36	54	54	42	36	44	42	38	45	50	..	45.4
Warrensburg	Maximum	66	77	81	75	66	59	63	72	79	82	77	55	59	75	64	66	65	76	67	62	60	71	77	65	68	63	62	69	77	76	..	69.1
	Minimum	41	43	61	57	49	42	37	42	51	48	50	35	32	34	44	36	47	48	44	35	33	48	49	38	34	49	38	37	45	53	..	43.3
Warsaw	Maximum	67	79	81	82	72	64	61	73	81	85	76	54	60	78	66	68	68	75	68	60	62	69	77	66	70	65	60	70	78	79	..	70.5
	Minimum	45	37	65	59	52	45	37	39	51	51	53	37	36	34	47	36	44	51	45	39	35	52	47	42	31	51	42	32	44	56	..	44.5
Northwest Plateau																																	
Chillicothe §§	Maximum	64	79	82	73	63	51	67	76	85	81	57	55	52	74	53	69	71	78	60	61	62	72	73	60	70	71	61	73	81	81	..	68.5
	Minimum	25	41	45	53	51	40	32	36	47	44	44	33	30	29	40	35	39	44	43	34	28	36	47	37	29	42	37	37	42	50	..	39.0
Grant City	Maximum	60	72	74	74	53	54	65	71	68	76	76	50	53	72	69	66	69	79	67	58	63	68	68	59	65	67	63	69	72	72	..	66.4
	Minimum	38	44	61	49	49	42	31	42	50	44	45	33	29	29	43	32	46	41	41	30	26	46	49	35	30	47	35	36	46	52	..	40.7
Kansas City (a)	Maximum	66	79	81	67	61	54	66	74	86	86	70	54	59	76	57	70	68	79	61	62	67	71	75	60	67	67	59	73	79	76	..	69.0
	Minimum	44	43	60	55	52	45	38	49	58	49	45	40	36	36	45	40	52	49	45	38	36	54	52	44	37	54	42	44	52	57	..	46.4
Kidder §§	Maximum	62	76	81	70	61	53	62	72	81	82	58	53	57	73	53	67	68	77	72	60	62	69	72	59	67	69	61	70	79	77	..	67.4
	Minimum	25	41	44	54	51	41	34	38	45	44	47	33	29	31	36	36	41	45	41	32	29	48	48	36	32	46	36	37	43	52	..	39.8
Lexington §§	Maximum	65	75	82	72	63	55	65	74	81	77	60	55	52	72	61	67	65	72	58	62	60	71	73	60	66	70	61	65	77	77	..	67.1
	Minimum	28	44	49	59	54	44	39	41	51	49	51	36	33	36	44	39	44	50	46	37	33	41	51	40	34	46	40	38	45	55	..	43.3
Maryville	Maximum	63	76	82	75	57	54	68	78	83	85	76	54	59	75	61	69	73	81	68	63	67	72	68	59	68	74	64	75	81	81	..	70.3
	Minimum	40	43	63	50	50	41	33	41	50	42	46	34	28	30	43	32	44	38	39	30	26	47	47	36	32	51	34	37	46	54	..	40.9
Oregon	Maximum	66	78	81	74	59	54	70	78	85	86	73	55	60	75	56	69	72	81	62	63	69	72	68	61	68	78	66	74	81	78	..	70.4
	Minimum	39	48	65	50	49	42	39	46	54	47	48	36	31	38	42	35	50	45	42	33	31	50	54	36	34	54	37	43	51	57	..	44.2
St. Joseph	Maximum	64	77	81	70	58	52	66	76	85	85	68	55	58	74	54	68	68	79	60	62	68	71	71	60	66	72	61	72	79	75	..	68.5
	Minimum	42	50	64	53	49	43	37	48	56	49	42	37	34	36	44	38	52	45	44	36	34	52	49	40	37	51	40	43	51	57	..	45.1
Trenton	Maximum	62	75	81	79	56	52	65	73	82	81	79	51	55	72	70	73	73	75	75	57	59	72	72	63	64	70	68	73	78	78	..	69.4
	Minimum	40	41	62	52	52	41	35	42	49	44	46	34	32	32	45	38	47	45	44	34	29	48	48	37	31	48	37	36	43	51	..	42.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs

(a) Place of observations changed, Jan 1, 1934; see explanation, page 4, Climatological Data for January 1934.

WBO, St. Louis, 5-18-34—875.

551.05
NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

JUN 28 1934

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII MAY 1934 No. 5

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

The month of May 1934 was decidedly drier and warmer than normal. The average rainfall for the State was only 40 per cent of the normal, the driest May since 1914. The extensive drought of April, of which Missouri was only a small part, developed in intensity, and by the end of May the drought was the most severe in the climatological history of Missouri, for so early in the year. Dust storms, probably the most severe of record, occurred on the 9th, 10th, and 11th. At times the sun was almost totally obscured and visibility frequently was less than one-half mile. The dust interfered considerably with breathing. All exposed places were rapidly covered, and even considerable deposits of dust were noted in the interior of residences and office buildings. While fairly good rains occurred on the 13th and 14th, they only gave temporary relief. By the end of the month much of the late planted corn had not germinated, oats and hay had made very little growth, and wheat was deteriorating rapidly. The stream flow of the large rivers was very much retarded, resulting in the lowest May stages of record for the Missouri and Mississippi Rivers in this district.

There was considerable range in temperature during the month,—from 31° at Elsberry on the 25th, to 110° at Maryville on the 30th. Damaging frosts occurred on lowlands in St. Louis and St. Charles Counties on the night of May 24-25th, causing serious damage to garden truck. The damage in St. Louis County alone was estimated at $200,000 to $300,000 by the assistant county farm agent. Some plantings were entirely killed, while others nearby were not affected. Light frosts also occurred in the counties of Scotland and Audrain, but no damage was reported. The unseasonably low temperatures of the 25th and 26th were followed by unusually high temperatures on the 30th. Such high temperatures have never been recorded so early in the season. The 110° at Maryville is the highest May temperature of record (1888-1934) for the State.—H. C. G.

TEMPERATURE

The monthly mean temperature for the State, 68 stations reporting, was 69.0°, or 4.6° above normal. The highest monthly mean was 72.3° at Caruthersville, and the lowest monthly mean was 65.4° at Arcadia. The highest temperature recorded was 110° at Maryville on the 30th, and the lowest was 31° at Elsberry on the 25th. The greatest daily range was 54° at Doniphan on the 30th.

PRECIPITATION

The average precipitation for the State, 116 stations reporting, was 1.89 inches, or 2.84 inches less than normal. The greatest local monthly amount was 4.64 inches at Caruthersville, and the least local monthly amount was 0.22 inch at St. Charles. The greatest amount in any twenty-four hours was 2.83 inches at Salem on the 13-14th. The average number of days with 0.01 inch or more of precipitation was 5. There was no snowfall anywhere in the State.

MISCELLANEOUS PHENOMENA

Dust storms.—7th, 9th, 10th, 11th, 12th, 13th, 21st, 22d, 24th; quite general and dense on the 10th.

Fogs.—Dense, 23d.

Frost.—Light, locally on 25th and 26th; heavy, locally on 25th, considerable damage on low ground.

Halos.—Solar, 1st, 2d, 12th, 21st, 23d, 25th, 28th; lunar, 21st, 22d.

Hail.—Light, at Kansas City and Warrensburg on 4th, Versailles on 5th, Kirksville on 12th, Warrensburg on 14th, Rolla on 21st; heavy, near Warrensburg on 4th, and in vicinity of

(Continued on page 24)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.00	30.27	10	29.62	30	7.0	22	s.	12	70	40	42	88
Kansas City...	29.97	30.34	10	29.60	30	9.2	40	n.	21	71	40	40	82
St. Joseph	29.97	30.35	10	29.58	30	7.8	31	w.	4	66	38	40	85
St. Louis....	29.99	30.30	1	29.64	30	11.2	30	s.	9	59	40	43	82
Springfield	30.00	30.26	10	29.67	30	8.6	32	se.	21	70	44	47	77
Cairo, Ill.....	29.99	30.34	1	29.64	30	7.2	23	n.	24	74	44	46	85
Keokuk, Iowa.	30.01	30.29	27	29.64	30	7.4	24	nw.	10	60	37	42	81

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	62.1	− 2.3	93	30	5.35	+0.62	13.40	1.38	....	5	..	..	..
1889....	63.5	− 0.9	100	28	6.56	+1.83	14.35	2.75	....	5	..	..	..
1890....	62.8	− 1.6	97	26	3.47	−1.26	8.09	1.14	....	6	..	..	..
1891....	61.5	− 2.9	97	27	4.26	−0.47	7.68	1.42	0	8	..	..	..
1892....	60.7	− 3.7	91	28	7.80	+3.07	14.88	3.89	0	17	5	9	17
1893....	61.8	− 2.6	94	30	5.89	+1.16	12.10	3.15	0	10	11	11	9
1894....	63.7	− 0.7	96	29	3.99	−0.74	8.78	0.47	0	8	13	11	7
1895....	64.6	+ 0.2	103	28	4.08	−0.65	8.49	0.36	0	9	13	12	6
1896....	70.1	+ 5.7	96	37	9.09	+4.36	18.23	4.08	0	12	12	12	7
1897....	62.4	− 2.0	93	28	2.56	−2.17	5.38	0.70	0	7	16	11	4
1898....	65.2	+ 0.8	97	31	7.90	+3.17	19.22	4.62	0	14	12	10	9
1899....	66.9	+ 2.5	96	34	6.26	+1.53	11.38	3.08	0	2	10	13	8
1900....	66.3	+ 1.9	97	29	3.69	−1.04	7.61	1.01	0	10	14	11	6
1901....	63.8	− 0.6	98	30	1.47	−3.26	3.77	0.19	0	6	15	10	6
1902....	69.4	+ 5.0	98	39	5.03	+0.30	9.93	1.64	0	11	13	11	7
1903....	65.1	+ 0.7	92	23	7.10	+2.37	14.01	2.08	0	15	9	10	12
1904....	63.1	− 1.3	95	32	5.03	+0.30	10.70	1.45	0	12	13	10	8
1905....	64.9	+ 0.5	94	34	4.87	+0.14	12.03	1.74	0	10	12	11	8
1906....	66.3	+ 1.9	98	27	2.16	−2.57	7.85	0.81	0	7	15	10	6
1907....	59.5	− 4.9	91	17	5.56	+0.83	10.89	1.39	0.8	10	14	6	11
1908....	66.1	+ 1.7	96	24	6.92	+2.19	17.07	2.82	0	12	12	10	9
1909....	63.3	− 1.1	96	25	5.34	+0.61	9.02	1.85	T.	9	15	9	7
1910....	60.1	− 4.3	94	32	6.62	+1.89	10.92	2.03	0	13	11	8	12
1911....	68.8	+ 4.4	101	27	1.55	−3.18	5.31	0.10	0	5	19	7	5
1912....	67.6	+ 3.2	97	30	3.86	−0.87	7.81	1.16	0	7	18	8	5
1913....	65.8	+ 1.4	101	33	3.05	−1.68	6.85	0.56	0	8	16	7	8
1914....	66.6	+ 2.2	98	31	1.47	−3.26	4.71	0.16	0	5	17	9	5
1915....	63.7	− 0.7	97	30	7.86	+3.13	15.98	3.04	0	12	12	7	12
1916....	65.6	+ 1.2	96	33	5.61	+0.88	10.58	2.00	0	11	15	8	8
1917....	58.7	− 5.7	91	30	4.33	−0.40	7.12	1.41	0	10	15	7	9
1918....	68.3	+ 3.9	100	28	5.49	+0.76	11.53	2.42	0	10	16	8	7
1919....	62.0	− 2.4	93	35	5.80	+1.07	9.63	1.84	0	13	10	10	11
1920....	63.8	− 0.6	97	32	4.85	+0.12	10.15	1.47	0	12	9	9	13
1921....	66.4	+ 2.0	102	28	3.69	−1.04	7.54	1.28	0	7	17	8	6
1922....	67.2	+ 2.8	97	38	3.17	−1.56	6.86	1.01	0	10	14	10	7
1923....	62.7	− 1.7	97	25	4.59	−0.14	11.31	1.39	T.	12	11	10	10
1924....	58.6	− 5.8	96	31	4.67	−0.06	8.68	1.55	0	10	13	8	10
1925....	61.2	− 3.2	98	24	2.14	−2.59	5.49	0.39	0	7	14	9	8
1926....	67.0	+ 2.6	100	29	2.73	−2.00	7.82	0.40	0	7	16	9	6
1927....	64.6	+ 0.2	94	34	6.98	+2.25	13.62	1.46	0	12	11	10	10
1928....	65.8	+ 1.4	95	29	2.84	−1.89	6.37	0.78	0	8	16	9	6
1929....	61.7	− 2.7	95	28	7.52	+2.79	13.68	1.45	0.3	13	9	10	12
1930....	64.7	+ 0.3	95	33	3.43	−1.30	7.38	0.97	0	9	16	8	7
1931....	61.0	− 3.4	96	29	4.51	−0.22	8.05	1.62	0	10	15	6	10
1932....	66.1	+ 1.7	98	31	1.91	−2.82	5.58	0.32	0	6	18	9	4
1933....	65.9	+ 1.5	96	35	7.53	+2.80	12.97	2.23	0	13	11	9	11
1934....	69.0	+ 4.6	110	31	1.89	−2.84	4.64	0.22	0	5	21	7	3
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	...	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
Period.	64.4	.....	110	17	4.73	.....	19.22	0.10	T.	9	14	9	8

Climatological Data for May 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Charlton	652	53	70.8	+ 6.6	104	30	45	25	39	2.94	−1.79	1.35	0	5	24	1	6	sw.	O. K. Benecke
Clifton Hill	Randolph	781	35	69.8	+ 6.2	104	30	41	25	42	1.91	−2.63	0.79	0	6	24	3	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	68.8	+ 4.5	101	31	42	26	37	1.35	−3.11	0.74	0	6	17	12	2	s.	U. S. Weather Bureau
Downing	Schuyler	876	13	69.1	+ 6.4	103	31	41	25	38	1.74	−1.99	0.79	0	5	24	5	2	s.	James Taylor
Elsberry	Lincoln	449	3	67.0	.....	102	31	31	25	53	0.30	.....	0.14	0	4	18	11	2	se.	Ray E. Mills
Fayette	Howard	661	54	68.7	+ 4.9	105	30	39	26	44	1.93	−2.62	0.81	0	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	68.0	+ 3.4	101	31	39	20†	44	1.06	−3.76	0.55	0	5	23	6	2	sw.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	1.53	−2.74	0.74	0	5	22	7	2	s.	W. L. Harker
Hannibal	Marion	759	42	70.6	+ 7.0	104	31	43	25	37	1.95	−2.40	1.47	0	4	16	8	7	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	44	69.8	+ 5.1	102	30†	41	25	41	1.08	−3.44	0.42	0	5	17	11	3	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	69.2	+ 6.9	101	30	42	25	38	3.09	−1.67	1.05	0	5	22	5	4	s.	Prof. J. S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	3.26	.....	1.67	0	5	23	4	4	e.	J. Robert Hall
Louisiana	Pike	469	40	67.8	+ 4.1	103	31	32	25	48	0.35	−4.13	0.25	0	2	23	4	4	s.	Stark Bro's Nurseries
Macon	Macon	875	35	69.6	+ 6.1	105	30	42	25	41	1.84	−2.56	0.90	0	4	22	5	4	w.	W. C. Brown
Mexico	Audrain	800	45	68.6	+ 4.6	104	31	38	25†	42	1.11	−3.58	0.51	0	3	26	1	4	s.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	1.34	−2.27	0.75	0	2	17	9	5	ne.	J. S. Conway
St. Charles	St. Charles	520	46	69.8	+ 6.7	101	30†	38	25	48	0.22	−4.08	0.22	0	1	25	3	3	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	71.2	+ 4.2	96	30	47	25	28	0.54	−3.80	0.52	0	2	21	7	3	s.	**Section Center**
St. Louis University	St. Louis City	578	22	70.6	+ 4.5	97	30	47	25	31	0.60	−3.61	0.56	0	3	23	7	1	se.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	1.36	−3.29	0.77	0	6	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	69.2	+ 5.4	102	31	41	25	40	1.58	−3.04	0.60	0	4	17	12	2	s.	Frank Hall
Unionville	Putnam	1,062	41	70.8	+ 8.7	104	30	42	25	40	2.87	−1.61	0.87	0	6	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	69.4	+ 4.5	100	31	39	25	34	0.56	−4.08	0.17	0	4	19	10	2	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	70.0	+ 6.2	102	31	47	25	32	1.34	−2.59	0.45	0	8	19	7	5	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**69.4**	**+ 5.6**	**105**	**30**	**31**	**25**	**53**	**1.45**	**−3.03**	**1.97**	**0**	**4**	**21**	**7**	**3**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	69.4	.....	96	31	43	25	39	1.97	.....	1.37	0	3	20	9	2	s.	Jeff. King
Caruthersville	Pemiscot	265	38	72.3	+ 2.5	96	31	48	25	35	4.64	+0.12	2.05	0	6	14	12	5	.....	Sam Smith
Doniphan	Ripley	344	30	68.0	+ 1.5	100	30†	38	26	54	0.93	−3.50	0.55	0	4	19	6	6	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	70.2	+ 4.6	99	31	40	26	45	0.92	−3.52	0.52	0	2	14	10	7	s.	John G. Putz
Marble Hill	Bollinger	470	39	68.4	+ 2.8	99	30	37	26	47	0.36	−4.23	0.16	0	4	17	11	3	n.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	1.33	−3.49	0.98	0	6	21	9	1	s.	John A. Spence
Poplar Bluff	Butler	339	29	69.2	+ 1.7	100	30	43	25†	43	0.51	−4.55	0.34	0	3	23	6	2	s.	Mrs. J. H. Wolpers
Sikeston	Scott.	318	27	70.6	+ 2.1	98	30†	43	25	40	1.13	−3.23	0.78	0	5	19	9	3	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill.	356	62	70.9	+ 2.5	94	31	46	25	30	1.59	−2.12	1.22	0	6	11	12	8	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**69.9**	**+ 2.5**	**100**	**30†**	**37**	**26**	**54**	**1.59**	**−2.97**	**2.05**	**0**	**4**	**18**	**9**	**4**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	65.4	+ 1.3	92	31	38	25†	41	2.13	−2.57	1.72	0	4	20	7	4	s.	Arcadia College
Birchtree (near)	Shannon	1,000	39	67.2	+ 2.2	96	30	43	11†	40	1.17	−3.20	0.73	0	5	24	5	2	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	1.23	.....	0.67	0	3	27	3	1	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	1.77	.....	0.95	0	6	17	11	3	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	....	.....	98	31	36	25	46	....	.....	....	0	..	..	..	..	....	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	30	67.9	+ 2.2	99	31	40	27	42	2.75	−3.08	0.87	0	7	17	7	7	se.	H. E. Dean
Eldon	Miller	934	39	68.4[a]	+ 4.2	102	30	39	25	44	0.83	−3.84	0.51	0	5	14[a]	14[a]	2[a]	sw.	E. H. Shepherd
Farmington	St. Francois	918	23	67.0	+ 3.3	95	30†	34	26	46	0.50	−4.95	0.35	0	2	24	7	0	s.	H. O. Miller
Goodland	Iron	1,000	41	65.8	+ 1.8	95	30	35	25†	46	2.89	−1.95	1.50	0	4	22	8	1	s.	F. M. Adams
Greenville	Wayne	381	25	65.8	− 0.1	99	30	34	25†	51	1.44	−2.75	0.59	0	4	24	5	2	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	3.03	−2.90	1.13	0	6	22	8	1	w.	A. W. Madison
Koshkonong	Oregon	958	33	69.8	+ 3.2	97	30†	45	25	32	2.92	−1.65	1.00	0	5	18	8	5	ne.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	67.7	+ 2.8	101	31	37	26	42	2.45	−3.00	1.08	0	5	26	3	2	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	69.0	+ 4.6	98	30†	44	16	37	2.71	−2.25	0.85	0	7	26	3	2	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	67.6	+ 3.8	97	30	40	26†	42	2.86	−1.97	0.91	0	6	22	6	3	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	67.4	+ 1.4	97	31	39	16†	44	2.30	−3.56	0.95	0	6	20	8	3	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	68.2	+ 3.7	95	31	42	26	31	2.44	−2.55	1.36	0	5	11	9	11	se.	F. H. Lane
Salem	Dent	1,173	30	66.4	+ 1.9	94	31	37	26	42	3.20	−1.50	2.83	0	5	21	9	1	s.	E. E. Martin
Seligman	Barry	1,542	33	67.8[c]	+ 3.3	93	31	46	16†	33	2.72	−2.92	1.39	0	7	16[c]	8[c]	4[c]	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	28	65.8	+ 2.1	95	31	35	26	43	1.14	−4.11	0.87	0	4	22	5	4	se.	A. L. Hailey
Springfield	Greene	1,324	46	68.2	+ 3.7	95	31	47	25	28	2.07	−3.12	1.13	0	8	20	8	3	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	69.6	.....	103	30	38	26	40	1.39	.....	0.54	0	6	22	6	3	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**67.5**	**+ 2.7**	**103**	**30**	**34**	**25†**	**51**	**1.92**	**−3.05**	**2.83**	**0**	**5**	**21**	**7**	**3**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	68.2	+ 3.2	100	30	44	25	38	2.59	−2.59	0.91	0	7	17	11	3	sw.	W. G. Bigelow
Clinton	Henry	765	41	69.0	+ 3.5	105	30	43	25	41	2.96	−2.37	1.03	0	7	24	4	3	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	68.2	+ 4.4	103	30	43	25	41	4.36	−0.17	2.14	0	7	17	8	6	sw.	John H. Patterson
Lamar	Barton	980	46	68.0	+ 2.4	98	31	44	16	45	1.39	−3.98	0.92	0	3	26	1	4	se.	Jesse A. Mann
Lamonte	Pettis	867	33	67.8	+ 3.2	98	30†	42	25	36	4.33	−0.62	2.05	0	7	24	4	3	se.	J. E. Wheeler
Marshall	Saline	779	47	69.8	+ 5.6	101	30†	43	2	38	3.11	−1.71	1.50	0	6	25	5	1	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	67.9	+ 3.4	98	30†	41	16†	38	2.94	−2.37	1.21	0	4	20	6	5	s	George A. Kaupp
Warrensburg	Johnson	878	47	70.0	+ 5.0	103	30	43	25	39	4.11	−0.43	2.00	0	6	21	6	4	sw.	E. A. Markey
Warsaw	Benton	687	33	69.4	+ 3.9	101	31	38	26	47	1.47	−3.65	0.86	0	6	24	3	4	s.	Everett Martin
Division means	**and extremes**	.....	..	**68.7**	**+ 3.8**	**105**	**30**	**38**	**26**	**47**	**2.91**	**−2.09**	**2.14**	**0**	**6**	**23**	**5**	**4**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	68.6	+ 6.1	102	30	37	25	38	1.32	−3.11	0.90	0	6	25	5	1	s.	A. S. Cumming
Chillicothe	Livingston	779	25	69.2	+ 4.0	101	30	39	25	44	2.87	−1.11	1.16	0	5	23	3	5	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	45	68.4	+ 6.3	98	31	43	25	36	2.97	−1.40	1.48	0	8	19	8	4	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	68.3[a]	+ 5.3	102	30	38	25	43	2.85	−1.44	1.19	0	6	25[a]	1[a]	4[a]	s.	Fred L. Stiff
Grant City	Worth	1,134	30	68.5	+ 6.5	99	30	40	25	38	2.25	−2.01	1.91	0	6	14	13	4	sw.	Howard Rybolt
Kansas City (a)	Jackson	963	45	71.0	+ 6.2	103	30	46	26	35	3.14	−1.51	1.56	0	7	17	9	5	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	69.4	+ 6.8	102	30	43	25	35	3.19	−1.48	1.15	0	5	18	12	1	s.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	1.91	−2.54	0.69	0	7	16	12	3	sw.	John M. Martin
Lexington	Lafayette	688	49	69.6	+ 5.2	105	30	46	25	37	4.28	−0.75	1.19	0	7	24	5	2	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	71.8	+10.5	110	30	43	15†	45	3.55	−1.44	2.26	0	6	21	1	9	sw.	Mrs. R. P. Hosme
Oregon	Holt	1,048	78	71.8	+ 8.6	104	30	44	15	38	1.67	−3.01	0.72	0	6	23	5	3	sw.	Mina Wright
St. Joseph	Buchanan	967	24	70.8	+ 6.8	103	30	45	25	34	2.34	−1.72	1.18	0	7	21	6	4	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	70.7	+ 8.1	103	29†	42	15†	43	2.94	−1.35	0.85	0	6	23	6	2	sw.	Albert Volker
Trenton	Grundy	822	38	70.0	+ 6.5	105	30	40	25	42	3.19	−1.62	1.51	0	8	26	2	3	s.	W. H. Estes
Division means	**and extremes**	.....	..	**69.9**	**+ 6.7**	**110**	**30**	**37**	**25**	**45**	**2.72**	**−1.79**	**2.26**	**0**	**6**	**21**	**6**	**4**	**sw.**	
State means	**and extremes**	.....	..	**69.0**	**+ 4.6**	**110**	**30**	**31**	**25**	**54**	**1.89**	**−2.84**	**2.83**	**0**	**5**	**21**	**7**	**3**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Precipitation for May 1934

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville	Missouri					.25	.02				.01				.70	.27									T.								1.25
Bowling Green	Mississippi					.13									.18	.13																	0.44
Brunswick	Grand					1.35					.05			.56	.72								.26										2.94
Canton	Mississippi					.53					.30			.37	.14								.50										1.84
Clifton Hill	Chariton				.06	.79								.67	.30								.08		.01							1.91
Columbia***	Missouri			T.	.32	.03							T.	.58	.38							T.		T.	T.				.03	.01		1.35
Downing	Mississippi				.03						.47		.11	.68									.45							T.		1.74
Edina	....do					.35					.09			1.09	.06								.22										1.81
Elsberry	....do				T.		.08							.04	.14								.04		T.								0.30
Ewing	....do				.48						.10			.35	.05								.20										1.18
Farber	....do					.56	.44								.20	.24																	1.44
Fayette	Missouri					.81					.05			.02	.66	.89																	1.93
Fulton	....do					.30	.08								.55	.10							.03		T.					T.			1.06
Gorin	Mississippi				T.	.05					.20		.16	.58									.54		T.					T.			1.53
Hannibal	....do					1.47								T.	.45	.01										.02							1.95
Hermann	Missouri						.07								.10	.25										T.							0.42
Jefferson City	....do				.02	.10	.20								.42	.34																	1.08
Kahoka	Mississippi					.08					.32			.68	.04								.50										1.62
Kirksville	....do				.10	.80							1.05	.84									.30										3.09
Linneus	Grand					1.67					.01			**	1.19									.39									3.26
Louisiana	Mississippi													.25	.10																		0.35
Lucerne	Grand					.66					.24			1.11	.04								.56										2.61
Macon	Chariton					.71								.90	.15								.08										1.84
Madison	Mississippi					1.40									.70																		2.10
Memphis	....do					T					.42			.60	T.							.51											1.53
Mexico	....do					.51									.38								.22								T.		1.11
Milan	Grand					.82					.22			.68	.10								.11										1.93
Monroe City	Mississippi					.75								.59											T.								1.34
New London	....do					1.97										.43																	2.40
Palmyra	....do					1.20								.14	.38	.07																	1.79
Paris	....do					.95								.51	.07																		1.53
Perry	....do					.67								.30	.07	.11							T										1.15
Philadelphia	....do					.55																											
St. Charles	Missouri														T.	.22																	0.22
St. Louis***	Mississippi				.02	T.								T.	.52										T.								0.54
St. Louis University*	....do				.03	.01								T.	.56																		0.60
Shelbina	....do					.77	.03				.05			.14	.36	.01																		1.36
Shelbyville	....do					.64					.15			**	.74																			1.53
Steffenville	....do				T	.60					.22		T.	.54									.22										1.58
Troy	....do														.03	.14							.08										0.25
Union	Meramec						.01								T.	.75										.02							0.78
Unionville	Chariton				.70	.40					.10		.60	.87	T.							T	.20										2.87
Valley Park	Meramec				T.		T.								T.	.58										T.							0.58
Warrenton	Mississippi					.08	.14				T.			.17	.17																		0.56
West Ely	....do					.58								.02	.49	.04										T.							1.13
Keokuk, Ia.***	....do				.32	.02				.31	.01		.29	.17	.01							.21		T.	T								1.34
Southeast Lowlands																																	
Bragg City	St. Francis						.93									.57	T.																1.50
Campbell	....do						.60								1.05	.32																	1.97
Cape Girardeau	Mississippi					.68	.59									.55																	1.82
Caruthersville	....do				.42	.50	.34				1.25				2.05	.08																	4.64
Dexter	St. Francis					.25	.60									.42																	1.27
Doniphan	Black				T		.32								.23	.32								.06									0.93
Fisk	St. Francis					.27	.14	.54							.24	.17	.09																	1.45
Jackson	Mississippi					.52									.40								T.										0.92
Marble Hill	....do				.02	.12	.06								.16																		0.36
Morehouse	....do				.28	.04	.02				T				.04	.94						.01											1.33
New Madrid	....do					.10	.92									.87	.07						.20										2.16
Parma	St. Francis					.12	.78									.60	.10						.64										2.24
Poplar Bluff	Black					T.	.30	.04								.17	T									T.							0.51
Sikeston	Mississippi					.12	.15					.05				.78							.03										1.13
Cairo, Ill.***	....do				.68	.54	.05				T.				.09	.22						T.								.01		1.59
Ozark Plateau																																	
Arcadia	St. Francis				T.	.07	T.								1.49	.23							T			.84							2.13
Birchtree (near)	Black				.12		.06							.10	.63	.26																	1.17
Buffalo	Osage				.36			T.							.20	.67																	1.23
Caplinger Mills	....do			.59	T.	T.	.03				.16			T.	.90	.05							.04										1.77
Crystal City	Mississippi																								.04								
Dean	Neosho			.05	.87	.32					.06				.72	.68						T.	.05										2.75
Eldon	Missouri				.02	.03	.05								.22	.51																	0.83
Farmington	St. Francis				T.																		.15			.35							0.50
Fredericktown	....do						.16								1.20	.27																	1.63
Galena	White				.98						.08				.19	.65							.08			.14							2.12
Goodland	Black													.30	1.50								.66		.43								2.89
Greenville	St. Francis				.47	.59									.22								.16										1.44
Hailey	White				1.13	.44	T.								.74	.57						.07	.08										3.03
Koshkonong	Black				.21	.73	.49								1.00	.49																	2.92
Lakeside	Osage				.03		1.41								.32	.49										T.							2.25
Lebanon	....do				.06		.42				.08				1.08	.81																	2.45
Leeper	Black					.03	.39								.41	.28							.12			.03							1.26
Lockwood	Osage			.01	.67	.85					.27			T.	.60	.27						T.	.04										2.71
Mountain Grove	White				.10	T.								.81	.91	.29						.03	.72										2.86
Neosho	Neosho			.02	.89	.16									.38	.57						T.	.28	T.									2.30
Owensville	Gasconade					T.									.05	.85						.52											1.42
Rolla	Meramec						.93								.62	1.36							.07				.06						2.44
St. Thomas (near)	Osage				.03		.65								.30	.41																	1.39
Salem	Meramec				T.	.15					T.			.88	1.95	.09						T.	.13										3.20
Seligman	Neosho			.05	1.34	.02									.39	.61						.18	.13										2.72
Seymour (near)	White				.25					.02					.61	.23																	1.14
Springfield***	....do			.27	.21	.08	.01				T.			T.	1.01	.23						.23	.03										2.07
Stover	Missouri				T.	.02	.02				T.				.48	.40																	0.92
Versailles	Osage				.04	.54	.10							.16	.54	.01																	1.39
Williamsville	Black					.50	.07									.09	.01						.05			.01							0.73
Willow Sprgs. (near)	White				.09		.02								1.35	.10	.15						T.			.13						T.	1.84
Southwest Plain																																	
Appleton City	Osage			.01	.55	.91					.15			.35	.60	T							.02		T.								2.59
Clinton	....do			.05	.40	1.03	.10				.32			.40	.66																			2.96
Concordia	Missouri																																
Harrisonville	Osage				.54	.59	.06				.21			.19	2.14	.63																		4.36

Continued on next page

Daily Precipitation for May 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain—Concluded																																	
Joplin	Neosho			.50	.07	.05					.01			.05	.24	.32																	1.24
Lamar	Neosho				.43										.04	.92																	1.39
Lamonte	Missouri			.05	1.70	.35					.25			.65	.85								.48										4.33
Marshall	do			.05	.05	1.12	.10							1.50	.29																		3.11
Nevada	Osage			T.	.68	.60								.45	1.21																		2.94
Warrensburg	Missouri				.92	.41	.03				.23			.52	2.00																		4.11
Warsaw	Osage				.20	.01	.24				.02				.14	.86																	1.47
Waverly	Missouri				T.	1.10								1.02	1.18	.12							.12										3.54
Northwest Plateau																																	
Bethany	Grand				.15						.15		.16	.74	.03							.09											1.32
Chillicothe	do			T.	.01	1.08					T.			1.16	.09								.53		T.					T.		2.87
Conception	Missouri	T.			.39	.17					.14		.41	1.48	.03							.30	.05										2.97
Edgerton	do			T.	.93	.08				.20			T.	1.19	.24								.21										2.85
Gallatin	Grand				.03	.82								.80	.15								.53										2.33
Grant City	do				.18	.09					.05		.99	.92	.02							T.								T.			2.25
Kansas City***(a)	Missouri			.14	.81					.06			.17	1.49	.46							.01								T.			3.14
Kidder	Grand			T.	T.	1.15					.20		T	1.08	.14	T.							.62										3.19
King City	Missouri	T.			.45	.24				.32			.10	.51	.11							.18											1.91
Lexington	do				.12	1.19					.67			1.05	1.07	.08							.10										4.28
Maryville	do					.74					.38		.11	2.26	.03								.03										3.55
Oregon	do		.72								.14		.10	.55	.08							.08											1.67
St. Joseph***	do			.04	1.14					.25			.29	.26	.07							.29			T.					T.			2.34
Tarkio	do				.85					.41			.34	.80								.07							.47				2.94
Trenton	Grand			.02	.18	.34				.01			.08	1.43	.07							1.06		T.									3.19

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. || Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated. |||| Incomplete.
(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for May 1934
(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.288	.277	.295	.197	.297	.311	.210	.280	.268	.411	.266	.218	.409	....	.014	.103	.202	.228	.268	.266	.249	.306	.275	.240	.270	.277	.266	.236	.251	.215	.231	7.878
	Mean temperature	66	64	67	72	69	72	74	78	74	72	64	68	71	56	60	61	66	68	68	73	74	72	66	65	56	58	60	66	70	80	81	68.2
	Wind movement	95	74	72	73	91	51	45	38	54	97	63	44	94	62	44	56	39	29	55	50	48	73	44	42	76	52	55	58	42	38	39	1,793

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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De Kalb, Buchanan County on 21st. (See special hailstorm notes).

Haze.—Dense, 7th, 10th, 11th, 22d.

Thunderstorms.—Local, 3d, 9th, 14th, 20th, 22d, 23d, 25th, 29th; more or less general, 4th, 5th, 10th, 12th, 13th, 21st.

Windstorms.—No damaging winds reported.

SPECIAL HAILSTORM NOTES

On May 4th, about 4 p. m., a hailstorm cut a path one-half to three-fourths mile wide, eight miles south of Warrensburg, damaging all kinds of crops, especially gardens, many of which had to be made over. The hail lasted about fifteen minutes, and stones were as large as guinea eggs. A short time before this storm, another struck near Valley City, twelve miles northeast of Warrensburg, doing considerable damage. Hailstones in this storm were as large as hen eggs. (No estimate of amount of damage was stated). The rain accompanying these two storms did much damage washing fields, and filled streams bankful in those localities. (Notes by Mr. E. A. Markey, Cooperative Observer at Warrensburg).

On the night of May 21st, a destructive hail storm occurred in the vicinity of De Kalb, Buchanan County, resulting in damage estimated at $25,000. The storm covered an area about 4 miles long by two miles wide, completely destroying small grain crops on some farms, and doing great damage to berries, orchards, and tobacco beds.

NEW STATION, CRYSTAL CITY, MO.

A cooperative station has been established at Crystal City, Jefferson County, about 40 miles south of St. Louis, and weather observations began on May 21, 1934. This station represents an important area that was heretofore without official weather records. The Pittsburgh Plate Glass Company, through Mr. H. H. Balsiger, of that organization, is cooperating in the work.

DEATH OF MR. BRINK

The Weather Bureau loses one of its best friends and most efficient cooperators in the death of Mr. J. R. Brink, of Maryville, Mo., which occurred on May 14, 1934. Mr. Brink's service as Cooperative Observer began in 1894 and continued uninterruptedly until his last illness, a period of 40 years. For length of service, he stood at the head of the corps of Cooperative Observers in Missouri. Not only did he keep an excellent record of the weather day by day during all those years, thus contributing invaluable climatic data, but he was also greatly interested in, and appreciative of, the forecast service of the Bureau, and for many years he was faithful, competent, and enthusiastic in serving his community as a disseminator of Weather Bureau forecasts, cold wave warnings, and frost warnings. His interest in all phases of the work was constant and unfailing.

Daily Temperatures for May 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	81	84	85	82	80	88	88	92	89	88	81	86	82	64	72	78	85	87	88	90	91	87	84	80	75	80	82	86	96	104	102	85.1
	Minimum	57	54	60	57	56	57	63	63	68	61	52	60	54	53	49	47	50	56	59	64	67	58	50	61	45	46	47	49	57	67	67	56.6
Columbia	Maximum	79	82	83	84	78	84	87	90	89	76	80	85	73	58	68	75	83	86	87	89	87	78	81	72	69	74	77	83	92	99	101	81.6
	Minimum	54	56	62	58	57	59	62	66	67	55	52	62	54	51	47	48	51	56	60	64	66	59	50	52	44	42	45	47	55	66	70	56.0
Fayette	Maximum	80	83	83	84	81	88	88	93	88	78	82	85	78	61	73	73	84	87	88	90	89	79	85	77	75	79	82	86	94	105	102	83.9
	Minimum	54	54	56	56	56	58	60	53	67	62	50	60	53	52	45	43	45	51	52	60	64	59	47	59	40	39	41	43	50	65	66	53.5
Hannibal	Maximum	81	83	85	82	79	87	86	88	89	85	78	74	75	61	71	78	85	88	89	91	88	83	80	72	75	80	85	97	99	104	83.5
	Minimum	61	55	61	64	57	59	67	58	69	61	56	53	54	53	48	45	55	58	61	64	68	59	53	58	43	48	48	54	60	69	73	57.8
Jefferson City §§	Maximum	77	83	82	85	82	86	92	92	90	79	83	85	71	57	72	78	85	87	87	91	82	84	77	73	79	81	87	94	95	102	102	83.9
	Minimum	51	53	59	59	56	59	61	63	66	64	48	57	61	53	48	45	50	55	62	65	59	51	59	43	41	44	46	55	55	64	72	55.6
Kirksville	Maximum	81	82	84	83	78	89	86	91	90	86	79	75	68	65	70	80	84	86	88	88	89	78	82	86	72	72	81	85	96	101	100	83.1
	Minimum	53	52	57	53	55	60	64	59	70	58	52	53	51	51	46	46	47	58	57	63	65	56	50	57	42	47	43	52	61	66	68	55.2
Louisiana	Maximum	80	80	82	80	78	86	85	87	92	85	79	80	70	60	70	80	87	90	92	93	90	82	82	75	65	75	80	86	97	100	103	82.9
	Minimum	49	54	58	60	58	55	54	57	65	64	64	54	58	54	43	35	47	50	54	60	70	60	42	54	32	33	35	39	49	63	67	52.8
Macon §§	Maximum	81	82	84	83	81	90	81	91	88	78	82	84	62	65	70	79	85	88	89	91	92	76	85	72	73	78	82	88	97	105	104	83.4
	Minimum	53	52	58	58	55	59	64	57	63	59	54	56	53	52	47	46	55	59	61	64	67	56	52	59	42	45	48	47	60	68	65	55.9
Mexico §§	Maximum	81	81	85	84	78	80	87	90	90	78	81	85	69	59	70	77	85	88	89	90	92	79	83	74	74	76	79	84	94	100	104	82.8
	Minimum	51	53	57	59	56	53	60	59	66	61	52	56	58	52	46	42	52	56	58	63	66	58	47	58	38	38	40	44	52	68	70	54.5
St. Louis	Maximum	76	79	82	82	76	84	87	86	91	79	80	82	82	61	73	77	83	85	86	88	90	81	81	70	70	73	79	85	92	96	96	81.7
	Minimum	52	59	64	64	63	61	68	63	68	66	62	54	59	55	54	49	57	63	65	69	68	66	59	53	47	52	54	60	65	70	75	60.8
Unionville	Maximum	81	85	80	82	77	90	88	92	90	88	84	76	70	78	76	77	85	90	90	90	91	87	85	75	75	80	84	86	100	104	103	85.1
	Minimum	67	56	60	57	55	62	63	60	70	52	55	54	52	52	45	50	56	57	58	61	65	55	55	54	42	43	45	52	64	64	70	56.5
Warrenton	Maximum	76	80	82	82	81	83	86	87	89	85	78	83	80	59	67	76	84	86	87	88	88	86	81	78	69	73	78	82	91	96	100	82.0
	Minimum	50	55	58	61	59	57	66	59	66	63	54	53	58	52	50	42	53	58	59	64	66	61	54	60	39	47	46	52	59	68	71	56.8
Southeast Lowlands																																	
Campbell	Maximum	77	88	84	87	81	77	87	86	91	83	84	88	86	87	65	77	81	86	89	92	90	87	84	89	73	77	81	85	91	95	96	84.6
	Minimum	53	49	51	54	60	59	58	64	60	64	50	49	52	57	54	52	44	51	55	57	59	62	57	51	43	46	45	48	57	61	57	54.2
Caruthersville	Maximum	78	80	86	87	81	79	86	89	91	87	81	84	90	86	68	76	81	83	86	91	90	87	82	85	72	75	79	82	90	95	96	84.0
	Minimum	55	68	58	61	63	61	63	66	69	68	57	59	60	66	58	59	54	60	63	66	65	65	64	59	48	53	54	53	55	66	62	60.6
Doniphan	Maximum	77	82	84	85	83	82	88	87	88	84	85	87	92	81	68	78	86	88	88	93	89	88	87	89	79	76	80	85	90	100	100	85.5
	Minimum	47	48	49	55	62	60	55	57	59	60	45	46	48	60	55	49	43	42	53	51	55	51	52	46	47	38	39	41	48	46	60	50.5
Jackson	Maximum	79	82	86	83	82	84	93	90	91	88	83	86	89	84	86	79	85	88	89	91	92	86	86	81	73	76	81	86	91	98	99	86.0
	Minimum	54	53	55	58	63	59	57	65	59	67	47	52	55	59	54	49	44	49	55	57	60	64	56	52	41	40	43	45	46	59	67	54.3
Poplar Bluff	Maximum	77	82	84	84	79	82	89	87	89	83	84	85	90	79	62	79	83	86	86	90	89	88	86	84	75	76	82	86	92	100	97	84.4
	Minimum	50	51	51	58	64	60	59	64	61	57	49	50	52	53	56	51	45	49	55	55	61	64	59	53	43	43	45	47	49	60	61	54.0
Sikeston	Maximum	74	83	84	81	79	82	89	89	93	88	83	87	91	84	70	77	82	87	89	92	90	86	84	85	73	76	80	83	90	98	98	84.7
	Minimum	54	57	60	60	64	61	61	64	62	67	51	55	56	61	55	54	47	55	59	60	63	63	57	53	43	47	45	47	50	63	59	56.5
Cairo, Ill	Maximum	75	80	82	84	77	80	86	83	89	78	80	82	87	79	68	72	80	83	85	89	88	83	80	81	68	72	76	78	86	92	94	81.2
	Minimum	57	62	61	65	63	64	65	66	67	67	57	57	63	61	58	56	55	62	64	65	67	65	62	55	46	51	52	56	59	68	64	60.6
Ozark Plateau																																	
Arcadia §§	Maximum	74	77	79	79	76	81	90	85	87	78	80	81	84	62	77	72	81	82	82	85	84	79	78	74	66	69	73	79	85	90	92	79.4
	Minimum	47	48	48	56	60	57	54	57	59	67	44	47	54	57	52	49	44	48	52	57	61	..	62	50	56	39	40	42	48	50	60	65	53.7
Birchtree	Maximum	73	80	79	82	76	81	91	90	88	79	83	83	86	67	67	68	85	83	84	87	84	82	82	75	70	73	78	83	87	96	95	81.2
	Minimum	47	54	53	58	52	57	57	63	60	60	48	47	53	56	51	47	48	48	56	56	60	60	57	52	44	43	45	43	56	63	62	53.3
Crystal City §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	91	82	82	74	72	75	80	84	91	97	98	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	64	53	55	36	37	39	42	45	62	62	....
Eldon §§	Maximum	78	82	82	85	83	84	92	93	91	77	83	86	72	55	69	78	85	86	87	..	90	83	84	76	72	84	80	84	93	102	101	83.2
	Minimum	51	50	51	58	56	58	60	62	63	65	50	52	57	54	49	44	48	52	57	61	..	62	50	56	39	40	42	48	50	60	65	53.7
Farmington	Maximum	78	79	81	79	86	87	93	94	89	85	81	86	88	80	72	76	82	85	85	87	89	90	83	85	75	65	78	82	88	95	95	83.8
	Minimum	40	50	47	56	58	55	56	57	58	65	49	50	52	54	50	41	43	47	48	55	54	57	53	55	35	34	35	39	42	63	59	50.2
Koshkonong	Maximum	74	81	79	81	78	78	89	88	88	80	83	83	86	77	66	76	83	85	84	86	83	83	81	82	68	72	76	81	89	97	97	81.7
	Minimum	49	54	56	57	60	58	63	65	65	64	53	57	59	51	53	53	55	55	62	64	66	64	61	59	45	48	50	54	57	67	69	58.0
Lebanon §§	Maximum	76	80	81	81	78	83	95	93	89	75	81	83	79	56	69	79	85	86	86	88	88	80	84	76	70	75	78	85	91	97	101	82.2
	Minimum	50	51	57	56	55	55	55	61	63	48	54	60	51	47	40	49	54	57	60	62	59	61	63	59	55	57	43	37	39	43	49	55	53.2
Mountain Grove	Maximum	72	76	78	78	78	84	92	88	85	79	84	81	84	66	72	79	83	80	81	84	85	82	82	80	72	74	78	84	90	97	95	81.4
	Minimum	46	49	52	55	58	55	55	62	63	62	48	50	58	53	48	44	52	53	59	61	63	59	55	57	42	40	40	45	48	65	70	53.8
Neosho	Maximum	79	83	78	77	74	82	90	88	87	88	83	84	81	65	70	79	85	85	86	90	87	79	83	83	78	74	78	85	90	94	97	82.6
	Minimum	53	49	55	54	54	55	54	52	59	62	42	51	57	53	47	39	47	52	53	58	62	60	57	58	47	43	39	41	50	56	57	52.1
Rolla	Maximum	75	80	79	82	78	81	91	89	89	84	78	83	80	66	68	72	80	82	83	86	86	76	78	76	65	70	73	78	84	91	95	79.9
	Minimum	48	52	57	59	60	59	60	63	66	66	51	53	64	54	49	48	51	58	60	64	66	63	57	58	45	42	44	48	53	67	69	56.6
Springfield	Maximum	73	77	74	76	72	80	88	87	85	74	79	81	79	57	67	75	80	81	81	84	84	77	80	77	68	70	74	80	87	94	95	78.6
	Minimum	51	55	56	56	59	57	65	68	66	60	54	58	57	50	49	52	56	59	61	65	63	61	58	56	47	50	54	52	59	69	72	57.9
Southwest Plain																																	
Appleton City	Maximum	76	76	77	70	76	84	90	90	87	80	76	82	75	55	69	77	82	84	81	81	88	80	83	75	71	75	74	80	94	100	99	80.2
	Minimum	54	53	62	57	55	58	62	66	64	59	50	60	52	50	50	47	51	54	57	62	63	62	53	60	44	47	50	50	56	69	66	56.2
Clinton	Maximum	83	85	78	76	75	87	91	93	87	82	82	84	79	59	64	73	85	85	83	90	87	78	87	76	76	85	83	83	93	105	103	83.1
	Minimum	53	50	60	54	56	57	60	63	62	59	54	57	57	54	48	46	50	50	54	60	64	60	50	50	43	44	50	51	55	66	64	54.9
Harrisonville §§	Maximum	80	82	80	75	79	87	92	94	87	78	84	85	58	59	71	77	83	85	87	88	88	79	84	74	70	75	80	86	95	103	100	82.1
	Minimum	52	52	53	53	54	55	61	63	63	56	50	56	52	47	45	48	50	52	56	59	62	55	51	59	43	49	49	50	54	68	66	54.3
Lamar §§	Maximum	79	82	77	77	75	82	88	95	88	75	81	84	73	57	66	76	82	85	86	89	87	78	83	77	72	77	80	84	91	97	98	81.3
	Minimum	52	54	54	58	56	56	58	59	64	63	49	50	62	54	51	44	45	52	56	59	64	64	57	58	48	47	45	46	46	57	66	54.6
Lamonte	Maximum	80	82	81	80	82	83	86	91	86	73	80	85	71	58	68	75	82	84	86	88	86	75	81	72	70	75	78	83	91	98	98	80.9
	Minimum	55	53	60	57	55	55	62	64	65	53	49	58	51	51	47	46	50	55	56	62	64	58	50	55	42	43	45	48	55	62	66	54.6
Marshall	Maximum	80	81	81	80	79	86	85	91	89	86	81	85	84	83	70	76	83	85	87	89	89	85	81	78	71	75	79	83	93	101	101	83.8
	Minimum	55	43	50	47	55	59	75	65	67	61	53	60	55	51	49	50	54	58	60	63	64	59	51	50	44	45	45	47	60	69	69	55.9
Nevada	Maximum	79	81	78	75	76	83	88	90	87	76	78	84	72	56	66	75	80	83	85	88	87	78	82	75	71	75	78	84	92	98	98	80.6
	Minimum	54	55	47	57	56	58	59	64	65	56	51	62	52	49	49	44	54	56	49	64	64	64	54	56	44	45	45	46	55	68	69	55.2
Warrensburg	Maximum	79	82	80	76	75	86	88	91	87	82	82	85	80	80	68	76	83	85	88	90	88	78	86	77	71	83	82	85	95	103	100	83.6
	Minimum	52	50	62	54	55	58	62	63	65	58	48	61	48	47	49	53	58	56	62	64	58	51	59	43	44	70	52	57	68	70	56.3
Warsaw	Maximum	80	83	83	82	79	86	92	96	92	83	85	86	79	58	69	81	87	89	89	92	91	81	88	79	76	79	83	89	97	102	104	85.2
	Minimum	54	53	61	58	56	55	56	65	65	61	47	55	54	54	49	41	44	53	52	60	65	60	47	57	40	38	40	42	50	63	63	53.5
Northwest Plateau																																	
Chillicothe §§	Maximum	83	84	85	82	77	91	87	95	91	78	83	84	65	67	72	80	88	90	91	92	92	75	83	72	74	78	83	89	99	101	100	84.2
	Minimum	56	58	57	53	54	55	61	60	62	58	49	53	50	50	45	44	52	54	55	59	65	56	48	58	39	42	45	45	58	66	70	54.1
Grant City	Maximum	71	78	78	72	76	89	89	93	84	84	82	82	76	69	70	74	83	87	88	88	83	74	79	75	72	77	76	86	97	99	98	81.6
	Minimum	57	56	63	53	53	57	59	62	68	50	47	51	49	52	47	54	50	59	57	66	67	53	47	56	40	45	51	53	59	73	69	55.4
Kansas City (a)	Maximum	82	82	80	72	77	88	92	94	89	78	84	86	66	64	70	79	85	87	90	90	90	74	84	71	71	75	83	87	98	103	102	83.0
	Minimum	59	60	60	58	57	58	61	64	72	58	55	64	51	50	51	50	58	63	65	68	66	59	53	55	48	46	48	52	63	78	77	58.9
Kidder	Maximum	81	82	83	75	75	88	86	92	88	82	82	84	79	67	69	77	84	87	88	89	90	73	80	73	74	77	80	85	96	102	101	82.9
	Minimum	56	51	62	51	53	57	62	60	67	59	52	58	49	50	46	49	54	58	57	59	60	55	52	57	43	48	50	51	61	72	70	55.8
Lexington §§	Maximum	77	78	83	72	78	87	89	93	87	75	83	81	64	64	77	72	81	81	88	86	88	76	85	72	71	77	78	87	97	105	101	81.7
	Minimum	57	54	61	56	55	57	65	62	68	59	52	58	54	50	48	49	54	58	60	64	67	59	53	60	46	47	50	56	61	68	74	57.5
Maryville	Maximum	83	84	84	75	83	94	91	95	98	89	87	84	82	77	74	86	91	93	94	94	95	79	87	87	80	84	86	94	104	110	106	88.7
	Minimum	57	55	63	52	52	57	59	62	68	51	49	57	49	51	43	50	50	59	55	60	66	53	49	55	43	45	45	53	59	68	64	54.8
Oregon	Maximum	83	84	82	75	79	92	95	94	91	84	85	83	76	71	77	82	88	91	91	92	93	78	84	78	79	82	85	91	101	104	103	86.2
	Minimum	60	57	64	54	52	59	61	65	69	52	51	59	49	49	44	52	56	62	62	65	64	53	53	56	45	50	51	56	63	75	73	57.5
St. Joseph	Maximum	81	81	80	72	78	88	89	93	89	78	83	85	65	68	73	80	85	87	89	90	91	74	82	73	72	77	81	87	98	103	101	83.0
	Minimum	60	59	60	55	55	58	63	65	68	57	52	63	50	52	49	54	58	63	64	67	63	56	52	57	45	49	48	58	64	76	74	58.5
Trenton	Maximum	80	80	83	79	78	92	91	93	92	91	82	81	80	65	71	81	87	88	88	93	93	86	80	80	71	78	80	79	98	105	104	84.8
	Minimum	59	54	62	55	56	58	62	62	69	58	51	60	51	53	44	45	51	57	56	60	65	55	49	49	40	44	47	49	59	63	72	55.3

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs

(a) Place of observations changed, Jan. 1, 1934; see explanation, page 4, Climatological Data for January 1934.

WBO, St. Louis, 5-21-34—895.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII JUNE 1934 No. 6

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GENERAL SUMMARY

It was the warmest June, for the State as a whole, since State-wide records began in 1888. The average temperature, 80.4°, is 1.1° higher than the previous highest average for June, which occurred in 1914. The average excess as compared with normal was 6.8°. As compared with normal, the month was warmest in the northwestern part of the State and coolest in the southeastern part, the excess averaging 8.6° in the Northwest and 5.1° in the Southeast. While it averaged warmer than any other June of record, the absolute maximum temperature for the month, 108°, has been slightly exceeded in the month of June in past years, notably, in 1911, when 112° was registered. The heat was persistent throughout the month. At Kansas City every day had an average temperature above normal and at St. Louis there was only one day below normal. The outstanding hot spell was from the 20th to 29th.

The rainfall was light, the State average being 2.85 inches for the month, but June has had less rainfall eight times in the last 46 years. However, the rainfall was very deficient during the whole six months period, January to June, inclusive, and the cumulative effect was severe drought in most parts of the State during June. The southeastern quarter suffered less than other sections. The first six months of 1934, for the State as a whole, had less precipitation than any other corresponding six months of record (1888 to 1934, inclusive); the total this year was 12.02 inches, while the least heretofore recorded was 13.12 inches, in 1901.

There were a few severe thunderstorms of local convectional type, accompanied by destructive lightning, and hail on various dates caused considerable damage. (See separate articles).

All crops made poor progress, except in spots favored by local rains, and there was decided deterioration in the condition of wheat and oats just as these crops were about to mature, early in June. Oats mostly were a failure. Wheat ranged from very poor to very good, with an average of fair to fairly good. Corn was in good to excellent condition for the most part until about the last week of June, when it began to suffer severely.

River stages in the St. Louis district generally were the lowest of record for June. At St. Louis the water fell to 0.2 foot on the gage on June 3, which is decidedly lower than ever before registered at this season of the year (record for years 1861-1934), the lowest previous June reading being 4.3 feet in 1931.

Water shortage on farms, both for stock and for domestic use, was becoming a problem in various localities by the end of the month. Some wells and springs heretofore considered "unfailing" were going dry, and many ponds had dried up.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 80.4°, or 6.8° above normal. The highest monthly mean was 83.2° at Kansas City, and the lowest monthly mean was 75.8° at Goodland. The highest temperature recorded was 108° at Clinton, Kansas City, and Warsaw on the 23d, and at Macon on the 28th and 29th, and the lowest was 47° at Goodland on the 19th. The greatest daily range was 45° at Farmington on the 19th.

PRECIPITATION

The average precipitation for the State, 119 stations reporting, was 2.85 inches, or 1.90 inches less than normal. The greatest local monthly amount was 5.95 inches at Caruthersville, and the least local monthly amount was 0.23 inch at Farmington. The greatest amount in any twenty-four hours was 3.20 inches

(Continued on page 29)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.88	30.08	30	29.66	11	6.7	34	nw.	9	74	44	51	82
Kansas City ...	29.84	30.11	10	29.59	20	9.8	41	nw.	22	67	39	37	86
St. Joseph	29.83	30.06	30	29.61	20	7.9	29	nw.	22	67	41	42	82
St. Louis	29.88	30.07	28	29.68	11	10.4	37	sw.	25	66	44	49	74
Springfield	29.90	30.09	28	29.71	15	8.6	35	nw.	17	73	48	50	86
Cairo, Ill.....	29.91	30.16	29	29.69	15	6.9	31	nw.	9	76	50	55	84
Keokuk, Iowa.	29.89	30.11	30	29.65	11	7.3	31	w.	20	67	43	45	76

COMPARATIVE DATA FOR JUNE

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	72.6	− 1.0	103	36	6.20	+1.45	10.52	2.87	0	7	..	..	..
1889....	70.7	− 2.9	100	38	4.66	−0.09	8.80	1.78	0	6	..	..	..
1890....	77.2	+ 3.6	106	44	2.59	−2.16	7.47	0.37	0	6	..	..	..
1891....	73.2	− 0.4	103	46	6.94	+2.19	13.54	3.29	0	13	..	..	..
1892....	74.5	+ 0.9	100	45	3.18	−1.57	7.63	0.45	0	7	15	9	6
1893....	72.6	− 1.0	98	40	4.61	−0.14	8.58	1.29	0	9	12	12	6
1894....	74.5	+ 0.9	105	35	3.92	−0.83	9.78	0.75	0	7	16	11	3
1895....	73.3	− 0.3	100	42	5.77	+1.02	9.95	0.45	0	10	12	11	7
1896....	72.5	− 1.1	101	45	8.32	+3.57	9.97	0.77	0	9	12	11	7
1897....	73.6	0.0	102	38	6.18	+1.43	11.67	2.78	0	12	9	14	7
1898....	75.3	+ 1.7	100	49	5.88	+1.13	11.08	2.42	0	11	13	12	5
1899....	74.3	+ 0.7	101	42	3.87	−0.88	9.05	1.53	0	9	15	10	5
1900....	73.3	− 0.3	103	44	4.79	+0.04	9.07	1.12	0	10	12	12	6
1901....	77.9	+ 4.3	106	40	2.13	−2.62	5.31	0.26	0	6	18	10	2
1902....	70.9	− 2.7	100	37	6.57	+1.82	12.55	2.55	0	12	11	10	9
1903....	67.3	− 6.3	95	36	3.25	−1.50	8.30	1.22	0	9	15	9	6
1904....	70.5	− 3.1	93	45	6.42	+1.67	13.79	1.60	0	11	12	12	6
1905....	75.2	+ 1.6	103	42	3.09	−1.66	6.88	0.74	0	7	15	10	5
1906....	72.7	− 0.9	101	40	4.70	−0.05	11.15	0.98	0	10	15	9	6
1907....	71.2	− 2.4	97	40	5.84	+1.09	10.35	0.94	0	11	14	10	6
1908....	72.3	− 1.3	98	43	6.30	+1.55	13.29	2.05	0	11	13	10	7
1909....	73.9	+ 0.3	98	48	5.21	+0.46	10.05	0.74	0	11	11	13	6
1910....	70.4	− 3.2	99	38	3.92	−0.83	9.01	0.96	0	8	16	7	7
1911....	78.9	+ 5.3	112	43	1.78	−2.97	5.85	0.08	0	6	18	8	4
1912....	69.5	− 4.1	100	42	4.78	+0.03	8.88	0.96	0	9	14	8	8
1913....	75.4	+ 1.8	107	33	2.57	−2.18	6.39	0.37	0	5	18	8	4
1914....	79.3	+ 5.7	106	43	2.37	−2.38	7.31	0.10	0	5	18	7	5
1915....	70.8	− 2.8	98	38	6.51	+1.76	12.88	0.57	0	12	11	10	9
1916....	70.0	− 3.6	100	42	6.99	+2.24	12.81	2.52	0	10	14	9	7
1917....	71.0	− 2.6	103	35	3.78	−0.97	13.54	0.09	0	8	19	7	4
1918....	77.2	+ 3.6	110	48	3.15	−1.60	8.06	0.62	0	7	17	8	5
1919....	75.0	+ 1.4	104	44	5.59	+0.84	10.69	1.91	0	11	14	10	6
1920....	72.7	− 0.9	104	41	2.35	−2.40	6.63	0.57	0	6	18	7	5
1921....	76.6	+ 3.0	105	44	5.71	+0.96	11.39	2.31	0	12	12	10	8
1922....	76.5	+ 2.9	108	43	1.66	−3.09	3.57	0.13	0	5	19	8	3
1923....	73.5	− 0.1	103	45	5.48	+0.73	9.36	2.12	0	11	14	9	7
1924....	72.5	− 1.1	101	38	7.39	+2.64	13.53	2.59	0	14	12	12	6
1925....	76.5	+ 2.9	103	46	6.10	+1.35	12.55	0.27	0	9	15	10	5
1926....	70.9	− 2.7	101	37	3.62	−1.13	8.42	0.34	0	8	15	9	6
1927....	70.3	− 3.3	99	41	5.77	+1.02	11.61	1.99	0	10	15	7	8
1928....	67.7	− 5.9	91	40	11.17	+6.42	22.00	5.08	0	15	8	11	11
1929....	71.3	− 2.3	99	39	5.77	+1.02	11.42	2.66	0	10	16	8	6
1930....	72.4	− 1.2	109	36	3.83	−0.92	10.35	0.30	0	7	18	8	4
1931....	77.1	+ 3.5	107	40	2.94	−1.81	9.14	0.56	0	6	19	8	3
1932....	75.2	+ 1.6	103	47	4.95	+0.20	14.12	1.57	0	10	12	12	6
1933....	78.4	+ 4.8	107	38	1.72	−3.03	9.10	0.00	0	3	22	6	2
1934....	80.4	+ 6.8	108	47	2.85	−1.90	5.95	0.23	0	7	17	10	3
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
.....	...	.....	..	..	....	.....	....	....	..	..	..	..	..
Period.	73.6	.....	112	33	4.75	.....	22.00	0.00	0	9	15	9	6

Climatological Data for June 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Charlton	652	53	82.2	+ 9.2	104	28†	58	12†	36	3.24	−2.25	0.96	0	7	23	5	2	sw.	O. K. Benecke
Clifton Hill	Randolph	731	35	81.7	+ 9.3	103	27†	56	12	35	2.75	−2.14	0.97	0	8	24	6	0	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	80.4	+ 7.6	101	27	57	13	31	3.56	−1.20	1.68	0	10	17	13	0	s.	U. S. Weather Bureau
Downing	Schuyler	876	13	80.8	+ 9.4	105	29	53	13	36	2.68	−2.78	1.23	0	9	23	7	0	sw.	James Taylor
Elsberry	Lincoln	449	3	78.8	.....	104	28	49	19	44	1.65	-	1.02	0	5	9	20	1	nw.	Ray E. Mills
Fayette	Howard	661	54	81.2	+ 8.4	106	28	54	19	38	3.02	−1.77	1.75	0	7	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	79.4	+ 6.2	102	29	55	13†	35	3.15	−1.52	1.66	0	7	19	9	2	sw.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	2.07	−2.22	1.02	0	8	20	10	0	s.	W. L. Harker
Hannibal	Marion	759	42	81.0	+ 8.5	103	1	58	12	35	4.15	+0.25	1.81	0	8	8	11	11	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	44	81.0	+ 7.2	105	28†	58	13†	35	3.06	−1.21	1.80	0	9	14	9	7	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	80.7	+ 9.0	105	29	53	12	38	1.77	−2.94	0.47	0	9	21	7	2	sw.	Prof. J S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	2.28	.....	0.66	0	7	19	11	0	sw.	J. Robert Hall
Louisiana	Pike	469	40	80.8	+ 8.7	106	23	49	13	42	2.35	−1.84	0.75	0	6	10	20	0	s.	Stark Bro's Nurseries
Macon	Macon	875	35	82.3	+ 9.9	108	28†	55	13	38	1.34	−3.55	0.50	0	6	21	9	0	w.	W. C. Brown
Mexico	Audrain	800	45	80.5	+ 7.3	103	1	55	12	34	4.63	−0.45	2.55	0	5	21	4	5	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	3.47	−1.60	1.32	0	7	17	10	3	ne.	J. S. Conway
St. Charles	St. Charles	520	46	81.7	+ 7.8	105	28	56	13	36	4.11	−0.01	1.38	0	7	15	13	2	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	82.6	+ 7.6	102	28	65	13	27	3.25	−0.57	1.70	0	7	13	15	2	sw.	**Section Center**
St. Louis University	St. Louis City	578	22	82.2	+ 7.3	102	27†	65	9†	28	2.18	−1.49	0.94	0	9	21	9	0	sw.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	1.96	−3.05	0.61	0	7	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	80.7	+ 8.1	105	28	54	12	35	1.73	−2.75	0.94	0	6	11	19	0	e.	Frank Hall
Unionville	Putnam	1,062	41	80.7	+ 9.4	104	29	50	13	40	3.33	−1.76	1.15	0	9	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	80.3	+ 6.9	104	29	59	13	32	2.77	−1.45	1.57	0	8	8	21	1	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	81.4	+ 8.9	104	29	58	7	35	3.01	−1.12	1.58	0	8	13	10	7	s.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**81.0**	**+ 8.2**	**108**	**28†**	**49**	**13†**	**44**	**2.79**	**−1.88**	**3.09**	**0**	**7**	**17**	**11**	**2**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	79.4	.....	105	29	54	13	42	2.75	.....	1.87	0	6	20	7	3	s.	Jeff. King
Carutherstville	Pemiscot	265	38	81.5	+ 3.1	101	29	60	13	31	5.95	+1.93	2.75	0	6	13	12	5	.....	Sam Smith
Doniphan	Ripley	344	30	80.0	+ 5.0	104	27	53	13	38	2.12	−2.47	1.77	0	5	17	6	7	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	80.8	+ 6.7	103	28	54	13	40	3.49	−1.23	2.24	0	6	9	6	15	s.	John G. Putz
Marble Hill	Bollinger	470	39	79.6	+ 5.6	102	24†	52	13	40	5.38	+0.67	3.20	0	8	14	11	5	w.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	3.06	−1.97	1.51	0	7	21	6	3	s.	John A. Spence
Poplar Bluff	Butler	339	29	79.8	+ 4.4	101	29	55	13	36	4.87	+0.20	2.67	0	7	22	6	2	s	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	81.2	+ 6.9	104	28	56	13	37	1.98	−2.25	1.31	0	9	12	14	4	s.	John A. LaFont
Cairo, Ill	Alexander, Ill	356	62	80 4	+ 4.1	99	27	62	13	26	0.92	−2.91	0.43	0	10	10	11	9	sw.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**80.3**	**+ 5.1**	**105**	**29**	**52**	**13**	**42**	**3.29**	**−1.14**	**3.20**	**0**	**7**	**15**	**9**	**6**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	76.2	+ 4.4	98	28	50	19	35	2.74	−1.95	2.52	0	6	15	9	6	s.	Arcadia College
Birchtree (near)	Shannon	1,000	39	77.7	+ 5.0	101	28	52	13	37	3.45	−1.13	1.80	0	5	25	4	1	sw.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	2.22	.....	1.50	0	3	24	6	0	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	2.47	.....	1.28	0	5	20	9	1	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	80.6[a]	.....	103	27†	52	19	41	2.16	.....	1.04	0	7	8[a]	13[a]	8[a]	sw.	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	30	80.6	+ 7.9	106	29	52	19	42	2.00	−4 04	1.23	0	4	23	7	0	se.	H. E. Dean
Eldon	Miller	934	39	80.5[a]	+ 7.5	105	29	59	12†	35	3.35	−1.27	2.00	0	6	8[a]	19[a]	2[a]	sw.	E. H. Shepherd
Farmington	St. Francois	918	23	80.2	+ 7.4	105	28	50	13	45	0.23	−4.42	0.23	0	1	20	10	0	s.	H. O. Miller
Goodland	Iron	1,000	41	75.8	+ 3.9	98	27†	47	19	40	2.81	−1.45	2.10	0	4	15	9	6	s.	F. M. Adams
Greenville	Wayne	381	25	77.0	+ 3.4	104	28	49	13†	40	2.64	−2.14	2.12	0	4	20	8	2	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	4.15	.....	1.62	0	7	22	7	1	w.	A. W. Madison
Koshkonong	Oregon	958	33	81.3	+ 6.9	102	28†	62	10†	33	1.25	−3.46	0.51	0	6	19	7	4	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	81.2	+ 8.5	105	29	54	19	37	1.35	−3.90	0.32	0	7	21	7	2	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	82.0	+ 8.4	103	23	60	19	32	3 92	−1.42	1.47	0	5	18	11	1	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	78.8	+ 7.0	101	29	57	13†	32	1.71	−3.07	0.65	0	9	16	11	3	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	79.8	+ 6.0	100	23	51	19	41	1.69	−4.12	0.83	0	5	22	8	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	78.4	+ 5.4	98	28	58	13	28	3.38	−0.88	2.45	0	6	9	5	16	se.	F. H. Lane
Salem	Dent	1,173	30	77.7	+ 5.3	99	27†	52	13	35	2.00	−2.70	0.82	0	7	17	12	1	s.	E. E. Martin
Seligman	Barry	1,542	33	79.0	+ 6.6	98	29	58	19	29	3.29	−1.06	1.62	0	4	21	9	0	s.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	76.7	+ 5.0	97	29	52	19	35	4.16	−1.24	1.77	0	9	17	11	2	s.	A. L. Hailey
Springfield	Greene	1,324	46	79.4	+ 6.9	98	23	62	17	30	2.65	−2.03	0.86	0	9	25	5	0	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	81.0	.....	103	29	59	12†	31	3.01	.....	1.67	0	8	17	13	0	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**79.2**	**+ 6.2**	**106**	**29**	**47**	**19**	**45**	**2.58**	**−2.61**	**2.52**	**0**	**6**	**18**	**9**	**3**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	81.2	+ 6.8	104	23	58	19	33	1.95	−3.30	0.70	0	6	14	16	0	sw.	W. G. Bigelow
Clinton	Henry	765	41	81.4	+ 7.6	108	23	55	19	39	3.20	−1.82	1.30	0	8	18	12	0	sw.	A. E. Derweut, M. D.
Harrisonville	Cass	904	56	80.8	+ 7.7	106	23	58	19	36	1.89	−2.74	0.99	0	8	19	6	5	sw.	John H. Patterson
Lamar	Barton	980	46	81.0	+ 6.8	102	29	58	19	38	5.30	+0.05	2.60	0	4	22	2	6	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	80.8	+ 6.8	104	23†	56	19	36	2.97	−1.86	1.43	0	7	20	10	0	se.	J. E. Wheeler
Marshall	Saline	779	47	82.7	+ 9.5	103	27†	60	13	32	1.99	−2.64	0.85	0	6	22	8	0	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	81.6	+ 8.1	104	23	56	19	35	1.83	−3.69	0.68	0	6	22	5	3	s.	George A. Kaupp
Warrensburg	Johnson	878	47	81.8	+ 7.9	107	23	58	12	43	2.21	−2.82	0.70	0	6	20	6	4	sw	E. A. Markey
Warsaw	Benton	687	33	83.0	+ 9.2	108	23	54	19	42	1.29	−4.09	0.60	0	6	19	11	0	s.	Everett Martin
Division means	**and extremes**	.....	..	**81.6**	**+ 7.8**	**108**	**23**	**54**	**19**	**43**	**2.66**	**−2.50**	**2.60**	**0**	**6**	**20**	**8**	**2**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	80.1	+ 8.1	103	29	51	12	34	2.60	−2.22	1.02	0	9	19	11	0	s.	A. S. Cumming
Chillicothe	Livingston	779	25	81.2	+ 8.3	106	29	49	12	40	2.51	−3.33	0.52	0	9	22	8	0	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	45	78.7	+ 7.2	101	28	56	12	32	3.26	−1.68	1.92	0	5	11	19	0	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	80.0	+ 8.1	104	29	53	12	36	4.81	+0.31	1.86	0	9	26	2	2	s.	Fred L. Stiff
Grant City	Worth	1,134	30	78.1	+ 7.3	100	28	51	12	33	4.18	−0.73	2.17	0	9	10	15	5	sw.	Howard Rybolt
Kansas City	Jackson	963	45	83.2	+ 9.6	108	23	60	12	32	1.71	−3.28	0.99	0	8	17	8	5	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	80.4	+ 8.6	104	29	55	12	35	3.52	−1.48	0.90	0	11	13	16	1	sw.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	2.59	−2.83	1.29	0	7	6	24	0	sw.	John M. Martin
Lexington	Lafayette	688	49	81.6	+ 8.7	105	29	58	12	35	3.79	−1.33	1.53	0	9	24	6	0	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	80.4	+10.6	104	2†	54	12	40	4.00	−1.09	1.99	0	7	13	13	4	s.	R. B. Montgomery
Oregon	Holt	1,048	78	82.2	+10.0	105	26†	56	12	35	2.21	−2.77	0.64	0	8	26	4	0	sw.	Mina Wright
St. Joseph	Buchanan	967	24	81.6	+ 7.5	103	29	57	12	31	3.96	−1.11	2.15	0	10	19	10	1	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	79.8	+ 8.0	105	26†	54	14	35	3.01	−2.09	1.55	0	9	16	14	0	se.	Albert Volker
Trenton	Grundy	822	38	81.4	+ 9.2	105	29	56	12	35	3.56	−1.44	1.08	0	8	23	7	0	s.	W. H. Estes
Division means	**and extremes**	.....	..	**80.7**	**+ 8.6**	**108**	**28**	**49**	**12**	**40**	**3.27**	**−1.84**	**2.17**	**0**	**8**	**18**	**11**	**1**	**sw.**	
State means	**and extremes**	.....	..	**80.4**	**+ 6.8**	**108**	**23†**	**47**	**19**	**45**	**2.85**	**−1.90**	**3.20**	**0**	**7**	**17**	**10**	**8**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for June 1934

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri			.02							.73	.01				.17			.01			.22		.16					.01	.28		1.61
Bowling Green	Mississippi							.01		.06	2.10								.74			.39										3.30
Brunswick	Grand					.08				.35	.63				.25	.60						.96	.37									3.24
Canton	Mississippi						.05	.85		.55	.13							.65	.13			.16		.58	.16							3.26
Clifton Hill	Chariton									.07	.97				.15							.67	.54		.01					.28	.06	2.75
Columbia***	Missouri		.39							.95	.02	T.			.15			1.68			.10	.05	.02		T.					.16	.04	3.56
Downing	Mississippi			.02			.23			.56	.07						.05	T.	T.			.18	1.05		.23						.29	2.68
Edina	do				T.					1.32	.42								.21			.32		.19		T.					.08	2.54
Elsberry	do				T.			.32		.22	.80								.06			.25	T.									1.65
Ewing	do									.30	.24								.65			.33										1.52
[illegible]	do			.21				.48		.02	3.09								.06			.56		T.						.40		4.82
Fayette	Missouri									1.75		.02			.21			.16				.39	.19								.30	3.02
Fulton	do			.01				T		T.	1.66					.06			.30			.03	.01	1.08						T.		3.15
Horin	Mississippi			.05		T.				1.02	.08								.08			.20	.40		.12						.12	2.07
Hannibal	do					.03	.69			.22	.72								1.81			.29		.25		T.			.14	T.		4.15
Hermann	Missouri			.01						T.	2.44	.04							1.83					.09								4.41
Jefferson City	do			.39						.02	1.80	.41				.15			.12			.02		.05							.10	3.06
Kahoka	Mississippi				T.		.20			.90									1.45			.12	.15	.50							.10	3.42
Kirksville	do			.05			.30			.47	.28							.01				.17	.34		.08						.07	1.77
Linneus	Grand				T.					.29	.66					.22		.11				.34	.61			.05						2.28
Louisiana	Mississippi									**	.70							**	.75	.40			.50							T.		2.35
Lucerne	Grand			.02		.05				.24					.08			.04		.16		1.50		.11						.65		2.85
Macon	Chariton			.12						.20	.50												.32	.15		.05						1.34
Madison	Mississippi										1.25							.20		.45			.12							.16		2.18
Memphis	do			.33				.10		.63									.29			.58	.48								.36	2.77
Mexico	do			T						.03	2.55								1.51			.31	.23									4.63
Milan	Grand									.26	.72				.05			.20	.33			.35	.52		T.							2.43
Monroe City	Mississippi						.25				.43							1.32		.57			.25		T.					.53	.12		3.47
New London	do							.31				.90							.27			.35		.09							.05		1.97
Palmyra	do							.32			.28								1.21			.19		.21								2.21
Paris	do							.14		.19	1.10								.65			.42		.17						.14	.15	2.96
Perry	do			.03				T.	T.		1.47								.90			.45		.05							.40	3.30
Philadelphia	do									T.	.60								.98			.22								.62		2.42
St. Charles	Missouri				1.23				.05	.08	1.38								1.31			.04		.02								4.11
St. Louis***	Mississippi	T.	.23	T.	.38	T.		T		.30	.25	T.						1.70				.04	T			T.				.35	T.		3.25
St. Louis University*	do	.02	.24	T.	.94			T.		.33	.26							.31				T.	.01			T				.06	.01		2.18
Shelbina	do									.24	.54								.61			.27	.28		.01						.01		1.96
Shelbyville	do									.73	.40								.64			.27		.21		.05							2.30
Steffenville	do						T.			.94	.25							.15				.26	.10		.03								1.73
Troy	do						.31		.26	.22	1.00								.32			.11		.49									2.71
Union	Meramec			.56							3.04	.04							.78					.01									4.43
Unionville	Chariton			T.				1.15		.30	.03				.05			.05				.20	.95		.10						.50		3.33
Valley Park	Meramec			.09	T.						.88	.05							.11					T.			T.						1.12
Warrenton	Mississippi		.02	.70			.14			.40	1.17								.24			.02	.08							T.			2.77
West Ely	do						.36		T.	T.	.52								.87			.36		.17						T.	.07		2.35
Keokuk, Ia.***	do					T.	T.		1.38	.20	.19	T.			.11		T.	.24			.08		.80		T.						.01		3.01
Southeast Lowlands																																	
Bragg City	St. Francis			T.		1.10	T.			T.	1.20	.28								.30				T.					.80		.10		3.78
Campbell	do					.25			.22	.10	1.77							.13													.28		2.75
Cape Girardeau	Mississippi			.04						.14	.22	.17	.02						.19					.10		.34							1.22
Caruthersville	do					1.60					.85	.49							.19						2.75						.07		5.95
Dexter	St. Francis			.25		.15				.08	1.70	.67							.30							1.17							4.32
Doniphan	Black		.17	.04		.08			T.		1.77						T.	.06				T.									T.		2.12
Fisk	St. Francis			.31		.09	T.			.31	1.17	1.21	T.						.04							.32							3.45
Jackson	Mississippi		T.		.31				.27	.38	.19														.10	2.24							3.49
Marble Hill	do		.59			.12			.04	.52	.81	.02				.08										3.20							5.38
Morehouse	do		.69			.07				.21	1.30		T.					.50								.24					.05		3.06
New Madrid	do					.18	.10			.19	.64	.70	.01						.30							.10					.45		2.67
Parma	St. Francis					.34				.20	1.55	.82							.48															3.39
Poplar Bluff	Black			.15		.15	.05			.62	2.05	1.04							T.					T		.81							4.87
Sikeston	Mississippi			.03			.25			.02	.68	.63							.25				.01			.03				.08			1.98
Cairo, Ill.***	do	T.	.07		.02	T.			.01	.01	.42	T.						.28					.05	.01	T.				T.	.03	.02		0.92
Ozark Plateau																																	
Arcadia	St. Francis			.11		.02	.02				2.30	.22																			.07		2.74
Birchtree (near)	Black		.75			.10					.50					1.80															.30		3.45
Buffalo	Osage			1.50								.19					.53																2.22
Caplinger Mills	do		.32	T.							T.	.40			.35	1.28															.12		2.47
Crystal City	Mississippi		.35		.14		.04			1.04																	.10			.03		.46		2.16
Dean	Neosho			T.	T.						.24	1.23				45															.08		2.00
Eldon	Missouri			.34							2.00					.24	.03		.63					.11									3.35
Farmington	St. Francis				T.			T.		T.	.23												T.					T.					0.23
Fredericktown	do										.32	.33															50						1.15
Galena	White					.12	.43					.46	.23					.22					.14											1.60
Goodland	Black						.15				2.10													.48	.08									2.81
Greenville	St. Francis		T.			T.			.46	1.16	.96								.06											T.				2.64
Hailey	White			.10	.23						1.62	.89	.37						.87						.07									4.15
Koshkonong	Black		T.	.43	.04					.06	.45					12								T.	.15									1.25
Lakeside	Osage			1.28							1.35	.02				.28	.11		T.				T.	.08							.23		3.35
Lebanon	do		.06					.05				.20				32	.31		.12				.29											1.35
Leeper	Black			.18			11				1.30	1.22					.06							T.	T.									2.87
Lockwood	Osage											1.47			.16	1.39														.75	.15		3.92
Mountain Grove	White		.65	.01	.03		.06				.28						45		.10			.02		.11									1.71
Neosho	Neosho			.05	.12	T.						.83			T.	.67	.02	T.															1.69
Owensville	Gasconade			.10							2.20													1.35									3.65
Rolla	Meramec										2.45	.63											.01	.17	.03						.09		3.38
St. Thomas (near)	Osage			.97							2.00	.09				.09			.03					.98									4.16
Salem	Meramec		.02							.02	.80								.48			T.		.48						.10	.10		2.00
Seligman	Neosho				.08						1.17	1.62				42																		8.29
Seymour (near)	White		.33	.10	.07						1.43	.09			.06	.26		1.77				.05								T.			4.16
Springfield***	do		.84	.02	T.						.01	.37			.17	.75		.34				T.		.01						T.	.14		2.65
Stover	Missouri			.05							.94	.03				.52			.36															1.90
Versailles	Osage		.53	.15						.84	.83	.01			.29	T.		.33				.03	T.											3.01
Williamsville	Black			.04		.12	.07				1.08	1.15	.01						.01					.01										2.49
Willow Sprgs. (near)	White			.05		.02		.02		.05		.80					1.17		.04						.01	.01								2.17
Southwest Plain																																	
Appleton City	Osage		.14		.09					.47	T	T.			.50	.05	.70														T.			1.95
Clinton	do				.12					.20	.20	.35			1.30			.03													.90	.10		3.20
Concordia	Missouri								.20		2.43	.23			.74			.40				.30	.20											4.50
Harrisonville	Osage				.15	.35				T.	.28	.02			.01	.99	.05	.04																	1.89

Continued on next page

Daily Precipitation for June 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																	
Joplin	Neosho		.45	.03								.52				.26																1.26
Lamar	Neosho			T.		.64						1.87				.19	2.60															5.30
Lamonte	Missouri				.06					1.33	.10	.20			.85			.23												.20			2.97
Marshall	do					.16				.85	.23				.45			T.				.27	.03									1.99
Nevada	Osage			.02	T.						.20	.68			.30	.50	T.													.13		1.83
Warrensburg	Missouri			T.	T.					.30	.56				.70			.12				.44	.09									2.21
Warsaw	Osage		T.							T.	.40	.02			.60		.14							.01						.12		1.29
Waverly	Missouri					.18				.60	1.46				.03	.38		.17	T.			.65	.10									3.57
Northwest Plateau																																	
Bethany	Grand			.02						.30					.82			.13			.17	.69	1.02		.06					.05		2.60
Chillicothe	do			.02	T					.34	.52				.36	.10		.26				.46	.31		.14							2.51
Conception	Missouri				T.				T.	1.92					.51			.10			T.		.36		T.					T.	.37	3.26
Edgerton	do			.24						1.86	.18				.62			.10				1.32	.27		.18						.04	4.81
Gallatin	Grand			.37						1.03					.36			.33				.23	.43		.50							3.25
Grant City	do			.04					.12	.81					.42			.08			.11		2.17		.16					.24		4.18
Kansas City***	Missouri		T.	.07					.02	.07	.12				.99	T.	T.	T.			.29		.07		T.					.08		1.71
Kidder	Grand		T.	.09	.02					.90	.56				.41	.22		.57				.25	.26	.03	.21					T.		3.52
King City	Missouri									1.29					.44			.10			.29		.23		.17					.07		2.59
Lexington	do			.02						.47	1.53	.09			.28	.22		.31				.75	.12									3.79
Maryville	do					.01				1.99					.25			.05			T.		.74		.11					.85		4.00
Oregon	do	.02			.20					.64					.39			.13			T.		.55		.21					.10		2.24
St. Joseph***	do			.03	.02				2.12	.03	T.				.55		T.	.21			.47		.33		.03					.17		3.96
Tarkio	do			T.	.17				1.10	.45					.45			.11			.09		.55		.06					.03		3.01
Trenton	Grand		.05						.84	.24					.35			.16			.89		1.02		.01					T.		3.56

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated. |||||| Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for June 1934
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.298	.314	.339	.218	.332	.285	.318	.374	.362	.458	.136	.271	.280	.290	.098	.106	.271	.240	.279	.348	.397	.218	.322	.338	.354	.404	.358	.364	.348	.310	....	9.020
	Mean temperature	80	81	78	76	80	82	82	80	82	78	78	72	72	70	73	78	78	76	72	78	81	83	82	85	84	84	82	84	85	80	..	79.2
	Wind movement	36	38	53	38	50	40	42	56	60	94	56	68	42	31	56	39	41	65	40	62	88	43	53	52	58	59	47	33	56	56	..	1,552

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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at Marble Hill on the 24th. The average number of days with 0.01 inch or more of precipitation was 7.

MISCELLANEOUS PHENOMENA

Dust storms.—1st, 2d, 3d, 5th.

Halos.—Solar, 1st, 2d, 5th, 6th, 9th, 10th, 11th, 13th, 14th, 15th, 17th, 19th, 20th, 21st, 22d; lunar, 2d, 24th.

Hail.—Light, 2d at Columbia and Springfield, 3d at St. Charles, north St. Louis, and Warrenton, 4th at St. Louis, 8th at Maryville, 9th at Arcadia, Lexington, and near Warrenton, 11th at Caplinger Mills, 17th at St. Charles, 20th at Kansas City, Maryville, and St. Joseph, 21st at Edgerton, 23d at Fulton, 24th at Jackson and Bethany, 30th in western St. Charles County; moderate, 24th at Marble Hill; heavy, 6th at Downing, 9th east of Columbia, 20th in north and central parts of Harrison County and southeast part of Nodaway County, southern Buchanan County and northwest Platte County, 21st at Brunswick, 22d at Grant City, 23d at Mountain Grove. (See special hailstorm notes)

Thunderstorms.—Local, 1st, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 11th, 14th, 15th, 16th, 17th, 19th, 20th, 23d, 24th, 25th, 28th, 29th, 30th; more or less general, 2d, 10th, 21st, 22d.

Windstorms.—1st, 3d, 4th, 6th, 7th, 17th, 20th, 23d, 30th. (See special windstorm notes).

SPECIAL HAILSTORM NOTES

On June 6th about 4 p. m. a heavy hailstorm, in connection with a thunderstorm, occurred seven miles north of Downing, Schuyler County, damaging crops to estimated amount of $1,500 and buildings, orchards, and trees to the extent of an additional $1,500. The storm approached from the southwest and moved northeast and the path extended for about two miles, being about a mile in width. Hailstones were from one to two inches in diameter. (Notes by Mr. Lester Turner, Downing, Mo.).

On June 9th heavy hail fell in the vicinity east of Columbia, Boone County, killing chickens and damaging gardens. The hailstones were as big as hickory nuts.

During the afternoon and early evening of June 20th damaging hail fell in southern Buchanan and northwestern Platte Counties, central and eastern Nodaway County, and at Ridgeway, Harrison County. The first of these storms occurred six miles south of Maryville, Nodaway County, at 2 p. m. and extended to the south and east of Ravenwood, a distance of about ten miles, over a path about one mile in width, doing severe damage to crops, estimated at $60,000 to $75,000. Oats, wheat, and corn were a total loss and corn was replanted with an early maturing variety. The storm came from the southwest and moved east-northeast. Hailstones ranged in size from peas to large eggs. (Notes by Mr. R. B. Montgomery, Cooperative Observer at Maryville, Mo.).

Later in the day, between 6 p. m. and 7 p. m., a second destructive hailstorm, accompanying a thunderstorm, crossed

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Daily Temperatures for June 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	102	101	92	96	98	103	102	100	95	84	91	91	92	88	86	92	90	89	94	101	95	92	100	96	100	101	102	104	104	98	..	96.0
	Minimum	69	67	69	68	67	71	72	72	67	66	64	58	59	64	68	64	68	65	58	70	66	67	70	76	75	74	76	73	74	76	..	68.4
Columbia	Maximum	100	98	93	92	94	96	97	95	92	77	87	81	86	82	86	91	94	84	88	94	87	93	97	94	98	99	101	96	100	90	..	92.1
	Minimum	69	68	68	70	70	71	71	73	64	64	65	58	57	65	69	66	67	65	58	66	68	71	69	76	75	76	72	76	76	74	..	68.6
Fayette§§	Maximum	101	101	92	94	97	101	100	99	95	82	89	86	90	90	88	95	94	88	92	99	90	95	101	95	101	101	102	106	105	94	..	95.4
	Minimum	66	64	69	66	68	71	68	72	67	66	63	56	56	63	64	65	67	65	54	66	67	73	68	74	74	73	68	70	77	74	..	67.1
Hannibal	Maximum	103	100	98	96	99	96	94	95	94	82	89	88	85	85	89	93	94	84	90	96	93	91	99	95	98	100	101	102	102	93	..	94.1
	Minimum	72	71	69	69	71	68	59	70	66	66	62	58	59	61	67	65	67	65	63	69	66	66	69	74	74	75	75	77	75	73	..	68.0
Jefferson City §§	Maximum	102	103	92	93	93	100	97	97	96	84	85	83	88	82	87	91	93	86	89	96	95	96	99	98	99	99	102	105	105	90	..	94.2
	Minimum	69	68	66	66	68	69	69	70	69	63	63	60	58	60	64	67	68	65	58	65	72	73	67	76	72	74	74	74	77	73	..	67.9
Kirksville	Maximum	100	100	95	96	95	96	98	97	89	85	93	91	87	90	90	92	92	90	95	100	97	92	100	93	99	102	101	101	105	91	..	95.1
	Minimum	73	69	66	67	67	63	60	71	63	60	63	53	55	62	60	60	65	62	60	73	65	64	69	73	75	75	75	74	78	69	..	66.3
Louisiana	Maximum	103	101	102	98	94	98	90	95	98	90	89	89	85	89	95	98	95	85	90	97	96	95	106	100	100	104	103	103	103	98	..	96.3
	Minimum	64	66	66	64	67	66	60	64	67	65	57	53	49	55	65	64	65	65	52	66	67	66	64	72	75	73	75	76	73	76	..	65.2
Macon§§	Maximum	104	102	98	98	99	105	102	100	97	85	92	86	89	88	91	94	96	90	95	102	91	95	102	94	102	104	103	108	108	89	..	97.0
	Minimum	73	71	66	66	69	70	64	68	64	63	62	57	55	62	64	63	66	63	61	72	65	70	66	73	74	75	74	78	79	74	..	67.6
Mexico §§	Maximum	103	99	95	95	95	102	99	99	100	78	88	82	85	81	88	92	94	83	90	96	96	95	97	94	99	101	102	102	102	91	..	94.1
	Minimum	69	67	64	66	69	70	65	69	66	62	61	55	57	66	66	64	63	63	57	65	67	71	68	75	72	73	71	76	75	74	..	66.9
St. Louis	Maximum	100	98	94	93	87	97	95	88	92	84	87	82	84	86	91	92	94	84	91	93	94	95	100	96	99	99	102	102	102	91	..	93.1
	Minimum	75	75	72	69	72	72	71	74	68	66	69	65	65	69	72	67	67	67	68	74	72	79	77	76	77	80	81	80	76	76	..	72.0
Unionville	Maximum	103	102	98	95	100	98	96	96	90	86	90	88	90	93	90	93	90	91	90	100	96	94	100	94	98	102	103	103	104	95	..	95.6
	Minimum	75	75	66	65	64	70	70	70	63	63	60	55	50	54	60	56	60	60	65	70	63	63	67	70	74	76	75	75	75	65	..	65.8
Warrenton	Maximum	100	97	94	90	89	96	95	91	95	77	85	82	83	81	87	90	94	86	89	94	91	91	98	94	97	99	100	102	104	91	..	92.1
	Minimum	72	74	66	68	68	64	68	69	66	63	64	60	59	61	67	68	70	64	63	66	68	73	69	76	73	75	75	72	79	75	..	68.5
Southeast Lowlands																																	
Campbell	Maximum	101	101	92	98	80	95	91	86	94	77	84	81	84	89	92	93	88	90	94	96	101	100	100	98	100	103	103	103	105	93	..	93.7
	Minimum	60	66	63	67	67	64	65	70	65	65	62	63	54	58	60	66	72	60	59	60	59	71	73	74	65	69	67	72	71	70	..	65.2
Caruthersville	Maximum	97	97	94	91	83	91	90	89	95	80	88	84	87	90	90	94	86	88	89	92	99	99	99	100	94	100	97	97	101	95	..	92.5
	Minimum	66	71	69	70	69	69	71	71	72	67	67	69	60	65	66	71	75	72	73	66	72	72	76	76	69	75	75	76	75	71	..	70.5
Doniphan	Maximum	100	100	93	98	82	95	95	92	98	90	81	82	85	89	94	95	84	85	88	95	101	100	100	99	100	103	104	101	99	94	..	94.1
	Minimum	63	66	63	65	68	63	63	68	70	65	64	58	53	57	61	65	72	65	65	57	71	70	72	75	67	66	71	71	70	72	..	65.9
Jackson	Maximum	101	102	96	94	89	98	97	91	95	77	82	84	90	91	95	97	92	89	95	96	102	99	101	100	98	100	101	103	102	92	..	95.0
	Minimum	63	67	64	65	68	61	68	71	69	66	65	65	54	55	60	67	74	64	55	61	71	72	73	66	67	74	71	74	76	73	..	66.6
Poplar Bluff	Maximum	100	98	93	95	79	93	94	87	95	93	79	84	86	88	91	97	90	89	89	92	97	98	96	97	96	98	100	99	101	84	..	92.6
	Minimum	64	67	65	67	68	64	67	68	72	66	64	62	55	59	62	67	74	65	57	59	70	74	76	72	69	71	69	73	73	71	..	67.0
Sikeston	Maximum	101	103	95	95	85	96	95	87	97	77	85	84	89	90	95	98	88	88	91	94	100	99	99	97	99	100	103	104	102	94	..	94.3
	Minimum	64	70	65	70	69	65	70	70	70	66	65	66	56	60	63	68	75	66	61	61	71	72	75	70	67	74	72	75	74	72	..	68.1
Cairo, Ill	Maximum	96	95	92	88	80	92	90	87	92	78	83	80	85	88	91	94	84	85	88	89	96	95	94	95	95	98	99	98	98	85	..	90.3
	Minimum	70	73	68	74	71	67	73	73	69	67	68	69	62	63	67	71	73	67	68	68	74	74	76	70	69	75	76	77	72	72	..	70.5
Ozark Plateau																																	
Arcadia §§	Maximum	94	91	88	89	77	91	89	89	89	73	78	78	82	83	87	88	86	83	85	88	93	93	91	94	93	95	97	98	96	85	..	88.1
	Minimum	63	67	64	64	65	64	63	65	71	63	63	64	51	53	59	63	68	63	50	59	69	67	68	75	61	69	67	68	73	71	..	64.3
Birchtree	Maximum	97	96	90	94	82	89	92	90	92	79	80	83	85	89	94	89	89	84	89	92	97	86	95	97	96	98	100	101	100	90	..	91.2
	Minimum	62	62	57	63	60	56	65	63	68	66	63	64	52	56	65	62	70	62	56	60	72	70	76	74	63	66	63	70	71	68	..	64.2
Crystal City §§	Maximum	101	..	101	94	87	97	97	91	95	82	87	82	87	88	92	96	94	86	93	95	99	99	101	100	102	101	103	101	103	94	..	[a]94.8
	Minimum	65	70	..	65	66	66	67	67	74	65	65	65	55	54	61	65	70	63	52	57	76	69	72	77	68	70	68	67	72	73	..	[a]66.3
Eldon §§	Maximum	100	100	93	93	93	99	99	..	96	86	84	83	88	80	85	91	93	95	88	95	92	97	98	100	100	99	102	103	105	91	..	[a]94.1
	Minimum	66	70	64	65	66	69	67	67	..	64	64	59	61	60	64	66	68	65	59	64	68	72	69	72	71	73	69	73	70	75	..	[a]66.9
Farmington	Maximum	99	95	95	85	94	94	95	89	95	78	88	80	88	84	96	90	96	88	98	100	101	102	101	103	102	97	102	105	102	103	..	94.8
	Minimum	68	69	59	61	63	64	68	62	65	63	63	65	50	53	60	60	70	63	53	60	70	72	73	75	71	75	75	74	75	78	..	65.7
Koshkonong	Maximum	98	98	91	93	84	96	95	92	92	85	79	85	87	90	94	92	91	88	94	98	98	99	98	101	102	102	102	94	..	93.8
	Minimum	69	72	66	67	67	67	70	68	70	62	64	64	68	62	67	68	73	66	62	65	73	72	73	69	70	71	74	76	75	74	..	68.8
Lebanon §§	Maximum	102	94	96	95	96	100	97	98	97	84	89	91	93	88	89	94	96	85	91	96	95	99	102	102	101	101	103	104	105	88	..	95.7
	Minimum	65	70	60	68	65	68	67	66	70	66	65	59	56	66	64	61	66	64	54	66	69	71	71	75	69	72	69	72	74	73	..	66.7
Mountain Grove	Maximum	99	95	88	88	82	92	90	91	92	78	86	86	87	86	92	92	92	84	88	92	93	96	94	98	95	97	99	98	101	96	..	91.6
	Minimum	67	63	62	65	63	67	68	67	67	63	63	62	57	59	65	60	66	63	57	63	70	69	66	72	68	69	71	71	79	74	..	65.9
Neosho	Maximum	95	96	90	88	86	94	94	95	95	95	95	89	90	91	90	92	93	90	92	97	98	98	100	99	97	96	96	99	99	99	..	94.3
	Minimum	63	61	64	66	60	60	61	68	69	64	64	58	65	67	63	64	66	51	68	70	72	73	70	68	65	66	68	72	72	65	..	65.3
Rolla	Maximum	95	93	88	89	86	93	91	89	91	75	80	80	81	81	83	86	85	80	87	92	90	94	91	92	95	96	97	98	96	84	..	88.6
	Minimum	70	69	66	66	68	68	69	68	72	62	66	62	58	60	63	66	69	64	59	69	74	72	69	75	70	73	72	81	76	72	..	68.3
Springfield	Maximum	95	93	79	85	86	90	90	91	91	87	84	81	84	84	84	87	87	82	87	94	91	95	98	95	96	95	95	97	96	91	..	89.7
	Minimum	73	63	66	66	64	70	70	70	72	68	64	64	64	63	66	65	62	66	63	69	74	73	76	77	78	74	76	77	77	70	..	69.2
Southwest Plain																																	
Appleton City	Maximum	96	96	81	90	96	96	93	97	95	85	95	88	91	87	82	91	88	87	91	100	93	100	104	99	98	97	100	101	101	93	..	93.7
	Minimum	67	70	65	66	64	71	70	72	72	70	67	61	62	63	68	65	67	64	58	67	71	73	75	75	75	71	71	74	75	75	..	68.8
Clinton	Maximum	103	99	92	92	93	101	101	101	95	90	92	90	90	84	83	90	93	84	92	95	92	101	108	103	101	100	103	102	103	93	..	95.5
	Minimum	64	67	66	64	64	62	68	68	70	67	68	60	60	63	70	65	68	64	55	68	70	73	75	73	75	70	68	73	73	68	..	67.3
Harrisonville §§	Maximum	100	99	86	90	94	98	97	97	96	82	95	89	92	87	82	88	89	88	94	101	90	99	106	103	100	102	102	105	105	99	..	95.2
	Minimum	66	67	63	64	63	69	69	70	66	64	65	66	62	63	62	65	63	60	58	67	67	68	70	73	75	73	71	67	69	72	73	66.5
Lamar §§	Maximum	98	99	87	91	90	94	96	95	95	90	88	84	91	86	81	87	88	83	91	97	95	98	101	99	96	97	99	101	102	97	..	93.2
	Minimum	66	61	66	68	64	66	70	72	74	76	65	64	64	66	67	66	69	65	58	62	71	75	78	75	74	72	70	74	75	75	..	68.9
Lamonte	Maximum	97	96	88	93	95	98	96	91	79	87	81	87	85	87	91	91	88	92	99	91	100	104	103	100	102	102	104	104	101	..	94.3
	Minimum	67	68	65	66	66	71	72	71	64	66	60	58	61	60	68	66	67	63	56	65	68	68	72	76	74	72	69	72	74	72	..	67.2
Marshall	Maximum	100	98	95	95	96	100	98	98	94	80	88	89	89	85	85	91	90	87	93	102	98	95	101	102	100	101	103	102	103	101	..	96.3
	Minimum	71	72	67	68	66	73	72	78	72	64	67	71	60	63	68	65	64	77	61	71	68	66	72	71	72	74	77	77	78	78	..	70.1
Nevada	Maximum	97	97	88	90	94	97	96	97	97	88	90	87	91	88	81	89	87	86	91	98	95	99	104	100	98	99	99	101	103	97	..	94.1
	Minimum	67	69	66	68	64	72	70	73	73	70	60	61	63	64	65	65	68	64	56	68	70	77	78	75	75	72	72	77	78	76	..	69.2
Warrensburg	Maximum	99	101	92	95	99	101	100	100	92	80	93	85	92	86	85	92	91	88	95	102	97	100	107	104	101	103	103	104	106	100	..	96.4
	Minimum	68	68	65	65	65	71	71	71	67	62	60	58	62	62	69	65	64	62	60	59	67	65	73	76	74	71	73	75	75	72	..	67.2
Warsaw	Maximum	103	103	92	96	100	102	100	100	98	88	95	90	96	88	86	96	94	90	95	102	99	102	108	104	104	104	105	107	106	99	..	98.4
	Minimum	61	61	64	64	65	68	77	70	73	67	69	59	58	64	67	64	68	65	54	67	68	77	71	75	75	75	67	71	75	72	..	67.7
Northwest Plateau																																	
Chillicothe §§	Maximum	103	102	102	97	101	103	102	101	92	86	92	86	91	87	89	92	89	89	96	102	88	104	101	98	100	104	103	104	106	96	..	96.9
	Minimum	69	65	66	66	66	71	70	70	64	63	61	49	57	59	63	59	63	61	58	68	63	64	65	70	71	73	71	71	73	73	..	65.4
Grant City	Maximum	96	97	89	91	96	99	91	95	88	79	92	81	89	80	83	86	83	84	89	94	86	82	98	88	92	95	99	100	96	91	..	90.3
	Minimum	71	64	67	64	66	69	70	68	63	60	60	51	59	63	60	61	64	57	58	76	61	62	76	71	73	77	73	72	73	68	..	65.9
Kansas City	Maximum	101	98	86	91	99	99	99	98	91	82	92	83	90	87	83	90	86	87	94	103	85	98	108	102	99	103	101	103	105	94	..	94.6
	Minimum	77	72	71	73	69	76	79	70	70	64	71	60	64	66	71	68	67	64	62	72	68	66	77	81	80	78	79	82	82	74	..	71.8
Kidder	Maximum	100	100	90	93	99	100	99	98	90	83	90	85	95	85	85	89	84	87	92	100	90	92	98	96	98	101	101	101	104	99	..	94.1
	Minimum	72	67	67	65	65	70	69	72	64	62	62	55	60	63	64	61	64	60	60	73	62	63	69	74	72	74	74	74	74	72	..	66.8
Lexington §§	Maximum	98	99	89	93	101	100	97	98	85	85	89	84	92	85	84	88	84	84	89	100	86	98	102	98	100	101	101	101	105	97	..	93.8
	Minimum	74	72	69	68	66	73	73	72	67	65	66	58	62	65	65	66	67	63	64	72	66	66	72	78	75	76	74	76	72	76	..	69.3
Maryville	Maximum	101	104	92	97	100	103	103	101	89	84	94	87	92	90	86	88	88	90	95	96	91	95	102	94	97	104	101	102	104	91	..	95.4
	Minimum	69	64	67	67	64	68	69	65	60	59	60	54	60	63	66	63	64	58	56	75	59	62	72	72	71	76	71	68	71	68	..	65.4
Oregon	Maximum	102	100	91	91	99	101	99	99	91	89	95	89	94	98	87	88	84	90	96	99	93	94	101	98	100	105	103	103	105	93	..	95.9
	Minimum	75	69	71	69	68	72	73	75	65	62	66	56	59	65	65	63	64	59	64	77	61	63	74	72	75	77	78	75	77	69	..	68.6
St. Joseph	Maximum	100	98	84	91	99	99	97	97	91	84	91	84	89	87	84	86	83	86	93	100	86	92	99	99	99	102	100	101	103	91	..	93.2
	Minimum	78	73	69	71	69	74	76	66	67	66	68	57	65	66	68	66	66	62	65	69	64	65	75	76	78	78	79	78	80	69	..	70.1
Trenton	Maximum	102	102	98	95	100	101	100	99	93	89	92	91	90	89	89	89	95	85	93	102	87	93	97	97	97	102	103	102	105	94	..	95.7
	Minimum	72	67	68	67	66	71	73	71	65	63	61	56	60	59	64	62	64	63	60	70	63	63	70	75	73	78	73	73	73	72	..	67.2

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 7-23-34—895.

Continued from Page 29

the Missouri River from Atchison, Kansas, and continued on the Missouri side in the vicinity of Rushville, Sugar Lake, and Bean Lake, where it did more damage than in Kansas. Crops and gardens were pounded into the ground, tobacco and corn were ruined over a wide area, and fruit trees were hard hit. Car tops were riddled, windows broken, and holes torn in roofs. The hail fell for about twenty minutes and stones in some instances were as large as hen eggs. Damage was given in newspaper accounts of the storm as thousands of dollars. (From clippings furnished by O. I. C., St. Joseph, Mo.).

As a part of the same disturbance, but a separate and distinct storm, a destructive hail and windstorm occurred at Ridgeway, Harrison County, in the late afternoon of June 20th, beating gardens into the ground, shearing leaves and small limbs from trees, and shattering windows. The storm lasted about one-half hour and hailstones were as large as hickory nuts. No estimate of damage available. (From clipping furnished by O. I. C., St. Joseph, Mo.).

About 2.30 a. m., June 22d, a thunderstorm, accompanied by heavy hail, occurred at Grant City, Worth County, approaching from the southwest and moving northeast, covering a strip about a mile wide through Grant City. Small garden truck, as peas, beans, and tomatoes, were a total loss, while corn was badly cut but will probably survive. The stones were about the size of walnuts. Damage to crops was estimated as negligible. (Notes by Mr. Howard R. Rybolt, Cooperative Observer, Grant City, Mo.).

On June 23d, about 11 a. m. a heavy hail and windstorm occurred in the vicinity of Mountain Grove, Wright County, resulting in damage to crops, possibly reaching $7,000. Windows, screens, and roofs were demolished. The storm travelled from southwest to northeast and the path was about one mile wide. Hailstones were from one-half to two inches in size. (Notes by Mr. Paul H. Shepard, Cooperative Observer, Mountain Grove, Mo.).

WINDSTORM AND LIGHTNING DAMAGE

During a thunderstorm the afternoon of June 1st in north St. Louis, lightning and wind damaged several buildings. Trees, wires, and poles were blown down or damaged. Damage estimated at $200,000 to $210,000, mostly due to lightning, which caused a fire in a warehouse where several thousand bales of cotton were stored.

On June 2d some trees were blown down at Warrenton, and limbs were broken off others.

On the afternoon of June 3d a thunderstorm squall occurred in north and northwest parts of St. Louis and St. Louis County, damaging trees. Lightning accompanying this storm killed two boys in Ferguson, St. Louis County. Hail also accompanied this storm but was mostly light.

A third thunderstorm and wind squall in northwestern St. Louis and St. Louis County the afternoon of June 4th uprooted trees and blew down wires. Another boy was killed by lightning at Pine Lawn, St. Louis County. Some hail fell during this storm but was mostly light.

On June 7th, during a thunderstorm, a boy was killed by lightning in University City, suburb of St. Louis. This was the fourth fatality by lightning in suburbs of St. Louis in three electrical storms.

A windstorm on June 9th at Centralia, Mo., did considerable damage to outbuildings, trees, etc. Some minor damage was done to trees at Columbia during the same day.

Trees were blown down in St. Louis on the 17th, but damage was slight.

On June 27th an 11-year old boy was killed by lightning at Hillsboro, Jefferson County.

About 11 a. m. June 27th, in the vicinity of Mountain Grove, six barns and some smaller buildings were destroyed by wind. Heavy hail accompanied this storm.

On June 30th, in the western part of St. Charles County, roofs of buildings were reported blown off.

IMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII JULY 1934 No. 7

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GENERAL SUMMARY

Following a June that was the warmest of record, July had not only record-breaking high temperatures on individual dates, but the general average for the month was higher than ever before in the history of State-wide records (years 1888-1934). For many years the hot July of 1901 had held the record, but 1934 now takes first place; for the highest temperature heretofore recorded was 116° on July 22, 1901, at Marble Hill, whereas, the present month shows a record of 117° at Louisiana, Pike County, on the 18th. Mexico, in the same quarter of the State, had 116° on the 19th, and Clinton, in the Southwest Plain, had 116° on the 24th. The highest in the northwestern quarter was 114° at Chillicothe; in the Ozark Plateau, 114° at Dean and Versailles; in the Southeast Lowlands, 114° at Marble Hill. Furthermore, the general average for the State, 86.2°, is 0.8° higher than the previous highest average, July 1901.

Extreme temperatures were felt in all parts of the State, but they averaged highest in the Southwest Plain (87.6°) and the lowest in the Southeast Lowlands (84.8°). The greatest excess as compared with normal occurred in the northern half of the State, where it averaged 9.6° above normal, as compared with an excess of 9.2° in the Southwest Plain, 8.4° in the Ozark Plateau, and 6.0° in the Southeast Lowlands.

There were only a few days with temperatures anywhere near as low as normal, but the outstanding hot period extended from the 11th to the 25th, inclusive, during which the maximum temperature every day was well above 100° at most stations.

The average rainfall for the State, 1.11 inches, is the second smallest July total of record, the total for July 1930 having been 0.97 inch. The rainfall was unevenly distributed over the State, with as much as 5.22 inches at the wettest station (Clinton, Henry County) and none at all at the driest (Palmyra, Marion County). Relatively substantial amounts were received in the west-central border counties and in considerable portions of the lower southeastern counties. Over a large south-central area and much of the northern third of the State less than half an inch was received. The State rainfall for the four months, April, May, June, and July, is 8.26 inches, or 48 per cent of normal, and is the least of record, being slightly less than for the same months in 1901, when it was 8.47 inches. For the seven months, January-July, inclusive, the total for 1934 is 13.13 inches, decidedly the least of record, being 2.01 inches less than for the same months in 1901.

July 1934 surpassed July 1901 in both heat and drought, and the destruction of crops was accordingly greater. Such heavy deterioration in corn crop conditions in one month has never been known before in Missouri, according to reports of the Agricultural Statistician. Corn was almost ruined except in parts of the southeastern counties and in some favored spots in lowlands of other sections. Much corn was cut for immediate feeding to stock or for silage. Pastures and gardens dried up. Alfalfa, soybeans, cowpeas, and other forage crops were cut very short. Apples and other fruits were greatly reduced in yield and quality. Livestock by the hundreds were rushed to market because of lack of pasturage and water. It was estimated that one half of the farms of the State were short of water, and many were compelled to supply their needs from considerable distances.

Damaging storms were unusually few. (See separate articles regarding damage by wind and hail).

River stages in the St. Louis district were the lowest of record for this time of year. At St. Louis the lowest stage this

(Continued on page 35)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.92	30.16	9	29.61	13	7.4	19	w.	13	63	33	31	81
Kansas City ...	29.88	30.14	7	29.51	31	9.8	43	nw.	13	56	30	29	88
St. Joseph	29.87	30.16	7	29.52	13	7.9	32	se.	13	55	30	28	86
St. Louis	29.93	30.22	9	29.66	13	10.7	31	sw.	31	61	41	42	71
Springfield ...,.	29.94	30.15	9	29.68	13	8.7	30	se.	14	62	34	34	88
Cairo, Ill.....	29.95	30.21	9	29.75	13	6.6	35	e.	25	82	52	57	86
Keokuk, Iowa.	29.93	30.20	9	29.64	13	7.5	23	nw.	5	62	40	40	67

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	79.3	+ 1.5	111	50	3.31	−0.47	10.48	0.50	0	7	..	..	..
1889....	77.1	− 0.7	107	46	3.75	−0.03	6.65	1.02	0	8	..	..	..
1890....	79.6	+ 1.8	110	42	2.98	−0.80	6.85	0.20	0	5	..	..	..
1891....	72.7	− 5.1	103	45	3.55	−0.23	7.30	0.10	0	8	..	..	..
1892....	75.8	− 2.0	102	45	4.99	+1.21	9.05	2.06	0	9	12	10	9
1893....	77.3	− 0.5	103	51	4.91	+1.13	18.30	0.30	0	8	14	12	5
1894....	76.5	− 1.3	109	42	2.48	−1.30	8.15	0.15	0	5	18	10	3
1895....	74.4	− 3.4	106	45	6.79	+3.01	14.51	2.92	0	10	10	12	9
1896....	77.3	− 0.5	108	48	5.87	+2.09	14.98	1.51	0	9	15	11	5
1897....	78.7	+ 0.9	106	48	3.22	−0.56	9.97	0.60	0	6	19	9	3
1898....	76.1	− 1.7	104	42	5.58	+1.80	15.06	1.97	0	9	16	10	5
1899....	76.0	− 1.8	102	43	4.51	+0.73	9.39	1.69	0	9	15	11	5
1900....	76.9	− 0.9	102	46	4.11	+0.33	9.75	0.77	0	8	17	10	4
1901....	85.4	+ 7.6	116	46	2.02	−1.76	4.90	0.05	0	5	19	10	2
1902....	77.0	− 0.8	103	50	4.59	+0.81	10.77	0.15	0	8	17	11	3
1903....	77.4	− 0.4	102	51	3.22	−0.56	8.56	0.78	0	8	17	10	4
1904....	74.2	− 3.6	100	47	4.65	+0.87	10.81	1.63	0	10	15	11	5
1905....	73.4	− 4.4	101	48	7.45	+3.67	17.98	2.35	0	12	12	10	9
1906....	74.7	− 3.1	100	48	3.53	−0.25	8.18	0.40	0	8	17	9	5
1907....	78.4	+ 0.6	105	51	4.57	+0.79	12.37	0.71	0	8	19	8	4
1908....	76.5	− 1.3	101	49	3.23	−0.55	5.60	1.10	0	8	18	9	4
1909....	76.7	− 1.1	102	41	6.41	+2.63	15.25	2.14	0	10	17	8	6
1910....	76.8	− 1.0	109	46	6.70	+2.92	12.69	0.20	0	9	16	9	6
1911....	78.0	+ 0.2	113	43	3.95	+0.17	11.82	0.64	0	8	16	9	6
1912....	78.8	+ 1.0	104	52	2.74	−1.04	6.22	0.18	0	7	18	9	4
1913....	80.2	+ 2.4	108	47	3.13	−0.65	7.68	0.03	0	7	18	9	4
1914....	80.5	+ 2.7	109	45	2.67	−1.11	7.61	0.34	0	7	17	9	5
1915....	74.6	− 3.2	102	42	6.05	+2.27	20.22	0.58	0	12	14	9	8
1916....	81.6	+ 3.8	109	52	1.25	−2.53	5.99	T.	0	3	25	5	1
1917....	77.5	− 0.3	107	42	2.96	−0.82	7.73	0.13	0	8	20	8	3
1918....	77.1	− 0.7	110	41	1.76	−2.02	4.94	0.21	0	6	19	8	4
1919....	80.0	+ 2.2	105	50	2.33	−1.45	8.52	0.32	0	5	23	6	2
1920....	76.3	− 1.5	105	47	3.25	−0.53	9.78	0.73	0	7	18	8	5
1921....	80.3	+ 2.5	109	46	2.32	−1.46	5.60	0.41	0	5	20	8	3
1922....	76.8	− 1.0	103	46	5.85	+2.07	17.68	1.92	0	8	17	9	5
1923....	78.2	+ 0.4	105	50	3.07	−0.71	10.29	0.24	0	6	18	8	5
1924....	73.3	− 4.5	103	40	5.39	+1.61	14.52	1.70	0	10	15	11	5
1925....	77.9	+ 0.1	106	46	2.71	−1.07	8.60	0.57	0	7	16	10	5
1926....	78.0	+ 0.2	108	40	3.14	−0.64	8.65	0.50	0	7	17	9	5
1927....	75.8	− 2.0	101	48	4.13	+0.35	10.95	0.88	0	8	18	9	4
1928....	77.2	− 0.6	102	48	2.97	−0.81	7.02	0.34	0	7	17	10	4
1929....	77.8	0.0	104	50	4.12	+0.34	11.35	0.55	0	8	16	10	5
1930....	81.2	+ 3.4	113	42	0.97	−2.81	3.42	T.	0	3	22	7	2
1931....	80.3	+ 2.5	110	49	3.23	−0.55	8.66	0.43	0	7	18	9	4
1932....	79.8	+ 2.0	109	48	3.67	−0.11	8.07	0.52	0	7	19	8	4
1933....	79.3	+ 1.5	108	49	2.49	−1.29	7.26	0.12	0	5	18	9	4
1934....	86.2	+ 8.4	117	48	1.11	−2.67	5.22	0.00	0	4	20	9	2
.....	....	.....	...	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	...	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	...	..	....	.....	....	....	..	..	..	..	..
Period.	77.8	.....	117	40	3.78	.....	20.22	0.00	0	7	17	9	5

Climatological Data for July 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	88.5	+12.4	113	20†	59	7	42	0.93	−3.42	0.57	0	6	24	3	4	sw.	O. K. Benecke
Clifton Hill	Randolph	731	35	88.4[1]	+12.0	113	25	56	7	..	0.39	−3.01	0.27	0	3	24	7	0	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	86.8	+ 9.9	111	25	59	7	37	0.67	−2.82	0.28	0	4	17	14	0	sw.	U. S. Weather Bureau
Downing	Schuyler	876	13	85.3	+ 8.9	111	19†	53	7	43	1.02	−3.47	0.55	0	6	24	7	0	s.	James Taylor
Elsberry	Lincoln	449	3	85.0	.....	111	20	55	31	45	0.27	.....	0.25	0	2	10	19	2	s.	Ray E. Mills
Fayette	Howard	661	54	87.3	+10.1	113	24†	58	7	42	0.80	−2.80	0.47	0	6	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	85.2	+ 7.8	111	24†	61	31	39	0.94	−2.91	0.91	0	3	20	8	3	sw.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	...	..	..	..	..	0.36	−3.55	0.13	0	5	23	8	0	se.	W. L. Harker
Hannibal	Marion	759	42	87.0	+10.2	112	20	59	7	37	0.09	−3.00	0.06	0	2	9	13	9	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	44	87.6[a]	+ 9.5	112	24†	60	7	34	1.79	−1.66	0.98	0	7	16	13	2	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	86.2	+10.2	111	19	54	7	46	0.62	−3.45	0.33	0	3	22	9	0	s.	Prof. J. S. Stokes
Linneus	Linn	816	2	....	.....	...	..	..	..	..	0.43	.....	0.22	0	2	16	12	3	e.	J. Robert Hall
Louisiana	Pike	469	40	87.1	+10.7	117	18	55	31	48	0.05	−3.19	0.05	0	1	15	16	0	s.	Stark Bro's Nurseries
Macon	Macon	875	35	87.7	+10.5	115	20	56	7	40	0.26	−3.11	0.11	0	3	24	7	0	w.	W. C. Brown
Mexico	Audrain	800	45	86.9	+ 9.6	116	19	59	7	40	1.23	−2.37	0.40	0	4	26	1	4	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	...	..	..	..	..	1.33	−2.40	0.97	0	4	20	6	5	n.	J. S. Conway
St. Charles	St. Charles	520	46	86.8	+ 8.7	114	20†	59	31	44	1.15	−1.97	0.80	0	4	20	10	1	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	87.2	+ 8.4	110	24	68	7	27	1.22	−1.76	0.94	0	4	16	12	3	sw.	**Section Center**
St. Louis University	St. Louis City	578	22	87.0	+ 6.9	110	24	67	7	27	0.96	−1.51	0.40	0	4	21	7	3	s.	St. Louis University
Shelbina	Shelby	779	41	....	.....	...	..	..	..	..	0.81	−3.07	0.30	0	4	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	87.0	+ 9.2	112	20†	56	7	44	0.48	−3.79	0.33	0	2	14	16	1	s.	Frank Hall
Unionville	Putnam	1,062	41	87.0	+10.5	112	20	48	7	42	1.08	−2.98	0.80	0	5	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	87.2	+ 9.4	112	24	64	31	32	1.28	−1.98	1.25	0	2	8	21	2	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	84.8	+ 7.9	110	20	61	30	35	0.95	−2.46	0.47	0	4	11	13	7	e.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**86.8**	**+ 9.6**	**117**	**18**	**48**	**7**	**48**	**0.82**	**−2.57**	**2.00**	**0**	**4**	**18**	**11**	**2**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	83.8	.....	109	25	61	29	39	1.40	.....	0.57	0	6	25	6	0	s.	Jeff. King
Caruthersville	Pemiscot	265	38	85.3	+ 4.0	106	24	69	7†	29	2.31	−1.08	1.04	0	8	17	10	4	s.	Sam Smith
Doniphan	Ripley	344	30	85.4	+ 6.8	110	24	62	29	40	2.41	−1.70	0.83	0	4	24	5	2	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	85.9	+ 8.3	112	24	59	29	44	1.46	−2.02	1.04	0	4	9	9	13	s.	John G. Putz
Marble Hill	Bollinger	470	39	85.6	+ 7.8	114	24	57	29	45	0.74	−3.66	0.52	0	4	17	14	0	w.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	...	..	..	..	..	1.45	−1.57	0.51	0	5	22	9	0	sw.	John A. Spence
Poplar Bluff	Butler	339	29	83.8	+ 4.6	106	23†	61	29	36	0.14	−3.34	0.06	0	3	25	5	1	w.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	85.2	+ 6.6	111	24	63	29	37	1.76	−2.61	0.97	0	7	13	17	1	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	62	83.5	+ 3.9	105	24	67	9	33	3.41	+0.34	1.34	0	8	10	12	9	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**84.8**	**+ 6.0**	**114**	**24**	**57**	**29**	**45**	**1.77**	**−1.66**	**1.15**	**0**	**5**	**18**	**10**	**3**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	83.0	+ 7.2	107	23†	58	29	42	0.63	−3.51	0.51	0	4	17	6	8	s.	Arcadia College
Birchtree (near)	Shannon	1,000	39	84.6	+ 8.0	109	24	63	29	40	1.48	−2.38	1.38	0	2	28	3	0	sw.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	...	..	..	..	..	1.83	. ....	0.86	0	3	26	4	1	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	...	..	..	..	..	0.30	.....	0.22	0	3	22	9	0	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	85.5[a]	.....	112	24	60	31	43	1.32	.....	0.47	0	6	9[a]	15[a]	6[a]	w.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	30	85.7	+ 8.4	114	24	55	29	50	0.21	−3.98	0.09	0	3	25	6	0	se.	H. E. Dean
Eldon	Miller	934	39	87.6	+10.4	113	24	60	7	41	1.46	−2.08	0.94	0	3	6	22	3	sw.	E. H. Shepherd
Farmington	St. Francois	918	23	87.9	+11.6	111	25	55	29	46	0.29	−3.15	0.21	0	2	21	10	0	s.	H. O. Miller
Goodland	Iron	1,000	41	81.7	+ 6.1	111	24	55	31	50	0.79	−3.09	0.20	0	6	22	8	1	s.	F. M. Adams
Greenville	Wayne	381	25	82.7	+ 5.3	109	23†	56	29	47	3.52	−0.25	2.29	0	3	17	14	0	se.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	...	..	..	..	..	1.01		0.64	0	2	26	5	0	nw.	A. W. Madison
Koshkonong	Oregon	958	33	87.4[b]	+ 8.6	111	24	67	29	34	0.29	−3.38	0.17	0	3	22	8	1	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	87.2	+10.3	112	24	59	7	41	0.61	−3.36	0.21	0	3	30	1	0	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	86.8	+ 9.2	110	24	58	7	38	1.02	−3.69	0.85	0	3	25	6	0	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	85.8	+ 9.4	109	24	62	29	39	0.38	−3.45	0.22	0	2	25	5	1	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	84.5	+ 7.0	107	24	58	8†	41	0.54	−3.77	0.25	0	3	22	9	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	85.6	+ 7.9	107	19†	62	7	38	0.50	−3.38	0.23	0	4	9	10	12	se.	F. H. Lane
Salem	Dent	1,173	30	85.2	+ 8.4	111	24	59	29†	44	0.23	−3.13	0.12	0	5	19	10	2	s.	E. E. Martin
Seligman	Barry	1,542	33	85.4[a]	+ 8.7	106	24	63	7	35	0.55	−3.76	0.35	0	3	22[a]	7[a]	1[a]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	83.6	+ 8.1	108	24	51	29	43	0.43	−3.81	0.40	0	2	23	8	0	s.	A. L. Hailey
Springfield	Greene	1,324	46	85.4	+ 8.6	106	24	61	7	33	0.89	−3.32	0.83	0	6	27	4	0	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	87.6	.....	114	24	58	7	40	0.54	.....	0.23	0	5	27	2	2	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**85.4**	**+ 8.4**	**114**	**24**	**51**	**29**	**50**	**1.04**	**−2.87**	**2.29**	**0**	**3**	**21**	**8**	**2**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	87.0	+ 8.8	108	19	58	7	37	1.93	−2.58	0.75	0	4	17	13	1	sw.	W. G. Bigelow
Clinton	Henry	765	41	87.4	+ 9.1	116	24	57	7	42	5.22	+1.39	2.44	0	6	24	6	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	86.6	+ 8.9	111	20†	53	7	42	2.14	−1.62	1.01	0	4	24	5	2	sw.	John H. Patterson
Lamar	Barton	980	46	86.4	+ 8.0	109	20†	59	7	38	0.64	−3.54	0.27	0	5	27	4	0	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	88.2	+ 9.1	113	24	63	30	42	1.33	−2.62	1.05	0	3	27	4	0	s.	J. E. Wheeler
Marshall	Saline	779	47	89.4	+11.9	111	20	58	7	35	1.19	−2.65	1.02	0	4	25	5	1	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	86.4	+ 6.8	108	24†	57	7	40	1.77	−2.17	1.21	0	3	24	5	2	s.	George A. Kaupp
Warrensburg	Johnson	878	47	88.2	+ 9.4	113	24	56	7	41	0.89	−2.96	0.40	0	5	29	1	1	sw.	E. A. Markey
Warsaw	Benton	687	33	88.8	+10.5	115	24	57	7	46	1.38	−2.71	0.80	0	4	24	5	2	s.	Everett Martin
Division means	**and extremes**	.....	..	**87.6**	**+ 9.2**	**116**	**24**	**53**	**7**	**46**	**1.58**	**−2.40**	**2.44**	**0**	**4**	**25**	**5**	**1**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	85.9	+ 9.6	110	13†	51	7	43	0.43	−3.80	0.32	0	2	27	3	1	e.	A. S. Cumming
Chillicothe	Livingston	779	25	87.4	+ 8.5	114	20†	51	7	44	0.95	−3.21	0.85	0	3	21	9	1	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	45	85.4	+ 8.8	108	20	52	7	37	0.85	−3.48	0.49	0	4	17	14	0	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	86.0	+ 9.9	110	24	50	7	45	0.58	−3.30	0.33	0	4	25	5	1	s.	Fred L. Stiff
Grant City	Worth	1,134	30	84.2	+ 8.0	110	19	48	7	38	0.48	−4.35	0.30	0	4	12	16	3	sw.	Howard Rybolt
Kansas City	Jackson	963	45	88.4	+10.3	110	24	56	7	40	2.26	−1.87	1.03	0	7	21	9	1	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	86.8	+10.2	112	13	51	7	41	1.71	−2.21	1.15	0	5	17	14	0	s.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	...	..	..	..	..	1.73	−2.12	0.91	0	4	9	22	0	sw.	John M. Martin
Lexington	Lafayette	688	49	88.4	+11.0	112	25	56	7	39	1.97	−2.71	1.60	0	4	24	7	0	sw	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	85.4	+ 9.7	112	19	50	7	40	0.76	−4.37	0.40	0	5	19	10	2	s.	R. B. Montgomery
Oregon	Holt	1,048	78	87.9	+12.3	112	15	51	7	38	0.55	−3.71	0.40	0	2	27	4	0	sw.	Mina Wright
St. Joseph	Buchanan	987	24	87.3	+ 8.4	108	20	54	7	33	1.05	−2.06	0.92	0	5	22	8	1	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	84.8	+ 8.0	111	20	50	7	37	1.95	−1.79	1.00	0	6	18	12	1	se.	Albert Volker
Trenton	Grundy	822	38	87.2	+10.4	113	20	51	7	41	0.85	−3.21	0.78	0	2	25	6	0	s.	W. H. Estes
Division means	**and extremes**	.....	..	**86.5**	**+ 9.6**	**114**	**20†**	**48**	**7**	**45**	**1.18**	**−3.03**	**1.60**	**0**	**4**	**20**	**10**	**1**	**sw.**	
State means	**and extremes**	.....	..	**86.2**	**+ 8.4**	**117**	**18**	**48**	**7**	**50**	**1.11**	**−2.67**	**2.44**	**0**	**4**	**20**	**9**	**2**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for July 1934

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri												.14					.28								T.	.20	.48	.06			T.	0.88
Bowling Green	Mississippi												.25																	.04		.10	0.67
Brunswick	Grand						.02						.08													.03	.57	.25			.08		0.93
Canton	Mississippi											.17	.04							.02							.07						0.30
Clifton Hill	Chariton										.05		.27															.07					0.39
Columbia***	Missouri					.03	T.				T		.26												T.	.10	T.	.28		T.		T.	0.67
Downing	Mississippi						.12			T.			.24	.55		.05										.02	.04	T					1.02
Edina	do						.07						.20		.39	T.											.02						0.68
Elsberry	do						T.											T.									.02	.25					0.27
Ewing	do							.15																									0.15
Farber	do																	.42										.03	.08		.29		0.82
Fayette	Missouri	.02											.11				.07										.10	.47	.03				0.80
Fulton	do						.02						.01															.91					0.94
Gorin	Mississippi						.06				.05		.05	.18												T.	.07						0.36
Hannibal	do						T.	T.				T.	.03														.06	T.			T.		0.09
Hermann	Missouri						.06						.01														.01	.05	2.00				2.13
Jefferson City	do	.24					.10						.12														.10	.22	.98			.03	1.79
Kahoka	Mississippi						.25				.09		.20					.38															0.92
Kirksville	do						.06							.33									T.			.23							0.62
Linneus	Grand	T.				T.				.22		T.														T.	.21						0.43
Louisiana	Mississippi												T.																			.05	0.05
Lucerne	Grand						.15			T.	.01						.23									.03	.04	.01					0.47
Macon	Chariton											.07	.08														.11						0.26
Madison	Mississippi											.56	.04													.04	.45						1.09
Memphis	do						T.	T.			T.		.10		.70	T.		T.								T.	T	T					0.80
Mexico	do												.21					.23								T	.39	.40	T.				1.23
Milan	Grand						.05				.07			.10													.04						0.26
Monroe City	Mississippi										T.		.10														.97	.14		.12			1.33
New London	do										T.																	.34			T.		0.34
Palmyra	do																																0.00
Paris	do										.08		.07					.11									.50						0.76
Perry	do																.88									T.	.30	.10			.10		1.38
Philadelphia	do												.32														T.	.41					0.73
St. Charles	Missouri	.27										.03							.05										.80				1.15
St. Louis***	Mississippi						T.					.26	T.	T.			T.	.01	T.								T	.42				.53	1.22
St. Louis University*	do						T.					.25					T.	T.	.01								T.	.40				.30	0.96
Shelbina	do											.12	T.														.30	.23		.16			0.81
Shelbyville	do																											.15					0.15
Steffenville	do										.33		.15													T			T.			0.48
Troy	do																	.02	.34										.44	.02			0.82
Union	Meramec	.83											T.			T.				.55							.23	.02	.50				2.13
Unionville	Chariton																.80	.10								.05	.03	.10					1.08
Valley Park	Meramec	T.						.04				T.	T.					.08	1.16								T.	T.	.56				1.84
Warrenton	Mississippi						T.						T.														.03	1.25					1.28
West Ely	do											T	.20														.97	.14			.10		1.41
Keokuk, Ia.***	do					T.				.18		T.	.47	T.	T.			.18								T.	T.	T.				.12	0.95
Southeast Lowlands																																	
Bragg City	St. Francis		T.					.83																			.30	T.					1.13
Campbell	do						.55	.02								.33										.04	.44				.02		1.40
Cape Girardeau	Mississippi	.22						.38									.96				.22						T.				T.		1.78
Caruthersville	do	.03	.43					.42				.12															.12	1.04	.07			.08	2.31
Dexter	St. Francis		.85					.85								.60	.18										.89						3.37
Doniphan	Black						.83								.58	.83											.17						2.41
Fisk	St. Francis							.33								T.	.21										.04						0.58
Jackson	Mississippi	.27					1.04						.12														.03						1.46
Marble Hill	do	.52					.12																			.08	.02						0.74
Morehouse	do	.26					.51	.22								.05										.41							1.45
New Madrid	do	.55	.03					1.15									.05										.47	.01				.06	2.32
Parma	St. Francis		1.03					.70									.15										.37						2.25
Poplar Bluff	Black							.05									.06											.03					0.14
Sikeston	Mississippi	.97	.08					.35							.14		.03										.18					.01	1.76
Cairo, Ill.***	do	1.34					.32					.83			.41	.01				T.						.20		T.			.02	.28	3.41
Ozark Plateau																																	
Arcadia	St. Francis																		.02	.05							.51		.05				0.63
Birchtree (near)	Black														.10											1.38							1.48
Buffalo	Osage	.44					.86																			.53							1.83
Caplinger Mills*	do												.05		.03												.22	T.					0.30
Crystal City	Mississippi						.04						T.					.36	.01								.47	**	.44				1.32
Dean	Neosho	.07					.09																					.05					0.21
Eldon	Missouri						.29																					.23	.94				1.46
Farmington	St. Francis															.08					.21					T.	T.						0.29
Fredericktown	do																			.06													1.09
Galena	White																									1.08							1.08
Goodland	Black					13																					.84	.08					0.92
Greenville	St. Francis						.66								.14				.14	.20							.06	.12					0.79
Hafley	White															2.29										.57							3.52
Koshkonong	Black														.64												T.	.37					1.01
Lakeside	Osage	.07			T		.24						.02			.07		.05								.17							0.29
Lebanon	do	.21					.19																				.03	.59	.35			T.	1.30
Leeper	Black	.01						.36								.36	1.47		T.								.21	T.	T.				0.61
Lockwood	Osage						.09																			1.02		.03					3.25
Mountain Grove	White															.22											.85	.08					1.02
Neosho	Neosho	.08					.21																			.16							0 38
Owensville	Gasconade						.35																					.25					0.54
Rolla	Meramec						.18																						.47				0.82
St. Thomas (near)	Osage	.30					.10																				.28	.02	.07				0.50
Salem	Meramec						T.												.05	.12						.02	.02	.02					0.23
Seligman	Neosho	T.					.01									.35												.19					0.55
Seymour (near)	White														.40													.03					0.43
Springfield***	do						.02						.75	.08												.01	.01	.02				T.	0.89
Stover	Missouri												.22														.31	.33	.02				0.88
Versailles	Osage						.04						.08													.01	.23	.18					0.54
Williamsville	Black	.09	.27					.53								.22	.41			.03							.78					T.	2.33
Willow Sprgs. (near)	White							T.								.02					.11						.07		.08				0.28
Southwest Plain																																	
Appleton City	Osage						.28						T.		.70												.20	.75					1.93
Clinton	do							.15					.06		.20											1.25	1.12	2.44					5.22
Concordia	Missouri						.10						T.													T.	T.	.56					0.66
Harrisonville	Osage						1.01								.11												.40	.62					2.14

Continued on next page

Daily Precipitation for July 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho						.27								.05	.66											.07	.50					1.55
Lamar ‖‖	Neosho	.03					.20								.10												T.	.27			.04		0.64
Lamonte	Missouri																									.25	.03	1.05					1.33
Marshall	do						.04						T.		T.											.03	.10	1.02					1.19
Nevada	Osage						.31						.25		1.21																T.		1.77
Warrensburg	Missouri						.13				T.				.20											.14	.02	.40					0.89
Warsaw ‖‖	Osage												.10													T.	.21	.80	.27				1.38
Waverly ‖	Missouri						.04								.06													.17					0.27
Northwest Plateau																																	
Bethany	Grand						.32																			.11							0.43
Chillicothe ‖‖	do						.01						.09													T.	.85						0.95
Conception	Missouri						.49			.03		T.			.10					T.						.23							0.85
Edgerton	do						.33		T.	T.		T			.13											.08	.04			T.			0.58
Gallatin ‖	Grand						.40																			.08	.40						0.88
Grant City	do					.01	.29								T.											.05	.13	T					0.48
Kansas City***	Missouri					.43	.26					T.		.50												.01	.31	.72		.03		T.	2.26
Kidder ‖‖	Grand						.27				T.				.12					T.						.15	1.15	.02					1.71
King City	Missouri						.91				T.				.68										.13		.01						1.73
Lexington ‖	do						.24								.11											.02		1.60					1.97
Maryville‖‖	do						.40			.13					.03											.12	.08						0.76
Oregon	do						.40			T.					.15											T.							0.55
St. Joseph***	do					.88	.04			.02		T.		.09			T.			T.						.02	T.	T.		T.			1.05
Tarkio	do					.54				.26	.05			1.00												.04	.06						1.95
Trenton	Grand						.07			T.		T.														.78				T.			0.85

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for July 1934
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.124	.341	.342	.303	.427	.370	.325	.276	.379	.463	.414	.277	.377	.567	.354	.414	.393	.382	.446	.489	.443	.408	.419	.354	.364	.303	.208	.096	.304	.346	.339	11.047
	Mean temperature	81	82	83	83	87	80	76	81	86	84	86	85	87	93	88	90	92	90	92	93	88	86	86	90	88	86	74	78	80	76	81	84.8
	Wind movement	41	45	36	39	63	70	77	46	62	63	64	56	70	84	69	53	37	42	46	62	57	50	38	49	36	44	57	41	47	47	39	1,630

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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month was 0.4 foot below zero, which is 2.4 feet lower than the previous low stage for July (years 1861-1934).

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 86.2°, or 8.4° above normal. The highest monthly mean was 89.4° at Marshall, and the lowest monthly mean was 81.7° at Goodland. The highest temperature recorded was 117° at Louisiana on the 18th, and the lowest was 48° at Grant City and Unionville on the 7th. The greatest daily range was 50° at Dean on the 29th and at Goodland on the 24th.

PRECIPITATION

The average precipitation for the State, 119 stations reporting, was 1.11 inches, or 2.67 inches less than normal. The greatest local monthly amount was 5.22 inches at Clinton, and the least local monthly amount was 0.00 at Palmyra. The greatest amount in any twenty-four hours was 2.44 inches at Clinton on the 27th. The average number of days with 0.01 inch or more of precipitation was 4.

MISCELLANEOUS PHENOMENA

Dust storms.—13th, 14th, 25th.

Halos.—Solar, 5th, 9th, 13th, 14th, 22d, 25th; lunar, none.

Hail.—Light, 13th, at Tarkio and south part of Nodaway County, 20th, at Farmington, 26th, at Lockwood, and at Kidder (date not given); moderate, 25th at Lupus and Wooldridge; heavy, 14th at Springfield. (See special hailstorm notes).

Thunderstorms.—Local, 9th, 10th, 11th, 12th, 15th, 16th, 17th, 18th, 19th, 20th, 24th, 29th, 31st; more or less general, 5th, 6th, 13th, 14th, 25th, 26th, 27th.

Windstorms.—5th, 11th, 13th, 25th, 31st. (See special windstorm notes).

WINDSTORMS

July 5, at Maryville, Nodaway County, a small tornado occurred, with slight damage to trees and outbuildings. The night of July 5th high winds damaged window glass, roofs, and power lines in central and southern Nodaway County.

July 11, at St. Louis, trees and wires were damaged by wind in the northwestern part of the city.

July 13, high winds struck parts of Harrison County and caused widespread damage to farm buildings from near Martinsville to beyond Ridgeway. Loss estimated at not less than $25,000.

July 25, in the vicinity of Lupus, Cooper County, and Wooldridge, Moniteau County, windstorms caused damage amounting to about $15,000, to farm buildings, livestock, and wire lines.

July 31, near Jefferson City, Cole County, a severe storm (probably not a tornado) caused property damaged estimated at about $5,000. Three persons were reported injured.

HAILSTORMS

July 14, heavy hail occurred at Springfield and vicinity southward. Windows were broken and roofs, gardens, greenhouses, and trees damaged. Tomatoes valued at about $4,000 were reported destroyed, and greenhouse damage was estimated at about $1,500.

Daily Temperatures for July 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	100	104	102	106	105	99	90	101	100	103	101	106	109	108	111	105	104	110	110	113	110	109	109	113	112	96	89	94	103	92	97	103.6
	Minimum	68	66	72	75	79	70	59	67	78	77	77	79	80	83	80	80	74	77	82	79	80	77	75	75	70	73	69	64	64	60	66	73.4
Columbia	Maximum	92	100	101	102	100	87	86	96	95	99	100	103	105	103	105	102	100	109	108	110	108	106	108	110	111	94	84	91	99	86	97	99.9
	Minimum	69	66	72	75	80	67	59	72	74	75	77	71	78	76	80	80	73	79	84	81	81	79	76	77	74	75	69	64	64	66	68	73.6
Fayette§§	Maximum	94	103	103	102	104	90	90	101	98	101	101	105	108	107	109	104	104	110	110	112	109	107	109	113	113	95	86	94	102	92	98	102.4
	Minimum	68	61	70	72	78	72	58	64	76	73	74	74	83	81	80	75	73	77	81	76	79	75	71	74	79	73	69	63	61	65	63	72.2
Hannibal	Maximum	95	102	100	102	102	96	89	93	93	100	99	102	108	104	107	103	98	106	111	112	108	107	109	107	106	100	91	93	101	89	94	100.9
	Minimum	69	67	73	74	80	74	59	65	73	73	77	73	75	73	79	76	71	74	74	79	83	80	79	83	84	75	69	66	65	62	62	73.1
Jefferson City §§	Maximum	96	101	101	101	103	92	93	98	97	101	99	105	108	107	108	107	104	110	111	111	108	107	110	112	112	91	89	95	98	91	..	[a]102.2
	Minimum	69	67	72	73	75	68	60	64	70	73	75	72	76	79	74	76	74	78	81	79	80	78	76	78	83	75	74	65	64	66	65	72.9
Kirksville	Maximum	96	103	99	103	106	99	88	99	98	102	101	103	106	105	108	98	94	108	111	110	109	106	108	110	108	103	90	94	104	93	93	101.8
	Minimum	65	69	72	73	79	70	54	63	74	72	75	73	74	72	73	73	72	74	75	77	78	60	78	78	77	73	68	65	63	60	62	70.7
Louisiana	Maximum	98	104	100	101	103	97	89	98	94	100	100	102	106	106	112	101	96	117	115	112	111	111	112	112	106	100	86	95	100	92	92	102.2
	Minimum	73	56	76	67	77	78	62	63	70	70	79	77	73	77	80	72	72	76	85	83	82	83	72	72	77	75	71	57	57	65	55	72.0
Macon§§	Maximum	90	107	107	107	109	90	90	96	97	103	103	102	110	107	111	99	102	112	113	115	112	110	110	114	113	97	89	97	98	91	96	103.1
	Minimum	67	67	71	75	79	74	56	65	75	75	77	72	77	74	74	74	71	74	81	79	84	81	79	76	76	72	69	65	65	58	60	72.3
Mexico §§	Maximum	95	100	102	103	103	91	89	97	97	100	105	103	108	103	108	101	99	112	116	115	112	112	114	114	113	94	85	96	101	88	96	102.3
	Minimum	67	63	72	73	77	70	59	66	71	73	76	70	72	73	73	77	70	76	81	77	79	79	74	74	82	75	69	62	61	61	65	71.5
St. Louis	Maximum	95	100	100	99	99	88	88	90	92	94	99	102	104	98	102	97	94	103	102	109	105	103	109	110	108	94	85	90	97	88	94	98.0
	Minimum	75	78	78	79	78	76	68	68	70	72	72	77	82	71	79	78	71	78	80	85	82	83	84	87	85	80	71	71	75	72	68	76.5
Unionville	Maximum	98	102	92	104	105	98	90	100	97	103	100	102	110	108	110	105	100	108	111	112	110	110	111	110	111	100	90	94	102	95	96	102.7
	Minimum	62	70	70	72	76	67	48	60	70	76	75	70	76	70	73	75	74	73	80	76	80	80	80	84	76	75	67	64	62	64	61	71.2
Warrenton	Maximum	94	101	98	98	102	96	88	96	93	96	102	105	108	102	104	101	96	106	108	111	109	104	111	112	108	97	90	92	97	93	95	100.4
	Minimum	70	69	76	75	78	75	65	68	70	73	77	75	77	73	77	77	72	77	81	80	80	80	80	82	82	75	69	67	67	65	64	74.1
Southeast Lowlands																																	
Campbell	Maximum	96	91	95	96	99	95	90	88	90	95	99	99	104	98	89	100	100	105	101	104	107	100	107	107	109	98	95	91	92	102	98	98.1
	Minimum	68	65	68	69	78	69	68	68	65	64	70	74	71	76	68	68	71	73	75	72	74	66	68	69	73	71	72	69	61	69	72	69.5
Caruthersville	Maximum	93	93	93	95	96	93	89	88	92	94	97	95	103	97	93	99	101	104	99	99	102	100	105	106	103	98	98	90	95	96	94	96.8
	Minimum	70	71	74	74	75	72	69	70	69	72	74	74	75	78	79	72	75	77	75	75	77	73	76	77	80	71	72	72	72	73	74	73.8
Doniphan	Maximum	98	99	101	100	101	100	91	93	94	100	103	101	107	98	89	100	101	104	104	104	104	103	108	110	107	105	95	95	99	105	104	100.7
	Minimum	70	66	64	64	70	71	69	68	66	65	68	70	70	68	68	68	72	78	78	76	76	69	72	70	73	73	73	69	62	69	72	70.0
Jackson	Maximum	90	98	100	99	99	97	90	92	93	98	100	101	105	99	98	103	104	104	99	106	105	106	111	112	110	103	94	96	101	102	99	100.5
	Minimum	72	68	69	69	73	70	70	69	63	65	74	75	75	72	72	70	76	77	75	75	76	71	69	68	74	73	76	70	59	73	71	71.3
Poplar Bluff	Maximum	92	96	97	96	97	93	85	89	88	89	92	100	103	94	91	98	100	101	99	102	103	99	106	106	106	101	94	95	97	102	96	97.0
	Minimum	71	66	67	68	71	71	69	68	65	65	71	71	74	79	70	68	72	76	77	75	73	68	70	70	75	73	75	69	61	72	73	70.7
Sikeston	Maximum	90	96	97	98	99	97	90	94	93	96	99	101	104	94	91	101	102	105	98	103	103	103	108	111	108	98	97	94	97	99	96	98.8
	Minimum	70	68	70	70	74	70	70	69	65	67	72	74	74	75	71	70	74	77	74	74	75	71	72	74	79	73	74	70	63	70	73	71.7
Cairo, Ill	Maximum	84	94	95	95	94	91	86	87	88	94	96	95	98	88	90	96	96	98	88	98	97	98	103	105	104	94	93	89	91	96	89	93.9
	Minimum	69	70	73	76	77	70	71	69	67	72	68	68	76	71	76	72	78	78	74	75	77	75	79	77	71	75	75	73	69	72	72	73.1
Ozark Plateau																																	
Arcadia §§	Maximum	91	95	96	96	96	90	87	89	90	93	97	100	102	92	97	101	100	101	99	104	101	99	107	107	104	95	82	89	96	95	97	96.4
	Minimum	71	65	66	65	70	76	66	61	59	62	72	74	74	78	75	73	72	73	74	79	72	71	68	65	72	72	75	68	58	72	60	69.6
Birchtree	Maximum	94	98	98	98	98	94	91	93	94	98	101	102	106	96	94	102	106	105	106	105	105	104	107	109	106	96	89	90	97	101	101	99.5
	Minimum	67	68	65	70	73	76	66	67	66	66	70	75	73	73	65	70	76	73	75	76	71	67	72	69	67	70	69	68	63	67	68	69.7
Crystal City §§	Maximum	95	100	..	102	103	89	91	94	93	98	103	105	109	103	105	105	98	100	108	110	109	104	109	112	110	97	82	90	98	91	97	[a]100.3
	Minimum	71	69	65	..	68	74	68	64	64	64	74	78	72	74	78	71	73	78	73	79	74	71	66	70	73	74	73	67	68	69	60	[a]70.7
Eldon §§	Maximum	98	102	102	104	104	91	90	100	97	101	100	104	108	107	108	109	107	110	110	112	111	107	108	113	112	93	84	93	99	91	105	102.6
	Minimum	70	65	68	70	76	68	60	62	71	73	76	79	77	79	78	75	75	76	78	81	77	75	75	75	76	77	71	66	65	68	64	72.5
Farmington	Maximum	98	101	101	103	98	99	103	101	102	104	105	106	108	106	103	101	104	106	107	110	109	106	109	110	111	99	97	94	101	100	98	103.2
	Minimum	66	70	73	74	70	69	73	71	74	75	74	75	76	76	73	73	75	80	82	82	81	82	82	82	73	65	64	60	55	67	59	72.6
Koshkonong	Maximum	98	98	100	100	102	96	93	96	97	99	102	100	107	101	94	105	107	108	109	108	105	104	109	111	105	95	90	91	99	102	103	101.1
	Minimum	76	76	71	75	74	76	69	69	..	..	73	74	76	78	70	71	75	76	76	76	76	77	76	78	74	71	74	70	67	71	69	[b]73.7
Lebanon §§	Maximum	98	103	103	104	103	90	94	101	99	102	103	100	106	107	105	109	109	109	110	111	108	107	109	112	110	98	89	95	101	96	106	103.1
	Minimum	65	64	69	71	75	66	59	66	72	70	77	76	76	77	75	72	74	75	81	80	75	73	75	75	75	70	70	61	63	66	65	71.2
Mountain Grove	Maximum	99	98	97	98	98	92	97	95	94	97	101	101	104	102	95	106	108	106	108	107	104	101	106	109	106	100	93	97	101	102	102	100.8
	Minimum	65	64	67	69	72	69	63	69	68	67	72	76	72	76	67	70	72	75	75	75	78	72	83	83	79	71	70	65	62	68	65	70.9
Neosho	Maximum	96	98	100	101	100	97	89	98	99	97	97	97	101	102	102	104	104	104	104	105	104	100	103	107	106	102	95	92	98	100	103	100.2
	Minimum	70	65	66	70	75	65	60	58	69	70	73	75	74	73	70	72	67	71	73	76	77	69	66	68	75	75	68	62	58	62	62	68.8
Rolla	Maximum	90	95	97	98	99	95	85	91	90	95	98	100	104	101	98	102	100	105	107	105	103	103	105	107	104	91	90	88	97	95	102	98.1
	Minimum	69	67	71	73	77	68	62	68	70	72	75	78	76	80	74	75	76	77	80	79	79	76	76	77	77	73	72	68	65	70	64	73.0
Springfield	Maximum	90	95	95	97	96	86	86	95	90	96	96	97	101	101	92	100	102	103	103	102	99	99	101	106	101	96	89	88	97	94	102	96.6
	Minimum	70	72	72	74	76	70	61	71	73	72	75	79	78	70	73	75	79	80	79	80	79	76	79	82	77	74	73	69	72	74	69	74.3
Southwest Plain																																	
Appleton City	Maximum	97	101	101	104	101	92	89	99	98	100	98	101	102	101	104	103	106	105	108	107	103	102	104	107	105	95	90	99	102	104	106	101.1
	Minimum	71	67	72	74	77	65	58	65	76	74	76	78	80	67	75	75	75	76	77	76	77	76	75	78	80	80	70	68	68	67	69	73.0
Clinton	Maximum	97	100	102	105	103	95	87	103	100	105	99	104	110	101	110	113	114	113	114	115	109	109	109	116	112	90	90	94	100	89	107	103.7
	Minimum	70	66	69	70	75	66	57	63	75	74	74	74	80	70	74	74	74	74	76	77	76	73	73	74	76	70	68	68	66	65	65	71.2
Harrisonville §§	Maximum	99	104	104	107	105	86	86	98	100	101	99	105	109	102	106	108	108	109	110	111	106	106	106	111	111	96	94	95	104	93	105	102.7
	Minimum	67	69	69	73	74	64	53	64	69	72	75	78	77	69	75	75	74	74	74	72	75	72	73	74	80	69	68	66	64	62	63	70.4
Lamar §§	Maximum	97	101	101	101	101	87	87	98	97	100	98	99	104	103	105	106	107	108	107	109	103	102	105	109	105	99	89	93	101	96	107	100.8
	Minimum	70	67	69	74	79	67	59	62	74	75	75	78	80	70	73	75	73	75	75	77	77	74	73	74	75	77	71	65	65	66	69	72.0
Lamonte	Maximum	100	103	103	106	104	91	100	101	100	103	99	106	109	106	108	109	107	110	110	111	108	108	109	113	112	101	90	97	102	93	107	104.1
	Minimum	66	64	70	74	78	64	64	64	76	74	75	77	76	76	78	76	76	72	81	78	79	78	77	74	76	73	70	65	65	63	65	72.4
Marshall	Maximum	97	103	102	104	104	100	87	99	100	101	100	105	108	107	107	104	103	108	109	111	107	105	108	110	108	99	87	93	101	95	101	102.4
	Minimum	78	79	74	78	79	80	58	67	82	77	79	81	83	81	81	82	81	80	81	82	82	80	81	81	82	73	69	66	68	62	66	76.5
Nevada	Maximum	98	100	101	104	102	94	87	98	97	99	99	99	105	101	102	104	105	106	106	106	105	102	104	108	107	96	89	95	101	94	108	100.7
	Minimum	75	63	70	75	79	67	57	62	75	76	76	71	75	67	75	77	76	76	79	78	78	75	77	73	75	75	70	65	64	65	68	72.1
Warrensburg	Maximum	100	105	105	106	105	98	90	102	100	103	99	105	109	104	108	108	111	109	109	112	108	107	108	113	110	93	91	97	103	95	107	103.9
	Minimum	63	66	72	75	78	66	56	62	75	74	76	80	78	69	76	76	72	78	78	79	80	79	79	78	75	75	69	67	70	65	66	72.6
Warsaw	Maximum	103	103	103	105	104	93	95	102	99	105	105	103	110	107	110	111	112	112	113	113	109	109	110	115	112	100	89	96	103	96	111	105.1
	Minimum	68	65	69	75	78	71	57	66	76	74	76	74	79	79	75	77	74	73	81	80	78	79	73	73	75	71	71	66	65	67	65	72.6
Northwest Plateau																																	
Chillicothe §§	Maximum	99	105	104	107	107	84	91	104	101	105	102	104	112	109	112	107	104	111	112	114	110	109	110	113	114	98	89	95	104	92	100	104.1
	Minimum	62	62	68	74	78	68	51	61	71	74	79	75	78	77	76	76	72	75	79	75	78	77	72	71	78	71	69	62	60	59	63	70.7
Grant City	Maximum	90	97	93	101	103	79	80	92	91	99	92	98	105	101	109	102	98	103	110	107	106	102	99	106	107	99	92	93	101	86	96	98.0
	Minimum	63	65	70	73	75	66	48	62	69	74	77	74	77	75	79	76	71	76	76	73	75	77	72	73	75	74	69	62	63	54	65	70.3
Kansas City	Maximum	96	105	103	106	104	78	83	98	99	101	98	105	108	103	109	107	108	107	109	109	106	104	106	110	108	97	91	94	103	90	100	101.5
	Minimum	69	68	79	80	71	64	56	63	79	78	84	81	68	76	81	82	76	82	84	83	85	83	82	75	81	75	70	68	70	65	73	75.2
Kidder	Maximum	98	103	102	105	106	97	85	98	100	102	98	105	112	104	111	106	105	108	110	110	107	105	106	109	109	95	92	93	104	93	100	102.5
	Minimum	62	68	66	71	79	67	51	61	74	75	79	76	80	72	77	76	71	74	82	76	77	76	75	78	69	74	69	63	63	57	68	71.2
Lexington §§	Maximum	99	104	103	104	103	85	88	100	100	102	99	106	108	104	109	106	107	109	110	111	108	104	108	110	112	96	92	95	103	93	99	102.5
	Minimum	68	69	75	77	80	68	56	61	76	77	79	79	84	72	76	81	74	78	84	82	82	80	78	77	81	77	70	67	68	63	66	74.4
Maryville	Maximum	91	100	94	104	104	80	81	94	94	102	96	100	109	104	107	103	102	109	112	111	108	105	105	110	108	100	92	95	102	92	101	100.5
	Minimum	64	68	69	73	76	66	50	60	68	77	78	73	78	75	75	75	71	74	76	71	73	73	72	74	73	73	66	67	63	60	65	70.2
Oregon	Maximum	99	105	103	107	105	82	87	98	98	107	97	107	110	106	112	108	107	108	110	110	109	106	105	108	111	100	96	98	104	97	100	103.2
	Minimum	64	68	69	79	82	67	51	63	71	77	80	74	74	69	75	77	72	77	82	76	79	79	79	79	80	77	69	64	69	59	70	72.6
St. Joseph	Maximum	97	101	101	106	103	76	83	96	97	100	96	102	107	102	108	106	102	106	108	108	106	103	103	108	107	96	94	94	101	93	100	100.3
	Minimum	66	68	72	80	70	61	54	63	74	77	80	77	75	78	81	80	74	81	86	83	82	82	81	75	82	77	71	67	72	64	70	74.3
Trenton	Maximum	96	102	103	108	104	90	90	100	99	104	99	107	111	107	111	102	103	108	110	113	109	107	109	111	112	104	92	94	102	90	96	102.7
	Minimum	66	63	71	71	78	68	51	66	76	74	82	75	77	74	75	77	73	76	81	77	78	76	74	73	75	73	71	64	61	60	65	71.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 8-22-34—945.

551.05
NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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GENERAL SUMMARY

The extreme heat and drought of July continued into August, and the spell was not finally broken until about the 16th, although beginning to weaken about the 11th. Long-standing records of August high temperatures were broken during the first ten days of this month. But the second half of the month was in marked contrast, being decidedly cooler than normal and with minimum readings on the 29th at some stations slightly lower than ever before recorded in August.

About the 11-12th fairly good rains fell over most of the State for the first time in about seven weeks. Rains came again on the 15-17th, and from then on to the end of the month showers were rather frequent. The average rainfall for the last 20 days of the month was much more than normal for the State as a whole, but a few localities—principally in the western counties of Jackson, Cass, Bates, St. Clair, Henry, Cedar, Dallas, and Vernon, and the northern counties of Atchison, Nodaway, Clark, and Putnam,—were still without rainfall of much consequence at the end of the month.

The rains were too late to be of much benefit to corn. They helped forage crops, gardens, and pastures, and enabled farmers to sow wheat, rye, and barley, for pasturage, and they brought great relief in furnishing water for domestic use.

So far as records show, the heat and drought of 1934 were the most severe in the climatic history of Missouri. (See special article on the subject, page 40.)

Only a few severe local storms occurred.

Record-breaking low-water stages continued in the principal rivers. The lowest stage at St. Louis, 3.0 feet below zero, is 2.6 feet lower than ever before registered in August.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 80.6°, or 4.4° above normal. The highest monthly mean was 84.8° at Warsaw, and the lowest monthly mean was 77.6° at Arcadia. The highest temperature recorded was 115° at Downing on the 9th, and the lowest was 41° at Grant City on the 25th. The greatest daily range was 48° at Lamonte on the 31st.

PRECIPITATION

The average precipitation for the State, 119 stations reporting, was 3.90 inches, or 0.04 inch less than normal. The greatest local monthly amount was 10.47 inches at Greenville, and the least local monthly amount was 0.07 inch at Appleton City. The greatest amount in any twenty-four hours was 5.45 inches at Parma on the 13th. The average number of days with 0.01 inch or more of precipitation was 9.

MISCELLANEOUS PHENOMENA

Duststorms.—10th, 12th.

Earthquake.—19th.

Halos.—Solar, 15th; lunar, 19th.

Hail.—Light, 11th in northern Boone County, 15th at St. Joseph, 16th at Clifton Hill, 27th at Kansas City, 31st at St. Joseph; heavy, 4th in Nodaway County. (See special hailstorm notes.)

Thunderstorms.—Local, 1st, 2d, 4th, 9th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 27th, 30th, 31st; more or less general, 10th, 11th, 15th, 16th.

Windstorms.—2d, 10th, 11th, 12th, 15th, 16th, 18th. (See special windstorm notes.)

(Continued on page 40)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.96	30.22	25	29.60	1	7.4	27	nw.	11	70	45	42	62
Kansas City...	29.93	30.23	25	29.51	1	9.2	35	sw.	27	66	37	37	70
St. Joseph.....	29.94	30.27	24	29.54	1	7.7	38	nw.	10	64	40	40	70
St. Louis....	29.98	30.23	25	29.69	1	10.3	32	sw.	9	73	57	59	53
Springfield....	29.97	30.20	25	29.68	1	9.2	29	se.	4	68	49	50	63
Cairo, Ill.....	29.99	30.20	26	29.78	1	7.1	24	sw.	13	82	62	67	63
Keokuk, Iowa.	29.99	30.26	29	29.64	1	6.9	32	sw.	31	70	47	50	62

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	74.0	− 2.2	110	45	7.25	+3.31	11.53	2.07	0	11	..	..	..
1889....	73.5	− 2.7	101	52	1.96	−1.98	5.25	0.10	0	14	..	..	..
1890....	73.3	− 2.9	106	47	4.84	+0.90	15.39	1.10	0	9	..	..	..
1891....	73.2	− 3.0	102	38	5.34	+1.40	13.10	2.37	0	8	..	..	..
1892....	74.3	− 1.9	102	44	2.42	−1.52	7.00	0.29	0	6	17	8	6
1893....	72.8	− 3.4	100	40	2.20	−1.74	6.63	0.20	0	4	18	10	3
1894....	77.0	+ 0.8	111	39	1.58	−2.36	5.64	0.04	0	5	14	16	1
1895....	75.3	− 0.9	104	46	4.23	+0.29	9.92	1.17	0	8	15	11	5
1896....	76.6	+ 0.4	108	41	3.25	−0.69	8.45	0.38	0	6	17	10	4
1897....	74.1	− 2.1	108	41	2.39	−1.55	7.87	0.56	0	6	19	9	3
1898....	75.8	− 0.4	103	44	3.03	−0.91	7.20	0.40	0	5	17	10	4
1899....	78.8	+ 2.6	107	49	3.25	−0.69	7.33	0.20	0	7	18	10	3
1900....	80.3	+ 4.1	105	52	3.51	−0.43	8.37	0.34	0	6	19	9	3
1901....	78.4	+ 2.2	109	47	1.88	−2.06	6.98	0.12	0	5	19	9	3
1902....	75.0	− 1.2	103	47	6.16	+2.22	11.49	0.96	0	10	14	11	6
1903....	74.5	− 1.7	102	43	5.40	+1.46	11.63	1.17	0	10	16	11	4
1904....	73.7	− 2.5	100	43	5.46	+1.52	9.51	1.98	0	8	16	10	5
1905....	76.4	+ 0.2	99	48	4.69	+0.75	9.32	1.35	0	8	19	7	5
1906....	76.6	+ 0.4	101	40	4.72	+0.78	12.43	1.28	0	11	14	10	7
1907....	77.3	+ 1.1	109	47	3.71	−0.23	7.07	1.56	0	9	17	8	6
1908....	76.4	+ 0.2	102	46	3.87	−0.07	7.28	0.78	0	8	17	9	5
1909....	79.5	+ 3.3	110	40	0.55	−3.39	4.30	0.00	0	2	24	6	1
1910....	74.7	− 1.5	103	40	2.77	−1.17	10.07	0.91	0	6	15	9	7
1911....	75.4	− 0.8	109	41	4.20	+0.26	12.04	1.39	0	7	15	8	8
1912....	76.2	0.0	104	41	4.19	+0.25	8.70	1.40	0	9	17	8	6
1913....	82.8	+ 6.6	110	41	1.06	−2.88	3.51	0.00	0	3	22	7	2
1914....	78.0	+ 1.8	106	49	4.25	+0.31	8.31	1.16	0	9	15	9	7
1915....	69.8	− 6.4	98	37	7.86	+3.92	15.14	1.78	0	12	12	9	10
1916....	79.2	+ 3.0	107	41	4.05	+0.11	14.86	0.30	0	7	19	7	5
1917....	73.3	− 2.9	104	38	4.45	+0.51	11.46	0.98	0	9	16	8	7
1918....	81.8	+ 5.6	111	45	3.34	−0.60	7.83	0.68	0	8	17	9	5
1919....	75.7	− 0.5	106	44	4.29	+0.35	11.27	0.53	0	8	17	9	5
1920....	73.1	− 3.1	102	43	4.78	+0.84	10.47	0.96	0	9	15	8	8
1921....	76.8	+ 0.6	109	48	5.27	+1.33	10.04	1.79	0	9	14	10	7
1922....	77.5	+ 1.3	107	46	2.40	−1.54	6.22	0.13	0	6	18	8	5
1923....	77.3	+ 1.1	108	42	3.99	+0.05	9.80	0.24	0	8	16	9	6
1924....	77.2	+ 1.0	106	48	4.14	+0.20	9.51	0.99	0	7	19	8	4
1925....	76.5	+ 0.3	107	45	3.45	−0.49	11.24	0.68	0	6	19	8	4
1926....	77.5	+ 1.3	106	50	5.63	+1.69	13.55	1.83	0	10	15	9	7
1927....	71.1	− 5.1	97	39	5.06	+1.12	13.87	1.94	0	9	14	10	7
1928....	76.4	+ 0.2	99	45	5.35	+1.41	11.24	0.96	0	9	15	10	6
1929....	76.0	− 0.2	105	43	2.50	−1.44	8.57	0.32	0	6	18	9	4
1930....	78.5	+ 2.3	114	47	2.02	−1.92	4.81	0.04	0	6	16	10	5
1931....	74.9	− 1.3	106	44	4.77	+0.83	11.00	0.54	0	9	15	9	7
1932....	77.2	+ 1.0	106	46	5.98	+2.04	13.96	0.61	0	9	18	9	4
1933....	75.4	− 0.8	103	48	3.91	−0.03	10.62	0.36	0	9	13	10	8
1934....	80.6	+ 4.4	115	41	3.90	−0.04	10.47	0.07	0	9	14	11	6
.....	....	.....	...	....	....	.....	....	....	..	..	..	..	..
.....	....	.....	...	....	....	.....	....	....	..	..	..	..	..
.....	....	.....	...	....	....	.....	....	....	..	..	..	..	..
Period.	76.2	.....	115	37	3.94	.....	15.39	0.00	0	8	17	9	5

Climatological Data for August 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	82.3	+ 8.1	113	9	52	24†	37	1.84	−2.00	0.89	0	8	20	5	6	se.	O. K. Benecke
Clifton Hill	Randolph	731	35	80.8[b]	+ 4.8	111	8†	52	24†	40	5.41	+1.40	4.30	0	6	18	10	3	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	80.1	+ 4.5	110	10	53	29	34	4.94	+1.34	3.20	0	7	9	17	5	sw.	U. S. Weather Bureau
Downing	Schuyler	876	13	79.2	+ 4.3	115	9	46	29	38	2.30	−1.42	0.81	0	9	15	11	5	sw.	James Taylor
Elsberry	Lincoln	449	3	78.4	.....	110	9	44	30	41	3.72	.....	2.40	0	9	4	17	10	se.	Ray E. Mills
Fayette	Howard	661	54	80.3	+ 4.4	112	9†	51	30	45	3.66	+0.40	1.67	0	9	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	78.6	+ 2.2	109	9†	46	30	39	5.08	+1.61	4.05	0	6	15	6	10	se.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	...	..	..	..	..	2.01	−1.11	0.51	0	6	18	13	0	se.	W. L. Harker
Hannibal	Marion	759	42	79.0	+ 4.0	110	9	49	29	42	2.89	−0.45	0.93	0	10	11	5	15	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	44	79.4[c]	+ 2.7	111	9†	51	30	41	6.25	+3.00	1.60	0	11	13	15	3	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	78.6	+ 4.6	111	9	47	24†	44	4.76	+1.25	2.65	0	6	13	12	6	e.	Prof. J S. Stokes
Linneus	Linn	816	2	...	.....	...	..	..	..	..	4.22	.....	2.87	0	9	18	10	3	e.	J. Robert Hall
Louisiana	Pike	469	40	78.8	+ 3.9	112	8†	42	30	39	3.66	−0.16	1.12	0	11	10	16	5	e.	Stark Bro's Nurseries
Macon	Macon	875	35	79.7	+ 3.6	114	9†	48	29†	43	3.40	−0.14	2.20	0	9	18	10	3	nw.	W. C. Brown
Mexico	Audrain	800	45	79.2	+ 3.2	114	10	47	29	43	6.76	+3.52	5.42	0	8	25	2	4	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	...	..	..	..	..	3.52	−1.05	1.44	0	9	10	10	11	n.	J. S. Conway
St. Charles	St. Charles	520	46	79.8	+ 3.0	112	9	48	30	38	4.95	+1.47	3.64	0	11	14	15	2	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	80.0	+ 2.5	108	9	52	29	29	3.14	+0.15	1.96	0	10	10	12	9	s.	**Section Center**
St. Louis University	St. Louis City	578	22	79.6	+ 2.4	109	9	52	29	30	3.18	−1.07	2.07	0	11	13	9	9	se.	St. Louis University
Shelbina	Shelby	779	41	....	.....	...	..	..	..	..	4.14	+1.12	2.35	0	7	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	36	79.0	+ 2.5	113	8	46	29	41	3.23	−0.48	1.30	0	10	14	12	5	n.	Frank Hall
Unionville	Putnam	1,062	41	80.4	+ 5.6	114	8†	45	24	42	2.63	−1.44	1.15	0	8	..	..	..	.....	Geo. W. Davis
Warrenton	Warren	816	52	80.2	+ 3.7	110	9	48	29	33	5.23	+0.83	4.18	0	9	6	22	3	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	77.8	+ 2.8	110	9	50	29	32	2.66	−0.54	1.05	0	7	9	10	12	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**79.6**	**+ 3.8**	**115**	**9**	**42**	**30**	**45**	**3.78**	**+0.37**	**5.42**	**0**	**9**	**14**	**11**	**6**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	80.5	.....	110	7	55	29†	38	8.57	.....	4.27	0	9	17	8	6	s.	Jeff. King
Caruthersville	Pemiscot	265	38	82.2	+ 1.9	108	7	59	30	31	9.35	+5.97	2.85	0	11	10	10	11	s.	Sam Smith
Doniphan	Ripley	344	30	82.0	+ 4.4	114	8	50	30	42	8.48	+4.20	3.30	0	12	15	8	8	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	80.6	+ 4.5	111	7†	51	30	38	4.37	+0.76	0.86	0	12	7	4	20	s.	John G. Putz
Marble Hill	Bollinger	470	39	80.4	+ 3.4	112	9	49	30	41	5.82	+2.22	1.62	0	9	10	14	7	w.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	...	..	..	..	..	4.85	+0.87	1.44	0	10	18	9	4	s.	John A. Spence
Poplar Bluff	Butler	329	29	80.6	+ 2.6	109	7	53	30	36	6.05	+1.68	3.05	0	9	17	6	8	s.	Mrs. J. H. Wolpers
Sikeston	Scott.	318	27	80 9	+ 3.3	109	7†	54	29†	37	4 43	+0.57	1.00	0	12	14	9	8	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	62	79.0	+ 1.2	99	8	56	29	27	2.70	−0.32	0.87	0	13	6	9	16	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**80.8**	**+ 3.0**	**114**	**8**	**49**	**30**	**42**	**6.14**	**+2.06**	**5.45**	**0**	**11**	**13**	**8**	**10**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	77.6	+ 3.3	108	9	47	30	41	7.10	+3.28	2.00	0	14	14	3	14	s.	Arcadia College
Birchtree (near)	Shannon	1,000	39	79.0[a]	+ 2.9	111	9	49	30	41	6.18	+1.60	1.72	0	9	20[a]	2[a]	8[a]	.....	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	...	..	..	..	..	0.88	.....	0.46	0	6	20	6	5	.....	C. M McCallister
Caplinger Mills	Cedar	750	8	....	.....	...	..	..	..	..	0.32	.....	0.15	0	6	15	12	4	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	79.2	.....	110	9	45	30	42	4.33	. ....	1.41	0	9	5	13	13	sw.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	30	84.0	+ 6.3	114	9	54	29	47	3.91	−0.25	1.40	0	7	19	8	4	sw.	H. E. Dean
Eldon	Miller	934	39	80.0	+ 3.6	110	9†	48	30	46	3.72	−0.10	0.98	0	8	7	10	14	sw.	E. H. Shepherd
Farmington	St. Francois	918	23	78.8	+ 3.4	114	9	43	30	43	3.42	−0.15	1.76	0	4	15	8	8	sw.	H. O. Miller
Garber	Taney	950	0	80.6[e]	.....	111	9	50	30	41	4.42	.....	1.37	0	9	9[e]	7[e]	10[e]	e.	William H. Durham
Goodland	Iron	1,000	41	77.8	+ 3.3	111	8†	44	30	47	7.15	+3.17	2.75	0	12	16	8	7	s.	F. M. Adams
Greenville	Wayne	381	25	78.4	+ 1.7	113	9	47	30	45	10.47	+7.12	4.78	0	10	10	17	4	se.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	...	..	..	..	..	4.47	.....	1.32	0	6	17	14	0	ne.	A. W. Madison
Koshkonong	Oregon	958	33	82.0	+ 4.1	112	9	54	30	35	4.96	+0.62	1.92	0	10	15	7	9	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	81.2	+ 5.1	110	9†	53	30	38	3.18	−0.70	0.93	0	10	22	4	5	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	83.6	+ 6.4	107	9	56	29†	34	3.16	−1.20	1.88	0	6	14	13	4	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	79.4	+ 3.9	110	9	51	30	39	4.24	−0.08	1.62	0	10	16	7	8	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	83.2	+ 6.1	105	9†	55	29†	36	1.90	−2.24	0.67	0	7	16	12	3	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	80.0	+ 3.8	108	8	49	30	34	8.11	+4.03	3.82	0	9	3	7	21	se.	F. H. Lane
Salem	Dent	1,173	30	80.4	+ 4.5	112	8	47	30	43	4.36	−0.12	1.73	0	11	10	14	7	s.	E. E. Martin
Seligman	Barry	1,542	33	83.4[a]	+ 7.2	105	9†	55	30	32	3.03	−1.01	1.44	0	7	17[b]	5[b]	7[b]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	79.0	+ 4.0	106	9	58	21†	38	4.72	+0.76	2.08	0	9	14	10	7	s.	A. L. Hailey
Springfield	Greene	1,324	46	80.8	+ 5.1	104	9	56	29	29	2.60	−1.49	0.77	0	11	14	12	5	sw.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	81.6	.....	111	9	50	26	42	3.94	.....	1 21	0	8	18	8	5	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**80.5**	**+ 4.4**	**114**	**9**	**43**	**30**	**47**	**4.39**	**+0.64**	**4.78**	**0**	**9**	**14**	**9**	**8**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	83.6	+ 5.8	107	4†	52	29	36	0.07	−3.61	0.05	0	3	12	17	2	sw.	W. G. Bigelow
Clinton	Henry	765	41	83.6	+ 6.0	114	10	52	29†	40	0.83	−2.54	0.60	0	5	17	11	3	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	82.3	+ 6.4	112	10	49	24	46	1.26	−2.79	0.62	0	8	17	10	4	sw.	John H. Patterson
Lamar	Barton	980	46	83.6	+ 5.9	108	9†	58	29†	38	1.85	−2.38	0.83	0	7	19	8	4	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	82.2	+ 5.1	111	9†	50	29†	48	3.01	−0.72	1.51	0	9	22	7	2	s.	J. E. Wheeler
Marshall	Saline	779	47	82.4	+ 6.4	110	9†	53	24	35	4.17	+0.53	1.30	0	9	15	15	1	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	84.2	+ 7.1	108	9	52	25†	44	0.15	−3.49	0.13	0	2	19	5	7	sw.	George A. Kaupp
Warrensburg	Johnson	878	47	83.7	+ 6.6	111	9†	51	24	35	1.05	−2.44	0.27	0	5	15	10	5	sw.	E. A. Markey
Warsaw	Benton	687	33	84.8	+ 7.2	112	9	54	30	40	1.87	−2.42	1.54	0	6	12	14	5	sw.	Everett Martin
Division means	**and extremes**	.....	..	**83.4**	**+ 6.3**	**114**	**10**	**49**	**24**	**48**	**2.01**	**−1.73**	**1.54**	**0**	**6**	**16**	**11**	**4**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	79.5	+ 4.5	112	9	46	24	39	4.55	+0.60	2.20	0	12	17	9	5	se.	A. S. Cumming
Chillicothe	Livingston	779	25	80.3	+ 4.6	114	9†	48	24	43	2.20	−2.26	0.96	0	7	16	10	5	s.	Wm. J. Olenhouse
Conception	Nodaway	980	45	79.4	+ 4.7	110	8	45	24	34	1.50	−2.20	0.56	0	5	7	20	4	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	81.9[a]	+ 6.8	111	10	50	24†	42	1.47	−1.75	0.60	0	8	20	6	5	s.	Fred L. Stiff
Grant City	Worth	1,134	30	78.4	+ 3.5	111	9	41	25	40	1.55	−2.19	0.68	0	8	9	12	10	se.	Howard Rybolt
Kansas City	Jackson	963	45	83.0	+ 6.4	111	10	51	24	34	1.44	−2.65	0.39	0	10	13	14	4	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	80.2	+ 4.8	110	9†	46	24	38	2.30	−1.57	0.80	0	9	12	16	3	s.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	...	..	..	..	..	2.78	−0.93	0.70	0	10	5	21	5	sw.	John M. Martin
Lexington	Lafayette	688	49	82.6	+ 6.4	111	10	51	24	43	1.29	−2.16	0.50	0	7	18	11	2	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	79.9	+ 6.1	113	9	44	24†	39	1.42	−2.54	0.36	0	11	13	15	3	e.	R. B. Montgomery
Oregon	Holt	1,048	78	81.4	+ 6.2	112	9	46	24	39	1.86	−2.15	0.96	0	8	17	11	3	se.	Mina Wright
St. Joseph	Buchanan	967	24	81.0	+ 4.3	110	10	49	24	40	5.84	+2.27	3.32	0	9	12	15	4	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	79.3	+ 4.1	112	9	43	25	37	1.41	−2.64	0.36	0	8	10	15	6	se.	Albert Volker
Trenton	Grundy	822	38	79.6	+ 4.4	112	10	47	24	41	4.41	+0.72	1.12	0	8	14	15	2	s.	W. H. Estes
Division means	**and extremes**	.....	..	**80.5**	**+ 5.1**	**114**	**9†**	**41**	**25**	**43**	**2.46**	**−1.36**	**3.32**	**0**	**9**	**13**	**14**	**4**	**s.**	
State means	**and extremes**	.....	..	**80.6**	**+ 4.4**	**115**	**9**	**41**	**25**	**48**	**3.90**	**−0.04**	**5.45**	**0**	**9**	**14**	**11**	**6**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for August 1934

Stations	Drainage-basins	Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri											.02	.88				.30	.60				.83			T.				.17				2.80
Bowling Green	Mississippi											.27	.34				1.87	.04				.61	.02		.08				.02				3.25
Brunswick	Grand											.32	.13				.89	.03	.04	.10		.30				.03							1.84
Canton	Mississippi											.74	.11		.51		.31			.09	.03				.31								2.10
Clifton Hill	Chariton											.11					4.30	.01	.45		.50					.04							5.41
Columbia***	Missouri		T.								.13	.28				.05	2.55	1.49	T.		.42	.02					T.					T.	4.94
Downing	Mississippi											.56	.25			.05	.55			.01	.22				.28						.10	.28	2.30
Edina	do											.93	.13				1.21					T			.37								2.64
Elsberry	do	.11										.14	.05			.32	2.08				.08	.28			T				.36			.30	3.72
Ewing	do											.50			.45		1.02								.45								2.42
Farber	do											.51	.30				3.30	.23		.04		.85											5.23
Fayette	Missouri											.35	.24			1.67	.37	.05		.16		.40			.40			.02					3.66
Fulton	do											.11	.11				4.05	.19		.06		.56							T.				5.08
Gorin	Mississippi	T.									.10	.51	.20			T.	.41			T.	T.			T.	.39						T.	.40	2.01
Hannibal	do	.02		.03								.90	.18				.93					.36	.01		.19	.10			.17				2.89
Hermann	Missouri	.45		.40								.15	.10	.03			3.55	1.20	.04	.04		.54	.07										6.57
Jefferson City	do	25		.02								.40	1.05				1.35	1.30	.10	.03		1.57	.03		.15								6.25
Kahoka	Mississippi											.42	.32				.12				.10				.40								1.36
Kirksville	do											.18	.28				2.65				.05				1.18							.42	4.76
Linneus	Grand											.30	.14			.08	2.79			.02		.44			.25	T.			.02			.18	4.22
Louisiana	Mississippi										.25	.30	.10			.62	.50		.04		.20	.90			.20			.05				.50	3.66
Lucerne	Grand		.01									.14	.09				.83	.02			.14	.06			.31						T	.35	1.95
Macon	Chariton											.69	.05		.04		2.20	.01		.07		.23			T	.09						.02	3.40
Madison	Mississippi											.76	.05				2.81	.20				.68											4.50
Memphis	do		T.									.42	T.				.44				.08	.12			.77							.20	2.03
Mexico	do	.08										.37	.06				5.42	.15	.36			.30	.02										6.76
Milan	Grand											.58	.32				1.23					.18			.67							1.06	4.04
Monroe City	Mississippi											.78		.08		.55	.89				.09	.13			.60	.02						.38	3.52
New London	do											.51	.16					.74				.09	1.31			.12			T.				2.93
Palmyra	do											.50	.18		T.		1.01					.21	.05										1.95
Paris	do											.25	.52				3.70	.15	.05			1.26			.03								5.96
Perry	do												.30				1.10	.12				1.83	.24									T.	3.59
Philadelphia	do											.45	.05		.94		.76					.97											3.17
St. Charles	Missouri	.50		.16							.05		.14	.02			3.47	.17		.04		.28		.10	.02				T.				4.95
St. Louis**	Mississippi	.41	.13								T.	T.	.20			.56	1.40			.03	.07	.24		.04	.06			T.				T.	3.14
St. Louis University*	do	.33	.20								T.	.01	.06			.72	1.35			.02	.09	.28		.02	.10								3.18
Shelbina	do											1.11	.16				2.35	.05				.33			.08	.06							4.14
Shelbyville	do											1.43	.13				1.80					.19											3.55
Steffenville	do	.03	.05								.30	.60	.15			.12	1.30		T.		.05				.40						T.	.23	3.23
Troy	do	.09		.09								.10	.24				3.00	.25		.03		.43				.15			.03				4.41
Union	Meramec	.25		.06								.01	.05				4.20	.88				.96	.09		T								6.50
Unionville	Chariton											.15	.20			.15	1.15				.20			.30	.18							.30	2.63
Valley Park	Meramec	1.78	T.	.07								.72	.02	T.			2.00	.36			T.	.30	.42		T.	T.							5.67
Warrenton	Mississippi	.04		.03								.08	.11			.40	3.78			T.	.22	.52										.05	5.23
West Ely	do																																
Keokuk, Ia.***	do	.03				T.		T		T.		.83		T.		.07			.01		.05			T.	.62			T.			T.	1.05	2.66
Southeast Lowlands																																	
Bragg City	St. Francis		T.											.80				T.	.18		1.70	.18	T.	.52	2.60								5.98
Campbell	do											.80		.74			.04		.25			4.27	.42	.70	1.27	.08							8.57
Cape Girardeau	Mississippi	.58	.01	.07								T.	.06	.11			.03	1.07				.47	.11	.09	.55	.06	.79						4.00
Caruthersville	do			.03										2.85		.25			.81	.13		.37	1.92	.30	2.40	.15	.14						9.35
Dexter	St. Francis		.39										.67	.85					.70	.62		.95		1.30	.59	T.							6.07
Doniphan	Black		.03									.07	1.97	T.			.32	.08	.11		.07	3.30	1.96	.12	.40	.05							8.48
Fisk	St. Francis			.41										1.46	T.			.43	.52			.94	1.03	1.27	.63	T.	T.							6.69
Jackson	Mississippi	.40	.02						.11			.16		.86			.82	.25			.34	.30	.13	.31		.67								4.37
Marble Hill	do	.41								T.				1.02			1.62	.35			.72	.51	.22	.30		.67								5.82
Morehouse	do	T	.12											.80			.21	1.27	.17		.08	.54	.46	.98	.22								4.85
New Madrid	do	.05	.01	.07										.82		.09		.61	.51	.02		.37	.32	.17	1.23	.56				.21			5.04
Parma	St. Francis													5.45				.25	.78			.81	.05	1.78	.53								9.65
Poplar Bluff	Black		.20										.05	.85				.53	.30			.91	T	3.05	.13	.03	T.							6.05
Sikeston	Mississippi	.16		.06									.02	.92				.40	1.00		.02	.53	.07	.60	.60	.05							4.43
Cairo, Ill.***	do	.59	.03					.02				T.	.46	.16		T.	.08	.25		.07	.10	.20	.12	.11	.51	T.							2.70
Ozark Plateau																																	
Arcadia	St. Francis	.15	T.	.05							.18	.28	.05				2.00	1.23	.06		T.	.80	.10	.46	.06	.08	1.60							7.10
Birchtree (near)	Black				.15									1.30			1.10	.30				1.10	1.72	.23	.18	.10								6.18
Buffalo	Osage																	.28	.03			.02	.05		.04	.46								0.88
Caplinger Mills*	do	T.	.03		T.								.03			.05	.04	.02	T.	T.	T.	T.	.15	T	T.			T.						0.32
Crystal City	Mississippi	.61	T.	.46								.16	.55				1.22	.19				.73		.08	T.	.33								4.33
Dean	Neosho	T.			.08												.26	.19			.10			1.40		1.10		.78					3.91
Eldon	Missouri	T.			.28								.68	.10			.98	.62	.04			.90	.12										3.72
Farmington	St. Francis	.43	T.						T.				T.				1.76	T.			T.	.43	T.			.80			T.				8.42
Fredericktown	do	.20										T.					1.26	.53				.48	.20	.20	.38		1.20						4.45
Galena	White													.08	.14			.28	.11		.12	.62	.15	.28	.08	.59	.18						2.63
Garber	do													.04	.12		1.37	.40		T	.47	.38	.07	.76		.81							4.42
Goodland	Black	.06									.37		.22	.50			2.75	.56		.05	.05	1.54	.10	.14		.81							7.15
Greenville	St. Francis							T.						1.36	.05		1.10	.30	1.30		.07	.94	3.53	1.25		.57							10.47
Hailey	White		T		1.07													1.22		T.	.37	T.	.16	.33		1.32							4.47
Koshkonong	Black									T.				1.16	.03		1.92	.36			.24	.36	.15	.34	.34	.06							4.96
Lakeside	Osage	T.	T									.11	.04	.65			1.02	.46	.08	T		.30			T.	T.							2.66
Lebanon	do												T.	.09			.93	.63	.32	.18	T.	.29		.26	.08	.31	.09						3.18
Leeper	Black	T.		T							T.			1.15			T.	1.45	.25			.90	.09	1.29	.42		.20						5.75
Lockwood	Osage	T.									T		T.	T.			.05	1.88			T.	.16	.70	.07		.30		T.					3.16
Mountain Grove	White				.17								.61	.08			1.62	.60	.03			.47	.07	.45		.14							4.24
Neosho	Neosho		T														.33	.33				.02	.67	.51		.02		.02					1.90
Owensville	Gasconade	.07												.08				2.75	1.07	.08		1.05	.08		.08	.12							5.38
Rolla	Meramec	.19											.09				2.00	3.82	.06			.50	.03			1.02	.40						8.11
St. Thomas (near)	Osage			.40									1.02				2.38	1.80		.10		.81	.05			.14							6.70
Salem	Meramec	.02	T.							.14	.24	.14					1.73	.80			.03	.26	.09	.10		.87							4.36
Seligman	Neosho				.17												.29	.07			.11	.06		.89		1.44							3.08
Seymour (near)	White				.03									T.			2.08	.84	.22		.04	.14	.89	.28		.20		T.					4.72
Springfield***	do		.04		.03								.12				.63	.47		T.	.02	.10	.34	.15		.16		.54					2.60
Stover	Missouri					.57							.42				.85	.07				.44	.02		T.								2.37
Versailles	Osage		.10			1.21						T.	1.14				.65	T	T.	.02	.49	.29			.04								3.94
Williamsville	Black	.01									.03			2.18			.01	1.15	.12			1.25		1.15	.15	.04	.03						6.12
Willow Sprgs. (near)	White					.22					.42	.18		.24				.86	.90		.07	.25	.07	.44	.16	.05	.10						3.96
Southwest Plain																																	
Appleton City	Osage												T.	T.			T.	.05		.01	.01		T.										0.07
Clinton	do											T.	T.	.10			.60	.05		.02	.06												0.83
Concordia	Missouri											.47	.40				1.43	.45				1.22							.06				4.03

Continued on next page

Daily Precipitation for August 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Harrisonville ‖	Osage											.05	.21		.03		.58	.04		.02		.23			.10							1.26
Joplin	Neosho	T.		T.								.45					.86	.10				.27	.20	.24		.10		T.				2.22
Lamar ‖	Neosho													.15	.17			.35	.48		T.	.15		.10						.45		1.85
Lamonte	Missouri		.05									.05				.93	.12	.10			.75	.76			.20			.05				3.01
Marshall	do											.65	.45				1.30	.43	T.	.05	.77	.33			.15			.04				4.17
Nevada	Osage												.02	.13								T.	T.									0.15
Warrensburg	Missouri											.08	.16	T.			.27		.20		.27	.07										1.05
Warsaw	Osage		T.									.01	.03	T.			1.54	.02	.25			.02										1.87
Waverly ‖	Missouri											1.09	.31				1.22			.10		.86										3.58
Northwest Plateau																																	
Bethany	Grand		T.		.03						.08	.30			.71	.63	1.57		.09		.21			.04	.14			.01				.74	4.55
Chillicothe	do											T.	.12	T.		.53	.96	T.			.10	.29			.10						.10	2.20
Conception	Missouri		T.		T.							.05		T.		.56			T.	T.	.37		T.	T.				.03			.49	1.50
Edgerton	do	T.	T.									.04	T.	.04		.15	T.		T.	.24	.45	.15			.29			T.			.11	1.47
Gallatin ‖	Grand											.02	.38			1.12	.50			.10		.36			.18						.26	2.92
Grant City	do		T.								T.	.08	.10	.03		.39	.18	T.	T.	T.	.04				.05			T.			.68	1.55
Kansas City***	Missouri	T.									.14	.11		.04	.02	.32	.01		T.	T.	.22	.17		T.	.03	T.		.38			T.	1.44
Kidder	Grand	T.	T.					T.				.30	.29	T.		.16	.80			.06	.01	.55			.12	.01						2.30
King City*	Missouri		T.		.03						.11	.12			.03	.54			.33		.37			.15			T.			.40	.70	2.78
Lexington ‖	do											.26	.09		.04		.48	.02	.07			.33										1.29
Maryville	do				.01							.10		.03		.18	.18					.13		.02	.24				.24		.01	.28	1.42
Oregon	do		.02								.11	.02		.05	T.	.96				T.	.47				.08						.15	1.86
St. Joseph***	do				T.						.07	T.	T.	.03	T.	3.29	.03		.24		.71			.26	.11			T.		T.	1.10	5.84
Tarkio	do				.06			.02						.36		.25					.14			.07			.27				.24	1.41
Trenton	Grand										T.	.87	.06			.95	.86	T.	T.		.42				.12			.01			1.12	4.41

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for August 1934

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.396	.354	.503	.341	.343	.366	.421	.392	.421	.408	.383	.409	.340	.250	.355	.381	.078	.088	.241	.302	.087	.159	.106	.162	.170	.081	.226	.187	.272	.246	.239	8.707
	Mean temperature	88	90	82	84	87	88	88	88	88	90	89	88	83	86	87	76	78	86	82	68	75	74	74	64	66	68	73	69	65	65	74	79.5
	Wind movement ..	79	62	83	40	45	40	43	57	47	46	57	74	47	30	47	61	70	53	48	57	76	37	38	55	43	42	39	31	44	60	62	1,608

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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WINDSTORMS

Aug. 2, at Versailles, Morgan County, high wind blew down several silos, barns, trees, telephone poles, and tore porches from several houses.

Aug. 10, wind damage was reported in St. Charles County by the observer at St. Charles.

Aug. 11, at Browns Station and vicinity, Boone County, high winds damaged outbuildings and trees.

Aug. 12, a very local windstorm in western St. Louis County demolished the roof of the Wellston dog track; damage estimated at $5,000. On the same day wind damage was reported over Callaway County to buildings and trees. The roof was torn off the county infirmary.

Aug. 15, in the north parts of Nodaway County, straight winds did heavy damage to barns and other outbuildings.

Aug. 16, at Clifton Hill, Randolph County, many trees were blown down and roofs damaged.

Aug. 18, in Platte County, straight line winds did much damage to roofs of buildings, farm houses, barns, and trees over a path about one-half mile wide. At Platte City twenty-five barns and other farm buildings were reported damaged. At Weston the loss to buildings, etc., was estimated at $35,000 and the loss in one apple orchard was estimated at $2,000. Two persons were reported injured at Weston.

HAILSTORM

Heavy hail fell on the 4th in Nodaway County, west of Hopkins, over a path two miles wide by ten miles long, extending from northwest to southeast. Foliage of trees, shrubs, and corn was cut off and shingle roofs were badly damaged. Damages not estimated.

EARTHQUAKE

An earthquake of light intensity (5) occurred in southeastern Missouri, centered in Mississippi County, on August 19, at 6:47 p. m.; and was felt as far north as St. Louis, and also in Illinois, Tennessee, and Kentucky. Only minor damage resulted, as the cracking of plaster, stucco, and the toppling of bricks from chimneys and loose articles from shelving at places near the center of the disturbance.

HEAT AND DROUGHT OF 1934 AND OTHER YEARS

All previous records for periods of extreme heat and drought were exceeded by the one in 1934. State-wide records began with the year 1888. From 1888 to 1934 there were three major droughts and seven others of considerably less severity. It should be remembered that in none of the great heat-drought periods were the conditions uniform over the State. For example, in 1934, in the lower southeastern part of Missouri the heat and drought were considerably less severe than in the northern and western sections of the State. But in order of general severity and crop damage, the drought of 1934 stands first; that of 1901, second, and that of 1930, third.

Although the heat-drought period of 1934 was more disastrous than that of 1901, the two were similar in dates of occurrence, duration, and intensity, as shown by the following:

Period of great temperature excess and rainfall deficiency: in 1901, June 14-August 3; in 1934, June 24-August 10.

Average temperature for the summer (June-July-August): in 1901, 80.6°; in 1934, 82.4°. (Normal for summer is 75.9°.)

Number of days with maximum temperature 100° or above (based upon records at Columbia, Kansas City, and St. Louis): in 1901, 22; in 1934, 33.

Highest temperature recorded in the State: in 1901, 116°; in 1934, 117°.

Total average rainfall for the dry period: in 1901, June 14-August 3, 2.62 inches, or 38 per cent of normal; in 1934, June 24-August 10, 1.52 inches, or 25 per cent of normal.

In 1934, streams, springs, and wells were lower, or more generally dried up, than ever before known. The average corn yield for the State: in 1901, 10.1 bushels per acre, which is the least of record prior to 1934; in 1934 (estimate of Sept. 1, not final), 5 bushels.

However, the 1934 drought ended more quickly after rains once began than did the 1901 drought; for, although the situation was relieved in 1901 by rains early in August, there were no general heavy rains either in August or September; while, in 1934, rainfall the second half of August was much greater than normal, except in a few western and northern counties, where deficient rainfall persisted through August.

For a brief summary of drought records in Missouri from 1870 to 1930, see an article in the Annual Summary of Climatological Data for 1930, pages 54-55.

NEW STATION, GARBER, MO.

A cooperative station has been established at Garber, Taney County, Mo., in the White River section. The station is about 6 miles west of Lake Taneycomo, in typical Ozark country. Mr. William H. Durham has shown great interest in the matter and is in charge of the station.

Daily Temperatures for August 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	102	106	101	106	110	109	110	111	113	112	101	103	98	104	98	88	87	98	90	83	85	89	91	88	81	91	88	83	80	85	100	96.5
	Minimum	72	74	66	69	77	75	81	77	76	79	69	76	78	73	77	71	72	74	73	60	60	64	64	52	56	55	63	56	52	54	65	68.1
Columbia	Maximum	103	103	95	103	102	107	107	109	110	110	101	100	95	100	97	82	83	95	86	71	85	81	84	69	73	85	88	76	73	78	93	91.7
	Minimum	73	80	68	70	80	79	79	80	77	76	71	74	77	74	74	69	71	74	69	59	59	65	64	56	59	54	62	60	53	56	62	68.5
Fayette§§	Maximum	103	105	100	104	108	109	110	111	112	112	100	101	94	102	99	85	85	98	85	69	84	89	89	68	78	89	89	80	80	82	97	94.1
	Minimum	73	77	69	64	77	76	76	75	73	79	76	71	77	72	80	72	72	60	60	64	58	59	64	55	57	53	59	58	53	51	52	66.5
Hannibal	Maximum	93	104	94	102	100	107	104	109	110	106	101	95	91	101	95	84	88	97	88	80	84	86	86	81	77	85	86	77	74	76	81	91.7
	Minimum	62	62	67	68	75	75	81	84	77	81	66	72	74	70	76	71	67	72	74	61	58	65	62	50	54	54	62	55	49	51	59	66.3
Jefferson City §§	Maximum	..	..	101	106	106	108	110	110	111	111	101	104	97	101	101	79	82	96	87	72	86	78	84	72	72	83	90	78	74	79	90	[b]92.0
	Minimum	..	..	..	65	75	77	82	81	76	82	75	69	73	72	75	69	68	72	77	66	58	61	63	55	55	53	55	61	53	51	55	[c]66.9
Kirksville	Maximum	99	104	98	106	101	108	105	110	111	108	94	95	98	102	91	82	86	96	87	86	86	89	89	78	80	87	84	79	74	76	84	92.7
	Minimum	70	72	65	62	67	69	83	83	79	78	63	70	74	68	72	68	68	68	69	60	57	58	58	47	47	54	54	54	47	54	60	64.5
Louisiana	Maximum	96	106	99	104	100	110	106	112	112	112	90	93	95	101	94	88	89	97	88	72	84	82	83	68	80	85	87	76	80	80	76	91.8
	Minimum	70	72	62	65	76	77	78	80	75	80	71	74	75	71	83	72	66	72	70	57	57	62	60	52	55	50	62	56	45	42	53	65.8
Macon§§	Maximum	108	110	99	108	101	113	109	112	114	114	91	100	92	105	89	84	87	98	87	65	85	88	90	65	80	89	85	77	74	78	94	93.3
	Minimum	69	75	65	65	76	76	81	81	78	80	65	65	76	69	71	70	70	72	74	62	58	60	63	50	52	56	63	55	48	48	56	66.1
Mexico §§	Maximum	107	109	99	104	102	110	110	112	113	114	95	101	97	103	99	82	88	95	84	69	85	85	85	69	75	86	88	76	73	79	89	93.0
	Minimum	68	73	66	62	77	71	79	79	70	79	71	69	74	71	79	64	65	70	73	60	57	60	61	52	55	53	60	56	47	51	55	65.4
St. Louis	Maximum	86	102	93	97	89	99	104	105	108	106	94	98	97	98	98	84	89	96	87	78	80	81	79	72	71	82	87	76	74	80	89	89.6
	Minimum	69	76	75	76	77	75	81	85	85	81	76	73	78	76	75	69	73	76	73	63	62	70	66	59	60	58	63	60	52	57	60	70.3
Unionville	Maximum	104	102	98	106	105	110	110	114	114	112	104	96	95	105	97	85	90	100	92	86	90	86	92	84	86	90	87	84	82	85	90	96.2
	Minimum	70	70	62	64	76	73	75	80	76	78	66	70	75	67	70	60	60	72	60	56	64	60	60	45	46	60	60	61	46	56	60	64.5
Warrenton	Maximum	95	105	97	99	97	107	106	109	110	108	105	103	97	102	98	82	88	95	89	83	84	82	79	79	71	83	87	81	72	79	85	92.2
	Minimum	70	79	69	69	74	75	79	84	82	81	73	70	73	74	75	68	70	71	78	62	59	67	63	55	58	55	60	62	48	52	56	68.1
Southeast Lowlands																																	
Campbell	Maximum	94	98	104	103	102	106	110	106	107	106	98	104	94	95	97	82	85	93	98	84	74	82	84	87	74	83	82	86	76	84	90	92.5
	Minimum	76	75	76	68	78	71	72	75	76	74	71	74	69	73	71	71	70	71	74	66	60	65	69	64	59	58	60	55	63	55	63	68.5
Caruthersville	Maximum	93	95	102	98	98	102	108	104	102	99	99	103	97	95	94	91	84	91	97	90	77	84	90	86	81	82	86	89	82	82	92	92.7
	Minimum	77	77	78	70	73	76	77	78	78	78	75	78	70	76	73	76	74	72	77	72	64	70	69	69	68	62	64	66	60	59	64	71.6
Doniphan	Maximum	104	102	107	106	110	111	112	114	112	106	106	104	96	98	98	93	80	95	97	83	82	84	86	83	78	80	86	90	81	82	92	95.4
	Minimum	80	76	72	67	68	72	70	72	76	74	77	70	72	72	73	72	72	72	75	66	62	66	67	70	67	60	67	63	58	50	52	68.7
Jackson	Maximum	97	94	99	102	97	107	111	111	110	105	97	101	95	100	97	89	84	95	93	90	79	88	82	80	71	83	87	88	80	84	92	93.2
	Minimum	69	77	74	66	71	74	76	75	78	78	77	77	71	64	73	71	71	73	77	65	62	68	68	69	57	53	54	61	53	51	54	68.0
Poplar Bluff	Maximum	100	97	105	101	101	106	109	107	108	102	98	103	94	95	92	78	81	93	97	78	79	82	83	81	75	80	87	91	80	81	91	92.1
	Minimum	79	75	78	70	70	72	74	72	76	74	77	75	73	74	74	71	71	74	75	67	61	66	66	71	65	58	58	63	57	53	55	69.2
Sikeston	Maximum	94	94	101	101	94	105	109	109	105	102	97	103	101	97	93	89	82	92	95	80	77	87	87	91	73	81	87	87	84	82	91	92.6
	Minimum	72	78	76	71	72	75	75	76	79	76	77	75	71	74	73	75	71	73	77	67	62	62	67	70	64	57	57	60	54	55	54	69.2
Cairo, Ill	Maximum	87	88	92	92	87	93	99	99	99	96	90	95	85	96	91	81	80	90	91	78	78	87	85	79	70	78	83	87	76	78	88	87.0
	Minimum	69	76	78	72	75	75	79	80	79	78	78	74	73	73	77	73	74	74	77	66	64	68	69	70	62	59	62	68	56	59	61	70.9
Ozark Plateau																																	
Arcadia §§	Maximum	96	97	98	100	96	105	105	106	108	103	92	96	98	96	93	75	81	90	92	74	78	77	77	72	68	78	82	82	73	88	84	89.0
	Minimum	69	75	74	61	69	70	76	74	73	76	72	74	69	69	71	68	68	71	77	64	58	61	68	67	67	50	52	58	54	47	52	66.3
Birchtree	Maximum	103	100	103	102	100	..	107	110	111	105	103	106	101	95	95	88	75	92	91	85	78	81	79	76	67	79	85	87	77	79	80	[c]91.3
	Minimum	80	79	71	61	69	..	71	70	76	74	75	73	65	73	70	67	70	70	74	65	56	60	65	66	61	63	57	62	55	49	57	[c]66.8
Crystal City §§	Maximum	93	104	93	98	93	103	109	108	110	108	94	99	99	99	100	82	90	98	90	76	86	82	78	70	70	82	88	79	76	81	91	91.3
	Minimum	69	76	77	63	71	73	71	74	74	80	77	75	72	71	72	70	70	72	79	62	61	70	68	65	56	49	51	62	52	45	49	67.0
Eldon §§	Maximum	105	95	105	104	107	107	108	108	110	110	104	106	97	103	100	78	85	98	88	70	87	79	85	70	71	83	91	81	75	84	95	93.2
	Minimum	64	81	66	68	68	75	78	81	81	81	78	71	71	70	70	73	69	72	75	65	59	60	64	58	57	52	57	60	52	48	49	66.9
Farmington	Maximum	98	100	99	103	98	107	110	112	114	98	98	100	98	103	98	97	99	98	94	80	80	79	80	80	77	74	80	90	93	78	81	93	93.8
	Minimum	65	75	68	65	67	68	70	70	73	80	63	74	68	68	69	65	68	68	78	60	56	65	69	60	52	45	50	60	47	43	50	63.8
Garber	Maximum	..	..	..	..	..	108	108	109	111	108	108	110	104	101	101	98	79	101	101	87	85	83	82	81	74	78	87	90	81	84	94	[c]94.3
	Minimum	..	..	..	..	..	69	75	72	71	72	70	74	72	70	70	69	72	72	70	72	62	71	59	65	65	65	64	61	54	50	53	[c]66.9
Koshkonong	Maximum	103	98	104	106	105	108	108	111	112	107	103	109	99	97	96	88	87	93	95	82	78	78	88	78	76	70	80	85	87	87	81	88	93.8
	Minimum	80	81	77	71	74	74	78	80	78	77	81	75	71	70	74	68	71	72	75	65	61	66	65	69	64	60	64	66	56	54	60	70.2
Lebanon §§	Maximum	108	102	104	104	108	106	107	107	110	110	103	108	103	106	103	76	78	98	92	74	85	76	85	85	67	82	90	84	79	84	93	94.1
	Minimum	75	82	66	68	73	75	80	82	79	80	79	75	68	70	72	72	67	68	69	68	59	62	64	63	56	56	60	61	54	53	60	68.3
Mountain Grove	Maximum	104	97	106	106	104	106	107	108	110	106	100	105	100	96	96	84	74	93	85	78	79	75	82	78	66	77	83	85	78	79	87	91.4
	Minimum	81	78	70	67	72	75	76	76	79	72	72	68	68	69	72	65	68	70	75	64	57	68	63	62	58	59	61	60	54	51	60	67.4
Neosho	Maximum	102	100	103	101	103	103	103	103	105	105	103	105	100	102	102	101	92	97	96	95	98	96	86	86	74	82	84	87	86	90	92	96.2
	Minimum	83	79	67	66	74	74	76	74	71	75	75	78	73	73	77	73	72	74	68	73	67	66	67	64	64	67	65	61	55	55	66	70.1
Rolla	Maximum	105	102	98	101	103	106	105	108	107	107	98	100	98	100	99	96	80	93	91	83	82	80	79	79	67	79	84	80	75	78	84	91.8
	Minimum	73	78	71	67	75	76	78	79	76	81	79	68	70	68	78	67	70	72	77	64	58	71	67	62	53	53	57	65	53	49	59	68.2
Springfield	Maximum	100	96	101	100	100	100	101	102	104	103	102	104	97	98	97	84	76	97	88	79	84	74	82	75	64	78	84	82	76	80	90	90.3
	Minimum	84	78	77	73	76	79	81	82	82	82	80	75	73	72	78	68	71	71	76	68	60	65	65	64	61	62	64	63	56	58	65	73.3
Southwest Plain																																	
Appleton City	Maximum	104	102	105	107	105	106	103	104	107	106	104	104	95	104	104	92	88	104	88	82	98	86	92	80	79	89	92	84	82	90	96	96.2
	Minimum	86	82	69	74	78	78	77	77	77	79	81	82	75	72	81	75	71	72	77	66	65	71	66	54	60	57	63	62	52	56	68	71.1
Clinton	Maximum	100	105	101	112	110	110	110	110	112	114	110	110	96	106	108	90	91	110	96	77	100	90	90	85	75	92	94	82	82	89	97	98.5
	Minimum	70	82	68	72	70	74	74	75	75	77	80	82	74	70	78	73	70	80	76	63	62	68	64	53	60	53	62	53	52	52	64	68.6
Harrisonville§§	Maximum	108	108	104	108	109	108	109	110	111	112	109	106	94	106	106	86	98	107	91	68	93	91	94	71	80	90	96	86	82	91	102	97.9
	Minimum	72	76	66	72	72	72	76	78	76	76	78	75	76	72	74	69	68	70	73	63	56	63	64	49	50	55	61	57	50	54	56	66.7
Lamar§§	Maximum	106	104	107	104	105	104	106	106	108	108	108	106	108	99	102	103	99	81	100	89	94	95	78	87	75	71	86	92	86	83	91	93	96.0
	Minimum	70	84	69	70	74	77	77	79	76	77	80	81	73	73	75	80	73	73	74	69	68	72	66	67	60	61	65	63	58	58	61	71.1
Lamonte	Maximum	105	106	101	108	109	108	108	109	111	111	107	105	95	106	103	92	94	104	95	72	86	90	89	89	79	87	94	93	80	89	98	97.5
	Minimum	87	78	65	69	76	76	76	75	75	75	75	75	75	71	74	71	71	75	71	58	60	60	52	52	58	53	62	62	50	50	50	67.0
Marshall	Maximum	102	105	101	104	107	106	109	108	110	110	106	99	98	101	99	89	95	99	96	83	85	87	88	87	77	87	87	79	77	81	97	95.5
	Minimum	75	81	69	72	79	82	82	80	78	81	71	71	72	73	81	72	72	73	75	58	59	66	64	53	56	57	64	57	54	54	64	69.2
Nevada	Maximum	107	105	105	104	106	105	106	106	108	107	107	107	94	103	105	96	89	105	97	85	100	87	93	82	74	88	91	86	84	91	94	97.3
	Minimum	86	84	66	75	80	78	79	79	80	80	83	81	71	74	81	76	71	74	77	70	56	70	65	56	52	55	65	58	52	59	68	71.0
Warrensburg	Maximum	106	107	103	108	109	107	108	109	111	111	108	103	97	107	107	89	94	105	92	65	92	89	93	86	79	87	93	80	79	92	100	97.3
	Minimum	78	81	70	75	78	78	78	79	78	82	78	76	76	72	82	73	73	83	74	59	61	66	65	51	58	52	62	59	53	58	65	70.1
Warsaw	Maximum	104	106	105	108	108	108	109	110	112	111	108	110	100	109	108	96	88	104	95	83	96	86	97	83	76	89	97	86	87	88	98	98.9
	Minimum	90	83	65	69	76	81	79	78	72	82	83	79	75	73	81	70	72	73	78	64	64	70	67	57	62	55	58	60	55	54	64	70.6
Northwest Plateau																																	
Chillicothe §§	Maximum	101	106	100	107	112	112	110	112	114	114	92	91	96	105	102	86	97	105	85	71	82	89	92	67	82	92	85	78	78	84	99	95.0
	Minimum	70	71	62	67	75	75	81	81	77	81	64	68	75	72	71	62	70	72	72	59	57	59	62	48	51	53	62	55	51	54	56	65.6
Grant City	Maximum	99	100	96	95	108	103	108	110	111	105	92	87	90	103	96	82	84	100	90	76	86	88	92	79	81	91	87	73	78	80	91	92.3
	Minimum	72	70	58	73	77	76	74	77	75	77	66	70	68	71	70	69	68	71	64	58	58	60	63	43	41	51	55	53	50	60	60	64.5
Kansas City	Maximum	103	104	99	107	108	109	109	109	110	111	107	101	96	105	100	86	98	105	87	73	84	86	94	66	79	88	88	80	80	89	100	95.5
	Minimum	83	78	65	77	83	84	85	85	83	80	78	73	72	73	74	73	74	77	73	60	60	66	61	51	57	55	66	59	54	60	71	70.6
Kidder	Maximum	100	103	96	105	108	108	109	109	110	110	101	96	97	103	95	83	88	103	96	79	83	87	91	79	80	89	85	78	78	81	98	[b]94.5
	Minimum	69	74	62	70	77	79	82	82	76	78	65	70	73	71	68	69	69	71	67	56	56	59	63	46	51	56	64	55	49	56	60	65.9
Lexington§§	Maximum	104	106	99	108	109	108	109	109	110	111	107	104	98	104	100	88	94	104	84	65	87	90	93	70	82	91	90	83	81	87	100	96.0
	Minimum	71	80	68	71	82	81	84	85	81	82	72	72	77	72	76	72	71	74	74	65	60	63	60	51	53	56	64	58	54	55	57	69.1
Maryville	Maximum	100	100	97	105	111	109	110	112	113	107	96	98	97	105	98	84	86	104	97	78	86	89	92	80	80	91	83	82	77	85	96	95.1
	Minimum	71	71	63	72	76	75	78	78	75	77	67	69	68	72	68	68	69	71	64	56	57	60	60	44	44	52	59	53	51	58	61	64.7
Oregon	Maximum	104	104	104	108	111	110	108	111	112	109	105	103	102	107	85	85	93	105	89	77	87	87	90	70	81	90	91	83	80	90	97	96.1
	Minimum	71	73	65	76	79	78	81	81	78	76	69	71	69	73	67	69	69	74	65	56	58	61	66	46	50	57	62	55	52	58	66	66.8
St. Joseph	Maximum	101	100	98	106	108	108	108	108	109	110	105	99	98	104	82	84	93	104	86	71	85	86	90	64	77	88	86	78	78	88	99	93.6
	Minimum	74	75	67	78	82	83	84	84	79	77	71	73	72	75	65	71	71	73	68	57	59	64	50	49	55	59	66	59	55	60	63	68.3
Trenton	Maximum	102	101	101	103	111	110	109	111	111	112	97	95	97	104	95	81	84	98	90	85	84	88	87	80	79	88	87	80	74	79	89	93.9
	Minimum	61	63	63	74	78	76	80	83	79	80	64	64	64	72	70	70	70	72	68	60	59	59	63	47	53	55	60	55	51	56	59	65.4

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 9-25-34—945.

NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII SEPTEMBER 1934 NO. 9

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GENERAL SUMMARY

The period of rains and cool weather that began about the middle of August, putting an end to the 1934 record-breaking spell of heat and drought, continued through September. September was a cool, wet month. The average temperature for the State, 65.6°, is the lowest September average since 1928. The average rainfall, 7.39 inches, is the third greatest September average of record for Missouri (years 1888-1934).

While there were a few warm days scattered through the month, no periods of high temperature exceeding two days occurred. Temperatures were much below normal about the 3d to 8th, 15-17th, 21st-22d, and 26-30th. The first light frost occurred on the 16th, at a few points in northwestern counties, and the first heavy frost on the 27th. No killing frost (except possibly locally on low ground in the vicinity of Maryville, on the 27th) was reported. Frost damage was of no consequence.

Rain occurred on 12 days, taking the average for the State, and the rain periods were well distributed through the month, the principal periods being the 1st-3d, 11-15th, 21st-22d, and 27-29th. Considerable areas in the northeastern, north-central, and south-central portions of the State received 10 inches, or slightly more; a small area around Farmington received 15 inches, and one around Brunswick, 13 inches. The areas receiving comparatively moderate rainfall were the lower southern portions, the northwestern counties of Nodaway, Worth, and Gentry, and the eastern counties of Pike and Lincoln.

This was the first month having more than normal rainfall since September 1933, and the second since May 1933. Soil moisture was restored to a depth of a foot or more in most places, but the lower subsoil was still abnormally dry at the end of September. Supplies of water for stock and for domestic use were at least temporarily restored.

Crops that survived the drought were greatly benefited by the rain. Even some late corn was benefited, but probably nine-tenths of the corn was beyond help, and the preliminary estimate of average yield of 4 bushels an acre is the lowest in the history of Missouri corn records. Meadows, forage crops, gardens, and grains sown early for pasturage, made excellent progress; but there was considerable damage to fodder and hay from the rains, and some corn in low bottoms was overflowed.

Many small streams were overflowed at times, and the Bourbeuse and Meramec rivers were in moderate flood about the 15-19th; but the principal rivers, although experiencing substantial rises, were far below normal stage for the time of year.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 65.6°, or 3.6° below normal. The highest monthly mean was 71.0° at Caruthersville, and the lowest monthly mean was 60.4° at Unionville. The highest temperature recorded was 95° at Marshall on the 1st, and at Poplar Bluff on the 10th, and the lowest was 32° at Grant City and Maryville on the 27th. The greatest daily range was 45° at Lamonte on the 26th.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 7.39 inches, or 3.25 inches more than normal. The greatest local monthly amount was 15.09 inches at Farmington, and the least local monthly amount was 4.07 inches at Poplar Bluff. The greatest amount in any twenty-four hours was 6.47 inches at Farmington on the 12th. The average number of days with 0.01 inch or more of precipitation was 12.

(Continued on page 45)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia	29.98	30.36	30	29.65	3	7.5	28	w.	11	90	63	68	55
Kansas City	29.97	30.37	30	29.71	20	9.2	27	nw.	20	90	56	63	56
St. Joseph	29.97	30.37	30	29.68	19	8.1	28	nw.	2	87	59	65	53
St. Louis	30.00	30.32	30	29.67	3	11.1	36	sw.	12	86	69	72	39
Springfield	30.00	30.35	30	29.73	3	9.4	27	w.	20	86	63	67	59
Cairo, Ill.	30.01	30.34	30	29.71	3	7.6	25	nw.	13	88	67	76	58
Keokuk, Iowa	30.00	30.34	30	29.64	3	7.2	19	s.	25	85	61	69	52

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	65.2	− 4.0	97	28	1.11	−3.03	2.59	0.20	0	4	..	..	..
1889	64.7	− 4.5	94	32	4.66	+0.52	9.28	0.93	0	11	..	..	..
1890	63.7	− 5.5	98	30	3.98	−0.16	14.41	1.75	0	9	..	..	..
1891	70.6	+ 1.4	104	34	0.63	−3.51	1.85	T.	0	6	..	..	..
1892	67.8	− 1.4	97	32	2.39	−1.75	5.20	0.00	0	4	19	6	5
1893	69.9	+ 0.7	107	26	3.92	−0.22	8.10	0.89	0	6	17	7	6
1894	68.5	− 0.7	101	34	4.93	+0.79	9.21	1.90	0	8	13	11	6
1895	71.8	+ 2.6	104	24	2.45	−1.69	11.24	0.26	0	4	19	8	3
1896	65.0	− 4.2	101	28	4.87	+0.03	8.17	1.65	0	10	11	10	9
1897	74.3	+ 5.1	105	27	0.74	−3.40	2.70	0.00	0	2	23	5	2
1898	70.9	+ 1.7	103	37	6.74	+2.60	14.67	3.60	0	9	15	9	6
1899	67.4	− 1.8	108	21	2.04	−2.10	4.40	0.50	0	4	20	6	4
1900	71.1	+ 1.9	100	29	4.81	+0.67	10.57	1.18	0	10	13	10	7
1901	68.9	− 0.3	103	27	2.31	−1.83	7.31	0.11	0	6	18	8	4
1902	63.2	− 6.0	95	30	4.78	+0.64	10.92	1.81	0	10	15	6	9
1903	66.6	− 2.6	98	32	4.41	+0.27	8.58	0.72	0	8	17	6	7
1904	69.6	+ 0.4	96	34	3.85	−0.29	9.72	0.53	0	7	16	8	6
1905	69.6	+ 0.4	98	41	7.67	+3.53	16.34	0.55	0	10	15	6	9
1906	71.9	+ 2.7	98	36	4.15	+0.01	9.81	0.27	0	11	15	8	7
1907	68.9	− 0.3	101	31	1.93	−2.21	4.05	0.70	0	6	18	7	5
1908	71.6	+ 2.4	99	28	1.80	−2.34	4.42	T.	T.	4	18	8	4
1909	68.7	− 0.5	105	28	4.62	+0.48	12.04	0.69	0	8	18	6	6
1910	69.5	+ 0.3	97	34	5.58	+1.44	11.41	0.88	0	10	14	6	10
1911	73.7	+ 4.5	105	39	7.13	+2.99	14.95	2.09	0	11	13	7	10
1912	68.6	− 0.6	105	27	3.06	−1.08	5.93	0.56	T.	6	17	5	8
1913	69.4	+ 0.2	109	27	4.63	+0.49	10.82	1.26	0	9	13	7	10
1914	69.6	+ 0.4	99	35	6.27	+2.13	16.17	2.20	0	9	15	8	7
1915	70.6	+ 1.4	98	34	5.25	+1.11	12.24	0.71	0	7	16	7	7
1916	67.8	− 1.4	101	27	2.94	−1.20	5.69	1.14	0	6	19	7	4
1917	67.9	− 1.3	101	33	2.78	−1.36	5.23	0.05	0	5	19	6	5
1918	62.3	− 6.9	96	29	4.73	+0.59	9.69	1.73	0	7	17	6	7
1919	71.4	+ 2.2	104	38	3.29	−0.85	8.66	0.30	0	5	20	6	4
1920	70.0	+ 0.8	100	31	4.81	+0.67	9.06	0.96	0	9	17	7	6
1921	73.4	+ 4.2	104	34	7.03	+2.89	14.95	0.95	0	13	13	9	8
1922	71.7	+ 2.5	107	31	3.31	−0.83	8.22	0.15	0	5	21	5	4
1923	68.7	− 0.5	98	33	4.47	+0.33	11.83	1.23	0	11	12	9	9
1924	64.0	− 5.2	96	29	3.77	−0.37	8.92	1.55	0	8	14	8	8
1925	74.6	+ 5.4	110	45	6.46	+2.32	14.55	2.39	0	10	14	6	10
1926	69.3	+ 0.1	97	27	8.79	+4.65	18.04	1.80	0	13	12	7	11
1927	71.6	+ 2.4	102	29	3.71	−0.43	9.82	1.57	0	8	17	7	6
1928	65.0	− 4.2	95	28	2.61	−1.53	9.04	0.00	0	5	20	7	3
1929	67.4	− 1.8	98	33	3.20	−0.94	7.32	0.88	0	8	13	10	7
1930	71.3	+ 2.1	105	37	4.18	+0.04	12.87	0.74	0	8	16	7	7
1931	75.0	+ 5.8	104	36	4.16	+0.02	10.80	0.46	0	7	19	7	4
1932	67.8	− 1.4	99	33	2.36	−1.78	11.06	0.24	0	6	17	8	5
1933	74.6	+ 5.4	102	36	4.38	+0.24	12.02	0.73	0	9	16	8	6
1934	65.6	− 3.6	95	32	7.39	+3.25	15.09	4.07	0	12	12	8	10
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
Period	69.2	.....	110	21	4.14	.....	18.04	0.00	T.	8	16	7	7

Climatological Data for September 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	66.6	− 0.4	94	1	37	27	34	13.32	+8.83	3.34	0	18	15	7	8	se.	O. K. Benecke
Clifton Hill	Randolph	731	35	65.6	− 3.0	89	1†	36	27	31	9.20	+4.75	2.63	0	11	15	7	8	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	65.2	− 3.0	87	11	38	27	28	8.31	+3.96	3.21	0	16	10	9	11	se.	U. S. Weather Bureau
Downing	Schuyler	876	13	64.0	− 3.6	86	11†	34	27	35	7.64	+2.04	1.76	0	14	12	9	9	s.	James Taylor
Elsberry	Lincoln	449	3	64.8	.....	89	20	38	17†	32	5.50	.....	1.43	0	13	10	6	14	s.	Ray E. Mills
Fayette	Howard	661	54	65.2	− 2.9	93	11	36	27	34	7.66	+2.91	1.40	0	15	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	64.4	− 4.5	88	1†	37	27	34	7.88	+3.59	1.75	0	16	12	6	12	s	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	8.80	+4.14	1.95	0	11	16	7	7	se.	W. L. Harker
Hannibal	Marion	759	42	64.8	− 2.9	87	11†	37	27	33	6.28	+2.31	1.51	0	16	12	4	14	se.	Hannibal Water Dept.
Jefferson City	Cole	557	44	65.5	− 3.8	88	1	39	27	33	9.55	+6.02	1.80	0	15	12	8	10	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	63.8	− 2.5	86	25	34	27	36	8.98	+4.52	2.35	0	11	7	13	10	sw.	Prof. J. S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	8.34	.....	2.25	0	15	14	5	11	e.	J. Robert Hall
Louisiana	Pike	469	40	64.3	− 3.7	88	1†	35	27	35	5.33	+1.25	...	0	14	13	7	10	s.	Stark Bro's Nurseries
Macon	Macon	875	35	63.4	− 4.5	88	11	35	27	36	9.14	+4.84	2.06	0	15	7	10	13	nw.	W. C. Brown
Mexico	Audrain	800	45	63.9	− 4.6	89	11	36	27	35	7.22	+2.62	1.75	0	14	18	1	11	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	6.49	+2.48	1.37	0	13	13	8	9	n.	J. S. Conway
St. Charles	St. Charles	520	46	66.4	− 1.9	90	1	41	27	31	7.42	+4.11	3.07	0	17	9	14	7	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	66.6	− 3.9	91	20	45	27	37	5.86	+2.40	1.27	0	15	9	8	13	s.	**Section Center**
St. Louis University	St. Louis City	578	22	66.2	− 4.0	90	20	44	27	37	5.22	+0.98	1.28	0	15	10	7	13	se.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	8.71	+4.63	1.98	0	16	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	64.0	− 5.0	87	1†	35	27	33	10.30	+5.93	2.65	0	13	13	6	11	n.	Frank Hall
Unionville	Putnam	1,062	41	60.4[g]	− 6.7	..	..	33	27	..	6.91¶	+1.98	....	0	13	..	..	..	.....	John H. Schick
Warrenton	Warren	816	52	65.0	− 4.0	86	1†	38	27	30	7.06	+3.04	1.66	0	15	10	8	12	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	64.4	− 3.1	87	11	38	27	29	6.40	+2.56	1.48	0	15	11	6	13	s.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**64.7**	**− 3.6**	**94**	**1**	**33**	**27**	**37**	**7.82**	**+3.52**	**3.34**	**0**	**14**	**12**	**7**	**11**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	67.9	..	91	20	44	17	34	5.60	.....	2.48	0	12	15	5	10	n.	Jeff. King
Caruthersville	Pemiscot	265	38	71.0	− 3.5	90	20	52	16†	29	5.10	+1.96	1.50	0	9	10	7	13	s.	Sam Smith
Doniphan	Ripley	344	30	67.5	− 3.7	90	1†	43	17†	36	4.18	+0.46	1.78	0	11	14	4	12	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	67.8	− 2.3	90	25	43	17	35	7.89	+4.11	1.56	0	14	10	3	17	n.	John G. Putz
Marble Hill	Bollinger	470	39	68.0	− 2.7	92	20	40	17	36	5.48	+1.74	1.24	0	12	13	8	9	w.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	....	..	..	..	..	..	5.21	+0.45	1.96	0	11	14	9	7	n.	John A. Spence
Poplar Bluff	Butler	329	29	68.2	− 3.5	95	10	45	17	37	4.07	+0.28	1.07	0	11	14	7	9	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	69.5	− 1.6	94	1	45	17	40	5.45	+2.12	1.80	0	13	12	9	9	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill.	356	62	68.6	− 2.9	89	20	52	27	28	6.02	+3.13	1.98	0	13	7	8	15	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**68.6**	**− 2.9**	**95**	**10**	**40**	**17**	**40**	**5.77**	**+1.99**	**3.85**	**0**	**12**	**12**	**7**	**11**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	64.9	− 2.7	86	20	40	17	31	7.87	+4.13	1.39	0	14	19	3	8	s.	Arcadia College
Birchtree (near)	Shannon	1,000	39	65.8	− 4.0	88	14	42	16	34	7.74	+4.11	2.98	0	10	14	4	12	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	10.78	.....	2.68	0	10	15	8	7	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	8.21	.....	2.66	0	10	13	11	6	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	66.4	.....	91	1†	40	17	34	7.46	.....	1.07	0	14	8	6	16	sw.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	30	66.6	− 4.4	91	11	39	16†	40	9.97	+6.04	2.20	0	10	15	9	6	sw.	H. E. Dean
Eldon	Miller	934	39	66.6	− 2.8	91	1	36	27†	43	5.86	+1.77	1.84	0	10	6	14	10	s.	E. H. Shepherd
Farmington	St. Francois	918	23	66.0	− 3.6	89	11	37	17	39	15.09	+11.72	6.47	0	12	17	5	8	sw.	H. O. Miller
Garber	Taney	950	0	67.2	.....	91	11†	40	16	41	6.99	.....	3.55	0	12	12	7	11	e.	William H. Durham
Goodland	Iron	1,000	41	65.4	− 2.4	88	20	37	17	38	8.20	+4.38	1.40	0	13	15	4	11	s.	F. M. Adams
Greenville	Wayne	381	25	65.5	− 5.3	88	20	42	16†	36	6.18	+3.04	1.00	0	12	12	8	10	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	6.71	.....	1.94	0	6	18	7	5	ne.	A. W. Madison
Koshkonong	Oregon	958	33	68.0[b]	− 3.4	90	13	46	16†	..	4.95	+1.27	1.00	0	11	12[b]	3[b]	13[b]	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	65.6	− 3.8	88	11	36	27	39	5.00	+0.75	1.12	0	9	20	2	8	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	66.4	− 4.5	87	11	38	27	31	8.82	+4.26	2.52	0	10	14	10	6	se.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	64.6	− 4.3	87	20	39	27	35	6.20	+1.96	1.84	0	14	14	5	11	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	68.0	− 2.5	92	12	38	27	40	7.10	+2.71	2.26	0	11	15	10	5	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	66.0	− 2.7	85	20	41	27	30	11.17	+7.26	1.77	0	14	9	6	15	se.	F. H. Lane
Salem	Dent	1,173	30	65.8	− 3.4	88	20	40	27	31	10.09	+6.01	2.49	0	14	12	8	10	s.	E. E. Martin
Seligman	Barry	1,542	33	66.3[a]	− 3.3	86	1†	41	27	35	7.85	+3.48	2.09	0	10	14[a]	8[a]	7[a]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	64.0	− 4.8	85	13	38	27	32	7.12	+2.65	1.56	0	11	15	7	8	sw.	A. L. Hailey
Springfield	Greene	1,324	46	65.8	− 3.1	87	11	41	27	31	6.50	+2.98	2.26	0	13	12	9	9	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	66.3	.....	89	11	34	27	32	9.66	.....	2.35	0	11	14	4	12	s.	I. M. Wilson
Division means	**and extremes**	.....	..	**66.1**	**− 3.6**	**92**	**12**	**34**	**27**	**43**	**7.73**	**+3.65**	**6.47**	**0**	**11**	**14**	**7**	**9**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	66.8	− 3.6	90	11	36	27	34	5.18	+1.06	1.36	0	12	11	12	7	sw.	W. G. Bigelow
Clinton	Henry	765	41	66.4	− 4.4	89	1†	35	27	37	5.89	+1.83	1.65	0	11	11	11	8	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	64.2	− 4.3	93	11	35	27	41	7.06	+2.48	1.85	0	11	15	4	11	sw.	John H. Patterson
Lamar	Barton	980	46	65.8	− 5.0	90	12	39	27	36	7.99	+3.47	1.50	0	9	17	3	10	se.	Jesse A. Mann
Lamonte	Pettis	867	33	66.2	− 4.0	92	11	34	27	45	6.60	+1.98	2.65	0	11	16	7	7	sw.	J. E. Wheeler
Marshall	Saline	779	47	66.0	− 2.8	95	1	37	27	35	11.33	+6.19	3.85	0	12	15	13	2	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	66.7	− 2.8	89	11	36	27	34	8.28	+3.98	2.10	0	11	13	3	14	s.	George A. Kaupp
Warrensburg	Johnson	878	47	67.5	− 2.7	91	11	37	27	36	8.64	+4.85	3.80	0	12	13	7	10	sw.	E. A. Markey
Warsaw	Benton	687	33	67.9	− 2.6	90	1†	36	27	34	5.45	+0.73	1.86	0	12	13	5	12	e.	Everett Martin
Division means	**and extremes**	.....	..	**66.4**	**− 3.6**	**95**	**1**	**34**	**27**	**45**	**7.86**	**+3.43**	**3.85**	**0**	**11**	**14**	**7**	**9**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	63.7	− 3.4	90	2	34	27	34	7.86	+3.70	1.54	0	12	13	9	8	e.	A. S. Cumming
Chillicothe	Livingston	779	25	63.2	− 5.4	91	11	34	27	36	9.42	+3.74	1.73	0	13	15	4	11	se.	Wm. J. Olenhouse
Conception	Nodaway	980	45	63.2	− 4.0	92	1	34	27	33	4.93	+0.81	1.31	0	10	8	16	6	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	64.6	− 3.3	93	1	33	27	36	6.15	+2.35	1.81	0	16	16	3	11	e.	Fred L. Stiff
Grant City	Worth	1,134	30	62.9	− 4.1	89	1	32	27	35	4.62	+0.36	1.40	0	11	6	15	9	se.	Howard Rybolt
Kansas City	Jackson	963	45	65.8	− 3.1	92	11	37	27	35	6.44	+1.88	1.67	0	14	10	11	9	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	64.0	− 3.3	90	1	34	27	37	5.82	+1.25	1.42	0	12	10	12	8	s.	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	5.65	+1.03	1.36	0	10	4	20	6	se.	John M. Martin
Lexington	Lafayette	688	49	64.8	− 4.0	90	11	36	27	35	9.39	+4.65	3.06	0	14	12	13	5	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	63.8	− 1.8	89	1	32	27	37	5.00	+0.50	1.39	0	10	8	8	14	se.	R. B. Montgomery
Oregon	Holt	1,048	78	64.8	− 2.3	91	11	35	27	34	7.43	+3.53	3.03	0	12	17	4	9	nw.	Mina Wright
St. Joseph	Buchanan	967	24	63.5	− 5.7	91	11	38	27	31	7.05	+2.11	1.54	0	14	11	7	12	se.	U. S. Weather Bureau
Tarkio	Atchison	916	31	62.2	− 4.1	87	11†	35	27	34	6.79	+2.95	1.95	0	9	10	9	11	se.	Albert Volker
Trenton	Grundy	822	38	64.7	− 2.5	90	11	34	27	35	6.10	+1.57	1.15	0	13	15	8	7	s.	W. H. Estes
Division means	**and extremes**	.....	..	**63.9**	**− 3.6**	**93**	**1**	**32**	**27**	**37**	**6.69**	**+2.24**	**3.06**	**0**	**12**	**11**	**10**	**9**	**se.**	
State means	**and extremes**	.....	..	**65.6**	**− 3.6**	**95**	**1†**	**32**	**27**	**45**	**7.39**	**+3.25**	**6.47**	**0**	**12**	**12**	**8**	**10**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated.

Daily Precipitation for September 1934

Stations	Drainage-basins	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri		.18	.29	.01						.02		.82	1.10	.35	2.37			.21			.45	.18					.16	.37	1.42			7.93
Bowling Green	Mississippi	.14			1.04		.04						.27	.08	.21	.41	.02		.24				.41					.22	.27	2.07			5.42
Brunswick	Grand	.20	1.98	.54	.06		.02				.03		2.80	.46	.09	.98			.14			1.50	.15				.04	.57	.36	3.34	.06		13.32
Canton	Mississippi	.24	.55	.93	.11		.57						.08	.09		1.20			.27			.30	.50					.21		1.28	.04		6.37
Clifton Hill	Chariton	.36	1.13	.43									.94	.48	.37				.01			2.40					.36		2.63	.09			9.20
Columbia***	Missouri	.03	.15	.44		T.	.05				.01	.78	2.43	.65	.16	.03			.54		.22	.17					.17		2.47	.01			8.31
Downing	Mississippi	.69	1.44	.32		.03	.66						.55	.31	.10	.80			.49		T.	1.07					.60		.57	.01			7.64
Edina	do	.41	1.68		.35		.42						.96	.43		1.98			.35			1.40	.43					.71		1.40			10.52
Elsberry	do		.67	.67			.18						.43	.40	.33	.36			.09			.40	T.				.14	.07	.33	1.43			5.50
Farber	do		.40		.18									.42	.68	.30					.26		.23					.22	.11	2.40			5.20
Fayette	Missouri		.28	.14	.05								1.34	.71	.44	1.40			.67			.46	.27				.02	.25	.48	1.14	.01		7.66
Fulton	do		1.02	.16	.05		T.				T.	.02	1.29	.60	.84	.38	.01		.41			.04	.25					.21	.84	1.75	.01		7.88
Gorin	Mississippi	.46	1.95	.22		T.	.40						.35	T.	.65	1.20			.30			1.49					.76		1.02	T.			8.80
Hannibal	do	.13	.80	.68	.42		.46					.01	.14	.50	.01	.56	T		.34			.16	.35		T.			.21	.08	1.43	T.		6.28
Hermann	Missouri		.60	.26	.16		.07	.04				.14	1.30	.79	.99	.95	.12		.20				.15					.39	.71	1.60			8.47
Jefferson City	do		.70	.45	.12		.02					.02	T.	1.80	1.07	1.45	.59		.94			.12	.31						.46	1.50			9.55
Kahoka	Mississippi	2.40	1.75	.20	.10		.60						.23	.02		2.15			.42			1.10	.41					.71		1.00			11.09
Kirksville	do	.44		.36			.42						2.35	.29	.08	1.12						1.70					1.04		1.02	.16			8.98
LaBelle	do	.28	1.55	.72	.12		.60						.30	.35	.10	2.18			.50			1.52	.42					.45		1.50			10.59
Linneus	Grand	.71	2.25	.25	T.		.02				T.	T.	.25	.88	.09	.26			.03			1.31	.07				.12	.27		1.81	.02		8.34
Louisiana	Mississippi	.27	.30	.40			.07				.02		.25	.35	.25	.45		.20				.35					.20		**	2.22			5.33
Lucerne	Grand	.19	.45	1.03	.20		.15						.27	.60		.16			.23			.58	.27		.01		.40			.74			5.28
Macon	Chariton	.03	2.06	.15	.11		.05						.25	.76	.16	1.81			.38			1.38	.25					.32		1.40	.03		9.14
Madison	Mississippi		1.50	.30									1.93	.45		1.16	.13					.61							.26	2.25			8.59
Memphis	do	1.48	2.29	.46	.16		.51						.38	.12		1.05			26			1.11	.20				1.12						9.14
Mexico	do		.13	.14	.04		.07						1.60	1.02	.30	.39			.45			.30	.50				.25	.28	1.75				7.22
Milan	Grand	.18	1.30	.14	.25		.20						.31	2.24	.08	.25						1.15	.23				.34			1.18			7.85
Monroe City	Mississippi	1.01	.36	.43			.16				T.		.18	.80	.13	.76			.32			.54					.28		1.21	.31			6.49
New London	do	.45	1.35	.09	.12			.07					.04	.26	.34	.41	.19						.22					.17		2.97				6.68
Palmyra	do		.64	.42	.18	.11						T.	T.	2.40	.11	.79	.09		.39			.11	.12					.38		1.16	.09			6.99
Paris	do	.03	1.19	.82	.07								1.93	.95	.09	.61			.42			.37	.24					.39	.15	1.92				9.18
Perry	do		.95	.22	.16								.17	.35	.09	.74			.22				.66		.02			.44	.22	1.45				5.63
Philadelphia	do	.05	.25	.05	.97		.36						.28	.54	.05	.98			.76			.99	.12					.54		1.54				7.48
St. Charles	Missouri	.01	3.07	.91	.06		.08	.03				.03	.16	.10	.31	.94	.10		.03				.54					.21	.19	.65				7.42
St. Louis**	Mississippi	1.04	.23	1.22		T.	.23				.18	.09	.13	.43	.25	.12			.01			.68	T.		T.	T.	.14		1.04	.07			5.86
St. Louis University*	do	.96	.32	.82			.24				.15	.03	.15	.26	.54	.09			.03			.52					.16		.88	.07			5.22
Shelbina	do	.10	.85	.44	.25		.11						1.98	.24	.12	1.34			.27			.91	.16					.34	.13	1.46	.01			8.71
Shelbyville	do	.36	.40	.84	.40		.19						1.84	.05	.18	2.10						.83	.53							1.23				8.95
Steffenville	do	.32	1.25	.60		T.	.30						.75	.90	.20	2.65			.27			1.51					.20		1.05	.30			10.30
Troy	do	.04	.66	.18	.16		.13	.02				.01	.21	.64	1.02	.48	.11		.11				.32					.18	.39	1.24				5.90
Union	Meramec		1.57	.89	.08		.18	.06				.02	.69	1.06	.71	1.07	.15		.24				.51					.53	.73	1.16				9.65
Unionville	Chariton	**	**	**		**	2.63						1.12	.15		.36			.22			.90					.49	.13		.91			¶6.91
Valley Park	Meramec		1.37	.67	.34		.20	T				.20	.04	.54	.74	.67	.04		T.	.06		T.	.70					.44	.39	.98	T.		7.38
Warrenton	Mississippi	.95	.71	.21			.23		T.			.02	.80	.93	.36	.47			.09			.27					.21	.05	.38	1.38			7.06
Keokuk, Ia.***	do	.23	1.02	.54		.16	.40					T.		T.	.02	.22	1.26		.04	.17		.10	.60			T		.40		1.20	.04			6.40
Southeast Lowlands																																	
Bragg City	St. Francis				.97			T.				T.	T.		2.10	T.							.64							1.96			5.67
Campbell	do		.10	.37			.28				.03	.22	.32	.25	2.37	.11							.10						.15	1.30			5.60
Cape Girardeau	Mississippi			.30	.52			.28	.05	.01		.82	2.19	.86	.25	.26	.20						.65					.37		1.29	.18			8.23
Caruthersville	do		.38		.05								.15	.27	1.50	.08	.05													1.47	1.15			5.10
Dexter	St. Francis			.60	.40	.16			.11				.50		.58	.31							.20					.07		1.70	.35			4.98
Doniphan	Black		.26	.07			.11					T.	.15	.13	.55	.95	T.					.07						.11	.13	1.65				4.18
Fisk	St. Francis			.07	.90		T.	.31					T.	.19	.07	1.27	.14	.54							T.			.04		1.41	.32			5.26
Jackson	Mississippi		.24	.56			.40	.05				.98	.67	1.56	.94	.55						.62	.05					.33	.08	.86				7.89
Marble Hill	do	.02	.58	.28			.32					1.24	.82	.42	.41	.36						.02						.30		.71				5.48
Morehouse	do		.03	.60			.15					.11	.86	.13	.49	.40							.05					T	.43	1.96				5.21
New Madrid	do			.25	.15			.08	.02				.59	.25	3.05	.80							.18							1.35	.75			7.47
Parma	St. Francis			.04	.27			.14					.48		3.02	.15	.05						.30							1.15	.28			5.88
Poplar Bluff	Black			.32	.41	.02	.16						.37	.25	1.02	.20	.13											.12		1.07	T.			4.07
Sikeston	Mississippi			.50	.28			.19					.95	.10	.45	.60	.02						.25					.05	.01	1.80	.25			5.45
Cairo, Ill.***	do	T.	.04	.42			.06	T.			T.	.16	.55	1.84	.34	.01						.84	.02				T.	.02	.38	1.34	T			6.02
Ozark Plateau																																	
Arcadia	St. Francis		.47	1.02	.17		.18	.01				.51	.58	.76	.53	.85	T.		T.				.25					1.15		1.38	.01			7.87
Birchtree (near)	Black		.55	.65			.15					.61	.34	.40	1.00	2.98												.54		.52				7.74
Buffalo	Osage		1.40	.98	T.							1.54	.65		1.78	.93	.02					.74	.06							2.68				10.78
Caplinger Mills*	do	.26	.67	.32		T						2.66	T.	1.05	.36	T.					.64	.07					T.		2.00	.18				8.21
Crystal City	Mississippi		.14	**	.81		.14					1.04	.88	.48	.64	.90			.10				1.07					.14	.48	.64				7.46
Dean	Neosho	.56	1.56	1.30							.56			T.	2.20	.34						1.27					.06		.26	1.86				9.97
Eldon	Missouri		.42	.30	.15								1.63	.80	.44								.14					.08	.06	1.84				5.86
Farmington	St. Francis	T.	.10	1.25			.30				.10	1.10	6.47	.62	.43							.95				.43			1.57	1.77				15.09
Fredericktown	do		.55	.64	.33		.17					.48	.63	.55	1.13	.39							.06					1.15		1.60				7.68
Galena	White		1.47	1.05							.10	.09		.10	.85	.10	.04					.77	.32					.08						4.97
Garber	do	.43	3.12	.99			.06				.01	T.	.09	.16	.36	.06						.90						.03	T.	.78				6.99
Goodland	Black	.40	.37	.85			.14					1.40	1.35	.49	.51	1.00						.31					.11	.40		.87				8.20
Greenville	St. Francis		.14	.95			.29				.14	.42	1.00	.87	.36	.68												.42	.11	.80				6.18
Hailey	White		1.40	.53											1.94							1.39					.16		1.29				6.71
Koshkonong	Black	.05	.63	.54			.23				.03			.10	.97	1.00						.18				.42			.80				4.95
Lakeside	Osage		1.31	.53	.01			T.			T.	.60	.08	1.32	.92	.40						.10	.09					.04		2.03	T.			7.43
Lebanon	do		1.07	.55			.04					.34			1.12	.45	T.					.30	.09					T.		1.04				5.00
Leeper	Black		.05	.34	.36		T.	.25				.02	.97	.01	1.18	.85	.01						T.				.16	.31		.88	.06			5.45
Lockwood	Osage	.55	.62	1.09							T.	2.52	T.	.34	1.06	.22						.87					.05		1.50				8.82
Mountain Grove	White	.18	1.43	.55			.10		.02			.23	.04	1.49	.35	.17						.43					.24		.04	.93				6.20
Neosho	Neosho	1.03	.60	.58							.42	.03			2.26	.43						.76					.02		.02	.95				7.10
Owensville	Gasconade			.75	.42								.92	.95	1.22	1.50	.17		.57			T.	.27					T	.20	1.22				8.19
Rolla	Meramec		.35	.74	.20		.01	.02				1.77	1.13	1.07	1.77	1.45	.11						.75					.12		1.68				11.17
St. Thomas (near)	Osage		1.12	.52	.02							.43	.47	1.25	1.21	.55			.40										.23	1.80				8.00
Salem	Meramec	.05	.63	.69			.17	.02			.04	2.06	1.56	.56	1.02	1.47						.98					T.	.10		.74				10.09
Seligman	Neosho	.42	1.67	1.61							.29			.13	1.14	.21						1.23						.19		.96				7.85
Seymour (near)	White	.10	1.36	.58			.06				T.	T.		1.04	1.17	.39						.66					.21	.07		1.48				7.12
Springfield***	do	.65	1.43	.95			T.				T.	.10	.53	.76	.13	.09					.49	.31	T.				.27		.50	.29				6.50
Stover	Missouri		.92	.32									.81	.46	.70	1.72						.40							.47	1.70	T.			7.50
Versailles	Osage	.85	.17	.41									1.96	1.21	.49	.84						.47					.08		.83	2.35				9.66
Williamsville	Black		.05	.15	.32			.14				.19	.29	.03	1.40	.67	.09						.02					.31		.88	.05			4.59
Willow Sprgs. (near)	White		.35	1.20	.39		.07					1.92	.12		1.08	.43						.09	1.10					.44		.83	.03			8.05
Southwest Plain																																	
Appleton City	Osage	.25	.54	.50						.02	.10	.04		27	.70	.82						1.36					T.		.40	.18				5.18
Clinton	do	.10		.45							.12	.12		.90	.55	1.65						.80					.10		.25	.85				5.89
Concordia	Missouri																																
Harrisonville	Osage		.38	.38							.25				.55	1.85						1.15	.02				.07	.72	.85	.84				7.06

Continued on next page

Daily Precipitation for September 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																
Joplin ‖‖	Neosho	1.22	.35	.68							.44	.03		1.95	1.16	.30					.75	.20					.03		1.55	.14			8.80
Lamar ‖‖	Neosho		.77	1.03			T.				.25	1.10		T.	1.50	1.00						1.00	.04					T.		1.30		7.99
Lamonte	Missouri		.35	.35							.02		.25	.30	.48	.33						.85					1.00		2.65	.02			6.60
Marshall	do	.74	.67	.50		T.							3.85	.35	.28				.72		T.	1.97					.45		1.47	.14	.19		11.33
Nevada	Osage	.10	.48	.52							.14	.13	2.10		.28	.90	1.54					.94							T.	1.15			8.28
Warrensburg	Missouri	.05	.33	1.27		T.					.11		.03	.50	.60	.71						.90					.33		3.80	.01			8.64
Warsaw ‖‖	Osage		.90	.65	.04							.01	.23		.93	.25						.50	.05				T.	.01	.02	1.86			5.45
Waverly ‖‖	Missouri		1.25	.56	.08						.06		1.13	2.00	.15	.85			.03			1.92	.18				.03	.72	.49	1.82			11.27
Northwest Plateau																																
Bethany	Grand	1.30	.22	1.32									.20	1.27		.33			.07		1.25	.45			T.		.63		.80	.02			7.86
Chillicothe ‖‖	do	1.21	1.73	.21	.03						T.		.86	1.11	.11	.35						1.66	.02	T.			.68		.14	1.31			9.42
Conception	Missouri	1.00	.13	.85		T.					T.			.03		.42			T.		.03	.48				.36	1.31		.32	T.			4.93
Edgerton	do	1.81	.33	.52		.02				.16	.03		.13	.08	.13	.03			.10		.39	.53					.70		1.15	.04			6.15
Gallatin ‖‖	Grand	1.11	.95	.77									.39	1.35	.08	.17			.02			.93					.61			1.24	.02		7.64
Grant City	do	.57	.02	1.40		.01					T.			.34		.81					.05	.17				.39	.58		.28	T.			4.62
Kansas City***	Missouri	.98	.45	.05		T.				.16	.01		.07	.80	.31	.05		T.			1.13	.15					.61	.03	1.64	T.			6.44
Kidder ‖‖	Grand	.53	.82	.28							T.		.10	.97	.18	.05			T.			.76	.16		T.		.45	.10		1.42			5.82
King City*	Missouri	1.36	.05	.79						.03				.93	.60	T.					.48	.33				.44			.64	T			5.65
Lexington ‖‖	do		1.64	.60			.02				.20		.15	.20	.40	.44						1.84	.04				05	.35	.40	3.06			9.39
Maryville ‖‖	do	.97	.02	1.29	.10	T.					.12			.08		.38						.40			T.		1.31			.33	T.		5.00
Oregon	do	3.03	.06	1.14		T.				.05	.45		.05			.49					.09	.23				.12	1.32		.40	T.			7.43
St. Joseph***	do	.76	.47	.58		.01				.32			.82	T.	.53	.02		T.		.02	.69	.17				.42	.79		1.45	T.			7.05
Tarkio	do	.69		1.49							.32				1.60						**	.41				.24	1.71		.33				6.79
Trenton	Grand	1.15	.60	.55			.14			T.			.76	.24	.08	.16		.05			.03	1.10					.43		.81				6.10

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for September 1934

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.280	.120	.115	.107	.202	.216	.158	.193	.160	.219	.194	.150	.178	.059	.052	.112	.151	.168	.170	.208	.153	.068	.117	.110	.229	.247	.099	.126		.067		4.581
	Mean temperature	78	73	64	67	68	67	61	62	66	74	78	71	66	70	60	56	60	67	70	72	58	60	66	75	78	72	54	64	62	60	..	66.6
	Wind movement	60	44	66	94	55	58	61	45	37	68	48	50	44	58	55	76	36	56	35	44	58	79	68	60	63	65	87	38	81	74	..	1,763

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from page 42

MISCELLANEOUS PHENOMENA

Floods.—In Bourbeuse and Meramec rivers on 15th to 19th.

Fog.—Dense, 9th, 11th, 16th, 17th, 19th, 21st, 22d, 23d, 24th, 27th, 28th, 29th.

Frost.—Light, 16th, 17th, 22d, 27th, 29th; heavy, 27th; killing, 27th (locally on low ground at Maryville.)

Halos.—Solar, 26th; lunar, 20th.

Hail.—Light, 10th at Jefferson City, 12th at Rolla and St. Joseph, 13th at Mexico, 20th at Bethany; moderate, 12th at Unionville, 17th at Jefferson City.

Thunderstorms.—Local, 2d, 5th, 6th, 9th, 10th, 14th, 15th, 17th, 18th, 19th, 24th, 25th, 26th, 27th, 29th; more or less general, 1st, 3d, 11th, 12th, 13th, 20th, 21st, 28th.

Windstorms.—On the 29th at 3.45 a. m., a small freakish storm, probably a very small tornado, struck at Springfield, Mo., doing minor damage to roofs and windows of buildings, outbuildings, and trees, estimated at $500. The storm path was limited to three very narrow city blocks and extended from southwest to northeast. (Extract from report by O. I. C. Springfield, Mo.)

ERRATA

August 1934, page 38, greatest precipitation in twenty-four hours at Columbia should be 3.59.

Daily Temperatures for September 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	94	85	81	79	80	75	76	80	84	81	91	85	76	72	72	69	77	79	86	79	77	57	75	88	89	81	66	61	68	70	..	77.8
	Minimum ...	67	69	55	51	58	57	49	50	54	64	62	63	65	64	53	43	46	58	56	64	47	52	48	64	67	47	37	50	58	43	..	55.4
Columbia.	Maximum...	87	83	73	76	84	72	72	76	80	80	87	76	74	72	69	65	73	77	83	81	64	60	73	87	87	72	62	63	65	66	..	74.6
	Minimum ...	70	70	53	51	59	56	51	51	56	62	64	63	64	64	49	42	46	58	59	64	52	52	51	65	68	44	38	53	52	44	..	55.7
Fayette§§	Maximum...	89	85	68	80	78	74	76	80	83	81	93	80	77	71	70	70	77	81	86	80	67	60	75	88	87	64	66	61	69	68	..	76.1
	Minimum ...	67	68	55	50	52	57	50	49	52	63	60	62	65	62	56	40	43	57	54	67	52	50	49	63	64	48	36	50	46	42	..	54.3
Hannibal	Maximum...	86	81	78	75	79	72	72	73	80	81	87	81	74	72	69	66	73	75	83	86	76	58	67	87	87	80	65	59	67	67	..	75.2
	Minimum ...	67	67	54	52	56	55	50	51	53	60	63	63	62	63	52	43	45	54	50	65	51	50	52	54	66	48	37	50	58	42	..	54.4
Jefferson City §§	Maximum...	88	81	65	77	84	72	74	76	79	83	87	78	71	76	69	67	73	79	83	84	58	63	75	86	85	79	65	75	65	67	..	75.5
	Minimum ...	64	69	65	49	52	59	51	51	53	61	64	62	62	62	58	43	44	50	57	61	57	51	50	57	66	69	39	42	53	45	..	55.5
Kirksville.	Maximum...	80	83	81	78	75	70	71	74	78	79	85	78	76	71	69	69	74	77	73	82	79	55	79	85	86	80	65	64	66	69	..	75.0
	Minimum ...	65	66	58	50	53	52	48	49	50	61	61	60	63	62	50	40	45	55	56	51	45	49	50	58	64	44	34	48	55	40	..	52.7
Louisiana	Maximum...	88	83	72	75	80	72	75	77	75	80	88	80	76	72	65	67	70	75	75	85	72	60	65	86	86	70	63	65	68	70	..	74.5
	Minimum ...	53	69	52	52	57	58	57	50	49	60	60	64	63	62	57	40	37	50	57	64	56	50	50	56	65	50	35	45	60	45	..	54.1
Macon§§	Maximum...	85	85	63	78	82	72	73	75	80	79	88	78	80	70	61	67	73	77	82	83	54	58	70	86	86	59	66	60	70	69	..	73.6
	Minimum ...	61	67	63	50	54	54	49	50	51	63	61	63	62	62	52	41	44	49	55	59	48	47	50	50	65	57	35	38	53	41	..	53.1
Mexico §§	Maximum...	88	83	70	77	86	71	73	76	81	84	89	75	76	72	61	65	73	79	83	85	55	57	71	86	88	72	63	63	66	66	..	74.5
	Minimum ...	60	67	65	50	51	55	49	48	53	57	62	60	60	62	55	41	44	48	53	59	52	50	49	54	64	65	36	37	51	41	..	53.3
St. Louis	Maximum...	89	76	70	75	86	71	71	74	76	76	85	78	73	81	69	65	72	75	83	91	77	57	66	86	87	86	66	69	66	65	..	75.4
	Minimum ...	70	69	56	53	58	58	55	56	57	61	67	65	65	65	55	49	53	55	60	64	55	52	55	57	68	49	45	51	59	51	..	57.8
Unionville §§	Maximum...	..	..	..	..	..	..	60	76	80	80	82	77	73	72	59	67	74	79	82	80	53	56	71	84	85	50	65	59	71	50	..	[f]70.2
	Minimum ...	..	..	..	..	..	..	..	54	51	55	61	63	65	61	48	40	44	50	55	58	44	44	50	52	60	47	33	37	51	38	..	[g]50.5
Warrenton	Maximum...	86	77	76	74	83	75	69	72	78	77	82	81	70	76	74	63	72	75	82	86	76	57	69	84	85	81	61	71	64	62	..	74.6
	Minimum ...	68	67	56	51	58	57	51	51	55	60	66	62	65	62	54	43	47	52	57	64	54	51	50	57	65	51	38	50	59	44	..	55.5
Southeast Lowlands																																	
Campbell	Maximum...	90	81	81	76	84	71	71	73	79	88	86	86	85	89	76	70	73	79	87	91	82	71	77	87	85	84	73	71	70	63	..	79.3
	Minimum ...	67	68	61	51	50	55	55	50	48	56	66	62	64	63	60	47	44	45	57	60	63	54	56	57	60	63	52	49	61	50	..	56.5
Caruthersville	Maximum...	88	76	81	78	83	76	73	72	80	89	87	88	86	88	82	70	74	80	84	90	86	78	76	88	88	87	79	78	74	68	..	80.9
	Minimum ...	68	67	66	54	54	59	58	54	55	64	70	66	66	65	67	52	52	54	63	64	67	58	59	62	67	68	55	55	63	57	..	61.0
Doniphan	Maximum...	90	85	75	78	85	73	75	80	80	88	80	84	89	85	76	70	70	71	85	90	80	70	72	89	89	86	75	69	72	70	..	79.4
	Minimum ...	54	68	63	48	50	57	53	51	49	58	58	66	63	63	60	47	43	43	56	57	59	50	57	59	60	62	50	47	64	52	..	55.6
Jackson	Maximum...	89	82	78	77	84	77	70	73	80	87	82	80	84	87	71	68	74	78	86	89	81	74	72	83	90	86	79	70	71	65	..	78.9
	Minimum ...	69	66	65	50	49	60	58	57	48	56	65	62	65	65	59	47	43	47	54	59	65	52	51	54	63	66	47	45	63	53	..	56.8
Poplar Bluff	Maximum...	88	75	76	78	81	67	74	79	82	95	85	84	85	84	75	72	75	75	84	89	81	72	74	87	88	86	64	68	71	71	..	78.8
	Minimum ...	53	67	60	51	51	57	51	51	50	58	69	64	68	66	70	58	45	56	62	64	66	56	58	58	59	53	50	48	60	52	..	57.7
Sikeston	Maximum...	94	91	80	76	84	82	70	70	82	89	86	81	87	88	77	68	74	81	85	92	89	80	76	89	90	88	87	74	71	66	..	81.6
	Minimum ...	54	60	65	51	52	57	58	51	50	57	68	64	66	65	66	47	45	49	57	64	65	54	51	57	64	66	51	50	63	54	..	57.4
Cairo, Ill	Maximum...	86	76	78	74	81	69	69	66	77	86	78	80	85	87	80	67	71	78	84	89	81	62	70	86	88	85	64	73	72	63	..	76.8
	Minimum ...	70	68	60	55	57	61	60	57	54	64	68	66	68	67	58	52	52	57	64	68	62	56	58	58	69	60	52	55	62	54	..	60.4
Ozark Plateau																																	
Arcadia §§	Maximum...	85	67	71	72	80	67	71	71	75	79	83	73	67	80	70	66	70	72	81	86	76	66	70	83	84	82	65	71	81	61	..	74.2
	Minimum ...	66	67	65	50	53	60	56	54	49	55	65	61	62	63	65	46	40	46	50	55	64	51	52	55	60	63	45	45	54	50	..	55.6
Birchtree	Maximum...	84	81	71	75	81	78	71	76	80	79	87	81	82	88	76	67	73	77	86	87	79	65	71	85	84	83	73	71	68	66	..	77.5
	Minimum ...	61	59	56	47	50	57	51	48	51	54	58	61	62	68	55	42	43	49	57	59	57	51	54	51	63	61	44	47	61	48	..	54.2
Crystal City §§	Maximum...	91	77	73	78	82	68	73	75	79	81	86	73	76	84	70	67	72	79	85	91	81	62	70	88	88	87	66	75	68	67	..	77.1
	Minimum ...	69	68	66	49	49	62	57	51	49	55	66	62	62	64	67	42	40	47	51	57	64	54	48	55	59	66	42	44	53	49	..	55.6
Eldon §§	Maximum...	91	79	84	79	85	78	74	77	83	84	89	85	84	75	63	67	77	81	87	84	76	70	77	88	85	78	68	79	67	81	..	79.2
	Minimum ...	61	69	65	51	51	59	47	48	48	55	66	64	62	63	59	42	43	44	56	56	57	51	50	55	64	65	36	36	52	45	..	54.0
Farmington	Maximum...	80	82	74	76	87	77	80	79	77	87	89	76	84	75	66	73	74	79	80	83	88	70	70	87	84	85	74	77	69	75	..	78.6
	Minimum ...	60	65	57	47	48	55	47	46	48	48	67	62	62	65	52	41	37	49	51	55	62	55	48	54	55	55	49	48	60	50	..	53.3
Garber	Maximum...	90	79	78	79	85	79	74	77	81	84	91	91	91	79	71	70	82	85	89	91	81	62	77	87	87	84	70	77	76	71	..	80.6
	Minimum ...	63	67	58	46	49	59	47	44	47	61	65	64	60	65	56	40	41	52	53	54	53	50	53	64	52	56	41	49	62	46	..	53.9
Koshkonong	Maximum...	88	81	71	72	82	74	71	76	79	79	87	87	90	83	71	69	71	77	84	88	78	71	71	89	85	..	..	84	70	65	..	[b]78.3
	Minimum...	69	66	58	50	56	59	52	52	54	61	68	64	69	64	56	46	48	54	58	63	59	51	55	61	66	..	..	46	60	49	..	[b]57.6
Lebanon §§	Maximum...	87	76	78	78	83	72	72	76	78	83	88	75	83	75	63	68	70	83	86	87	64	67	77	85	86	80	70	78	69	66	..	76.8
	Minimum ...	66	67	63	49	51	56	45	45	54	61	65	64	69	64	56	46	48	54	58	63	59	51	55	61	66	..	..	46	60	49	..	[b]57.6
Mountain Grove	Maximum...	82	72	71	74	81	70	74	75	76	81	86	80	86	81	67	70	71	77	82	87	68	64	70	82	83	82	70	73	70	69	..	75.8
	Minimum ...	67	65	51	46	54	55	48	45	52	60	65	61	62	61	48	42	46	54	55	64	49	46	51	61	63	47	39	49	54	45	..	53.5
Neosho	Maximum...	90	84	84	79	86	84	75	79	82	80	90	92	89	80	74	70	80	84	89	89	83	68	84	88	85	83	71	77	75	70	..	81.5
	Minimum ...	65	65	55	45	55	60	43	43	51	63	69	63	68	63	52	39	40	57	52	61	48	49	55	66	62	48	38	53	60	44	..	54.4
Rolla	Maximum...	84	75	73	74	81	76	70	71	75	80	84	81	80	75	69	64	70	77	81	85	81	64	72	81	84	83	63	73	70	64	..	75.3
	Minimum ...	62	62	56	50	58	60	50	51	53	63	66	63	64	61	61	45	45	56	57	66	54	49	52	63	67	53	41	51	62	61	..	56.7
Springfield	Maximum...	85	74	71	75	81	70	68	74	77	80	87	85	85	74	67	67	74	80	84	86	65	63	73	83	84	76	68	75	68	65	..	75.5
	Minimum ...	68	67	54	49	58	55	50	51	58	65	63	65	63	63	50	46	51	60	60	62	48	46	53	65	67	45	41	58	56	46	..	56.0
Southwest Plain																																	
Appleton City	Maximum...	87	81	77	82	86	74	75	78	82	79	90	80	75	67	65	69	78	83	88	82	73	67	81	87	86	78	68	74	70	66	..	77.6
	Minimum ...	70	67	54	48	56	58	50	50	56	62	66	72	65	63	52	44	48	57	57	65	47	49	53	66	66	45	36	56	58	43	..	56.0
Clinton	Maximum...	89	79	77	82	86	78	76	80	84	80	89	82	75	68	68	72	74	80	84	82	70	65	76	86	87	80	72	75	70	73	..	78.0
	Minimum ...	69	67	55	52	58	57	49	45	52	56	64	68	65	61	48	42	45	56	57	60	48	50	50	64	64	48	35	52	60	43	..	54.7
Harrisonville §§	Maximum...	87	88	62	85	90	77	77	82	86	82	93	83	74	69	67	70	79	84	88	83	51	65	82	88	88	50	62	72	72	71	..	76.9
	Minimum ...	69	66	52	46	49	52	46	49	54	60	62	64	67	61	49	40	41	47	55	59	44	43	47	52	64	45	35	36	52	40	..	51.5
Lamar §§	Maximum...	86	82	63	80	86	74	76	79	84	78	88	90	87	70	64	69	78	82	87	86	51	66	83	87	86	59	72	76	67	68	..	76.8
	Minimum ...	70	69	56	50	50	58	49	48	50	58	65	68	68	64	55	44	48	49	55	57	50	47	50	57	67	59	39	40	55	45	..	54.7
Lamonte	Maximum...	88	85	75	83	86	77	75	80	86	86	92	85	83	70	66	71	81	83	91	82	74	71	84	89	90	88	65	73	71	72	..	80.1
	Minimum ...	68	68	51	49	50	45	48	46	45	46	64	64	64	63	46	40	46	57	56	50	48	49	49	64	64	43	34	51	53	52	..	52.4
Marshall	Maximum...	95	82	70	77	84	78	72	76	79	79	89	88	80	72	66	64	74	78	85	81	76	61	75	87	87	82	64	65	67	67	..	76.7
	Minimum ...	68	66	55	51	59	57	48	50	55	66	63	62	66	63	52	43	48	58	58	56	47	51	49	65	67	47	37	52	58	44	..	55.4
Nevada	Maximum...	87	82	80	82	84	78	76	79	84	78	89	85	82	69	66	67	77	80	86	82	75	66	81	86	85	77	69	74	71	66	..	78.1
	Minimum ...	70	68	54	48	59	61	47	47	57	63	67	69	65	62	52	42	50	58	53	66	45	46	54	56	56	45	36	55	59	49	..	55.3
Warrensburg	Maximum...	89	84	77	82	86	80	75	84	87	81	91	87	77	70	65	71	80	83	89	82	82	66	84	89	87	78	64	70	70	70	..	79.3
	Minimum ...	69	68	54	50	58	56	50	48	56	64	65	66	66	63	52	43	48	58	58	67	46	48	51	66	67	45	37	51	57	43	..	55.7
Warsaw	Maximum...	90	79	78	82	87	79	77	80	85	82	90	86	80	70	68	70	78	84	88	83	78	67	82	88	89	81	69	80	70	73	..	79.8
	Minimum ...	69	69	55	50	58	59	47	46	54	65	67	65	65	64	53	42	45	60	55	60	50	51	52	67	68	48	36	54	60	45	..	56.0
Northwest Plateau																																	
Chillicothe §§	Maximum...	74	85	64	81	78	71	74	77	83	85	91	82	74	71	65	71	78	79	86	75	54	60	76	88	87	50	68	60	70	72	..	74.3
	Minimum ...	63	66	53	47	54	52	46	46	51	63	61	62	62	63	50	39	43	54	55	62	45	45	47	52	64	46	34	41	54	40	..	52.0
Grant City	Maximum...	89	83	78	77	77	72	72	75	82	75	83	81	78	73	71	70	76	78	82	76	53	62	74	82	80	70	67	63	67	63	..	74.3
	Minimum ...	64	66	52	46	53	50	45	45	57	64	55	67	64	62	47	37	42	52	54	51	42	39	49	66	65	41	32	49	52	37	..	51.5
Kansas City	Maximum...	80	88	63	82	85	70	74	80	84	83	92	86	76	69	66	72	80	79	90	78	51	66	83	88	88	75	65	65	71	74	..	76.8
	Minimum ...	70	63	54	51	58	53	48	50	61	65	67	69	65	65	48	40	52	57	55	50	45	43	52	69	72	42	37	54	50	43	..	54.9
Kidder	Maximum...	90	84	79	79	77	71	72	76	83	81	89	87	76	71	67	69	78	76	86	78	57	62	76	86	87	79	66	61	70	68	..	76.0
	Minimum ...	64	65	51	47	55	49	45	47	53	64	60	63	60	62	47	40	44	51	56	54	42	47	47	64	64	42	34	47	52	40	..	51.9
Lexington §§	Maximum...	84	85	62	81	85	73	76	80	86	82	90	84	77	71	65	70	79	82	89	82	52	64	82	88	89	49	65	61	71	72	..	75.9
	Minimum ...	67	69	55	50	53	55	48	50	54	61	65	66	64	64	52	42	44	50	57	61	46	46	50	53	67	49	36	38	54	44	..	53.7
Maryville	Maximum...	89	82	77	82	78	71	73	76	82	80	86	83	79	78	72	71	77	80	86	79	54	62	74	87	82	69	69	63	65	71	..	75.9
	Minimum ...	64	65	56	45	59	47	47	47	56	60	55	68	65	61	45	37	48	51	56	49	41	39	48	65	67	39	32	48	51	38	..	51.6
Oregon	Maximum...	74	82	75	81	80	73	77	80	84	79	91	84	84	77	68	75	80	83	89	79	53	70	80	90	81	72	69	63	64	74	..	77.0
	Minimum ...	63	65	50	49	58	49	45	49	55	59	60	66	65	62	44	42	50	56	57	51	41	41	49	66	68	38	35	49	51	41	..	52.5
St. Joseph..	Maximum...	72	83	64	82	78	70	74	78	83	81	91	83	78	73	62	71	79	79	87	76	52	64	80	87	80	51	68	62	67	72	..	74.2
	Minimum ...	65	60	52	51	58	51	47	51	59	63	60	65	66	62	48	41	51	55	59	46	43	40	51	68	50	40	38	54	47	43	..	52.8
Trenton	Maximum...	80	81	75	76	73	68	69	74	78	83	90	85	80	73	70	67	73	79	87	85	60	61	71	85	86	80	60	65	73	78	..	75.5
	Minimum ...	65	66	55	50	59	49	48	48	58	64	60	64	60	63	49	39	45	55	52	60	45	50	48	64	65	45	34	49	57	50	..	53.9

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 10-22-34—945.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII OCTOBER 1934 No. 10

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GENERAL SUMMARY

Abundant sunshine and mild temperatures were the outstanding features of the month. Skies were almost continuously clear during the first two weeks. Rain fell on only four days, on the average for the State. Yet, the month was marked by local storms in parts of the State on the 23d and 24th, with a tornado at Maryville on the 23d (see special article).

It was one of the warmest Octobers of recent years, with an average temperature 3.7 degrees above normal, but no extremely high temperatures were registered. The only period of markedly subnormal temperatures was that of the 27-30th, during which the first killing frosts of the season occurred over most of the State. Considerable portions of the southeastern quarter did not have killing frost during October. The first frost came somewhat later than usual. Frost damage was slight, as most crops subject to frost damage had matured.

Precipitation was considerably less than normal over most of the State, but near normal over some southwestern areas. Towards the end of the month rain was beginning to be needed for subsoil moisture, although the top soil moisture was sufficient for current needs of vegetation. Practically all of the rain came in two periods, viz., 17-20th and the 24th.

Weather conditions were quite favorable for out-door work, harvesting crops, plowing, etc., and farm operations were kept well up as a rule. Fall crops did well and thrived later than usual, owing to the copious rains of September and the mild October. Some reports indicated the finest fall crops of vegetables and forage in the last several years. Wheat, rye, barley, and grasses made very good progress. Some wheat was said to be too rank in growth, considering danger from later freezing.

Rivers and smaller streams were unusually low, but not quite so low, as compared with normal stages, as they were during preceding months.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 61.1°, or 3.7° above normal. The highest monthly mean was 65.1° at Caruthersville, and the lowest monthly mean was 58.0° at Grant City. The highest temperature recorded was 90° at Tarkio on the 8th, and the lowest was 24° at Edgerton and Grant City on the 28th. The greatest daily range was 56° at Greenville on the 31st.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 2.45 inches, or 0.40 inch less than normal. The greatest local monthly amount was 5.51 inches at Stover, and the least local monthly amount was 0.65 inch at Linneus. The greatest amount in any twenty-four hours was 4.68 inches at Lamar on the 17-18th. The average number of days with 0.01 inch or more of precipitation was 4. There was no snowfall reported anywhere in the State.

MISCELLANEOUS PHENOMENA

Duststorms.—Locally on 16th.

Fog.—Dense, 6th, 7th, 11th, 18th, 19th, 22d, 30th.

Frost.—Light, 15th, 22d, 27th, 28th, 29th; heavy, 28th, 29th, 31st; killing, generally on the 28th except in some southeastern portions.

Halos.—Solar, 2d, 3d, 9th, 13th, 14th, 15th, 17th, 29th, 30th, 31st; lunar, 14th, 22d.

Hail.—Light, on 24th in west St. Louis and in St. Louis County; moderate on 31st at Jackson and in Bollinger County; heavy, on 24th at Garber and on 31st at Greenville and Cairo, Ill. No damage reported in the State.

(Continued on page 50)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.08	30.49	27	29.65	20	7.4	27	n.	27	82	49	57	74
Kansas City...	30.05	30.56	27	29.63	20	8.5	27	sw.	16	82	45	55	75
St. Joseph.....	30.04	30.55	27	29.60	20	7.7	29	w.	20	78	46	54	79
St. Louis....	30.07	30.45	28	29.71	20	10.9	32	n.	27	74	46	54	76
Springfield....	30.08	30.47	27	29.73	31	8.5	25	n.	27	75	46	55	76
Cairo, Ill.....	30.08	30.45	28	29.63	31	6.8	33	nw.	24	84	47	59	81
Keokuk, Iowa.	30.08	30.50	27	29.60	20	7.3	23	sw.	20	77	49	57	75

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	53.6	− 3.8	89	24	2.65	−0.20	5.07	0.57	....	6	..	..	.
1889....	53.8	− 3.6	91	22	2.50	−0.35	6.03	0.73	....	5	..	..	..
1890....	54.8	− 2.6	91	20	2.24	−0.61	5.19	0.40	....	7	..	..	..
1891....	55.7	− 1.7	92	20	1.11	−1.74	1.98	0.30	....	5	..	..	..
1892....	57.5	+ 0.1	95	16	2.28	−0.57	5.15	0.21	0	5	16	7	8
1893....	56.7	− 0.7	95	16	0.99	−1.86	6.26	0.00	....	3	20	8	3
1894....	57.6	+ 0.2	94	18	1.74	−1.11	5.18	0.45	T.	6	17	8	6
1895....	51.2	− 6.2	89	14	0.35	−2.50	1.56	0.00	T.	2	21	6	4
1896....	54.1	− 3.3	90	19	2.48	−0.37	4.51	1.20	0	5	19	6	6
1897....	62.5	+ 5.1	99	23	0.71	−2.14	1.84	0.00	0	3	22	6	3
1898....	53.5	− 3.9	95	19	4.23	+1.38	8.73	2.22	1.4	8	11	7	13
1899....	62.4	+ 5.0	100	24	2.93	+0.08	6.33	0.47	0	5	20	6	5
1900....	62.4	+ 5.0	92	25	4.18	+1.33	8.38	1.33	0	7	17	7	7
1901....	60.1	+ 2.7	96	24	1.64	−1.21	3.93	0.47	0	6	18	8	5
1902....	59.5	+ 2.1	88	23	2.52	−0.33	4.72	0.87	0	5	21	5	5
1903....	57.3	− 0.1	90	19	2.85	0.00	6.38	1.11	0	6	19	6	6
1904....	57.6	+ 0.2	90	19	0.90	−1.95	2.20	T.	0	3	20	7	4
1905....	55.1	− 2.3	90	20	4.64	+1.79	10.81	1.24	0.3	10	15	7	9
1906....	56.3	− 1.1	94	17	0.87	−1.98	2.99	0.19	0	5	17	6	8
1907....	56.7	− 0.7	94	18	2.90	+0.05	6.44	0.99	0	7	17	6	8
1908....	56.3	− 1.1	92	21	2.74	−0.11	9.33	0.00	0.8	5	18	6	7
1909....	57.2	− 0.2	96	20	2.77	−0.08	6.69	0.37	T.	6	19	5	7
1910....	59.4	+ 2.0	94	15	2.71	−0.14	14.03	T.	0	5	22	4	5
1911....	56.9	− 0.5	96	25	3.30	+0.45	7.47	0.30	0.2	8	11	7	13
1912....	59.1	+ 1.7	97	21	3.83	+0.98	8.67	2.09	0.7	6	20	5	6
1913....	54.7	− 2.7	93	11	4.46	+1.61	8.84	0.63	3.3	9	15	6	10
1914....	59.2	+ 1.8	88	19	4.54	+1.69	10.68	1.20	0	7	14	6	11
1915....	59.3	+ 2.4	95	22	1.19	−1.66	3.05	0.10	0	3	23	5	3
1916....	58.0	+ 0.6	95	20	2.17	−0.68	4.86	0.48	0.3	6	18	5	8
1917....	49.8	− 7.6	93	12	1.16	−1.69	2.50	0.04	0.2	6	16	8	7
1918....	60.6	+ 3.2	95	28	3.37	+0.52	7.95	0.80	0	7	14	6	11
1919....	58.4	+ 1.0	98	17	6.74	+3.89	14.87	1.15	0	11	10	7	14
1920....	61.3	+ 3.9	93	18	2.89	+0.04	6.09	0.90	T.	7	17	6	8
1921....	57.9	+ 0.5	92	24	2.19	−0.66	5.28	0.36	0	5	21	5	5
1922....	59.9	+ 2.5	97	18	2.00	−0.85	5.12	0.51	0	5	20	6	6
1923....	53.0	− 4.4	89	17	3.39	+0.54	9.54	0.94	0.1	9	15	5	11
1924....	61.8	+ 4.4	92	21	1.22	−1.63	4.17	0.00	0	4	22	5	4
1925....	48.6	− 8.8	92	− 3	4.85	+2.00	11.44	1.56	2.4	10	8	8	15
1926....	57.3	− 0.1	93	21	4.67	+1.82	8.66	1.35	0	9	14	6	11
1927....	60.9	+ 3.5	93	26	4.72	+1.87	10.59	1.49	0	5	22	5	4
1928....	60.9	+ 3.5	94	22	3.83	+0.98	8.97	0.79	0	8	15	8	8
1929....	57.2	− 0.2	91	23	5.54	+2.69	8.58	0.90	T.	10	15	6	10
1930....	55.3	− 2.1	92	11	3.06	+0.21	7.09	0.48	T.	6	16	6	9
1931....	61.7	+ 4.3	95	27	3.45	+0.60	6.82	0.99	0	8	15	7	9
1932....	55.7	− 1.7	90	22	3.45	+0.60	7.32	0.99	0	5	18	5	8
1933....	56.4	− 1.0	86	23	2.68	−0.17	6.59	0.74	0	7	17	8	6
1934....	61.1	+ 3.7	90	24	2.45	−0.40	5.51	0.65	0	4	22	5	4
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	57.4	.....	100	− 3	2.85	.....	14.87	0.00	0.2	6	17	6	8

Climatological Data for October 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	62.2	+ 6.9	86	12	29	28	37	1.28	−1.64	0.60	0	5	20	7	4	se.	O. K. Benecke
Clifton Hill	Randolph	731	35	60.6	+ 3.9	86	12	29	30	34	2.00	−0.56	1.28	0	5	21	3	7	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	61.0	+ 4.4	82	26	29	28	34	2.57	−0.04	1.14	0	6	17	9	5	s.	U. S. Weather Bureau
Downing	Schuyler	876	13	58.4	+ 2.5	82	8	27	28	33	2.39	−0.46	1.73	0	5	22	4	5	sw	James Taylor
Elsberry	Lincoln	449	3	58.2	.....	82	10†	25	28	41	2.16	.....	1.83	0	4	23	2	6	se.	Ray E. Mills
Fayette	Howard	661	54	60.4	+ 4.0	87	12	29	28	42	2.15	−0.53	0.61	0	5	..	..	..	.....	J. D. Settle
Fulton	Callaway	818	46	60.4	+ 3.0	87	12	28	28	40	1.45	−1.64	0.93	0	4	23	2	6	n.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	3.11	+0.31	2.41	0	3	24	4	3	se.	W. L. Harker
Hannibal	Marion	759	42	60.6[b]	+ 4.6	82	16	..	..	32	2.05	−0.34	1.21	0	4	20	5	6	se.	Hannibal Water Dept.
Jefferson City	Cole	557	44	61.6	+ 4.8	83	12†	30	28	36	3.41	+0.62	1.70	0	6	25	4	2	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	58.9	+ 4.2	82	8†	26	28	39	3.20	+0.22	2.64	0	3	21	7	3	sw.	Prof. J S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	0.65	.....	0.31	0	3	23	4	4	sw.	J. Robert Hall
Louisiana	Pike	469	40	58.9	+ 2.7	80	8†	27	28	38	1.74	−1.15	1.15	0	3	21	6	4	e.	Stark Bro's Nurseries
Macon	Macon	875	35	59.4	+ 3.1	84	12	28	28	32	1.63	−1.37	1.06	0	4	23	2	6	w.	W. C. Brown
Mexico	Audrain	800	45	58.5	+ 2.2	83	12	29	28†	37	1.37	−1.30	0.70	0	5	27	2	2	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	1.85	−0.83	0.98	0	4	17	9	5	n.	J. S. Conway
St. Charles	St. Charles	520	46	60.7	+ 2.5	85	23	30	28	38	2.83	+0.11	2.19	0	5	23	4	4	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	63.2	+ 4.4	82	23	36	28	30	2.23	−0.49	1.73	0	6	21	4	6	s.	**Section Center**
St. Louis University	St. Louis City	578	22	62.1	+ 3.2	81	10†	34	28	32	1.84	−1.51	1.24	0	6	24	3	4	w.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	2.20	−0.70	0.93	0	4	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	36	58.4	+ 1.0	81	16	27	28	32	2.35	−0.09	1.10	0	4	21	4	6	s.	Frank Hall
Unionville	Putnam	1,062	41	57.8[b]	+ 2.6	85	12	25	28	33	2.16	−0.67	1.48	0	3	24	0	7	s.	John H. Schick
Warrenton	Warren	816	52	61.0	+ 5.0	81	22†	30	28	32	3.27	+0.27	2.43	0	6	18	8	5	se.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	59.1	+ 3.7	82	8	29	28	29	1.93	−0.33	1.37	0	3	20	4	7	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**60.1**	**+ 3.6**	**87**	**12**	**25**	**28**	**42**	**2.25**	**−0.58**	**2.64**	**0**	**4**	**22**	**4**	**5**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	61.8	.....	87	31	30	28	50	1.01	.....	0.88	0	2	25	1	5	s.	Jeff. King
Caruthersville	Pemiscot	265	38	65.1	+ 2.9	85	23†	35	28	36	0.78	−2.32	0.70	0	3	24	6	1	n.	Sam Smith
Doniphan	Ripley	344	30	61.8	+ 3.3	88	23	29	28	49	1.36	−1.76	0.90	0	4	22	4	5	s.	W. W. Martin
Jackson	Cape Girardeau	428	43	61.2	+ 3.3	84	10†	29	28	42	3.07	−0.17	1.08	0	6	18	6	7	n.	John G. Putz
Marble Hill	Bollinger	470	39	61.4	+ 3.2	88	12†	29	31	45	3.55	+0.63	1.81	0	5	22	2	7	n.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	2.51	−1.01	1.23	0	4	23	5	3	n.	John A. Spence
Poplar Bluff	Butler	339	29	63.8	+ 3.7	88	12	30	28	44	2.35	−0.79	1.08	0	5	25	4	2	s.	Mrs. J. H. Wolpers
Sikeston	Scott.	318	27	63.8	+ 4.5	87	22	29	28	41	3.76	+0.94	1.64	0	5	23	4	4	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	62	63.7	+ 3.3	84	12	36	28	33	2.68	−0.08	1.08	0	5	18	5	8	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**62.8**	**+ 3.5**	**88**	**12†**	**29**	**28†**	**50**	**2.07**	**−0.95**	**1.81**	**0**	**4**	**22**	**4**	**5**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	53	59.2	+ 3.2	88	31	27	28	55	3.02	−0.10	1.25	0	5	25	5	1	n.	Arcadia College
Birchtree (near)	Shannon	1,000	39	62.2	+ 3.8	85	9†	27	28	39	1.60	−1.39	1.32	0	3	26	1	4	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	1.92	.....	1.17	0	4	26	3	2	.....	C. M McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	3.66	.....	2.46	0	4	22	8	1	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	59.6	.....	86	23	27	28	45	1.40	.....	1.14	0	3	20	7	4	s.	Pittsburgh Plate Glass Co.
Dean †‡	McDonald	1,000	30	61.6	+ 2.9	84	12†	27	28	41	3.58	−0.23	1.96	0	3	23	3	5	se.	H. E. Dean
Eldon	Miller	934	39	61.4	+ 4.0	85	12†	28	28	37	4.20	+0.94	2.90	0	6	21	7	3	s.	E. H. Shepherd
Farmington	St. Francois	918	23	59.2	+ 2.4	85	12	25	28	50	1.03	−1.91	0.45	0	3	27	2	2	s.	H. O. Miller
Garber	Taney	950	0	61.8	.....	89	24	29	28	44	2.61	.....	1.96	0	5	18	4	9	e.	William H. Durham
Goodland	Iron	1,000	41	59.4	+ 3.5	86	22	25	28	46	3.49	+0.10	1.18	0	5	22	6	3	s.	F. M. Adams
Greenville	Wayne	381	25	59.5	+ 1.9	89	22	25	28	56	2.74	−0.13	1.05	0	5	23	4	4	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	1.66	.....	0.75	0	3	24	3	4	ne.	A. W. Madison
Koshkonong	Oregon	958	33	63.3	+ 3.7	84	31	33	28	35	1.43	−1.76	0.58	0	4	21	6	4	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	61.7	+ 4.0	84	23	27	28	40	1.98	−1.35	1.11	0	3	24	4	3	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	62.6	+ 3.9	82	19	32	28	31	5.17	+1.65	2.65	0	5	26	3	2	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,468	33	61.5[a]	+ 3.9	84	23	27	28	36	2.29	−0.96	1.87	0	5	25	3	3	w.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	62.4	+ 3.2	84	19	27	28	40	1.92	−1.56	0.78	0	5	22	5	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	61.5	+ 5.0	83	28	31	28	33	3.62	+0.57	1.77	0	4	17	6	8	se.	F. H. Lane
Salem	Dent	1,173	30	60.6[a]	+ 3.0	84	22	26	28	38	2.37	−1.36	1.13	0	6	22	4	5	s.	E. E. Martin
Seligman	Barry	1,542	33	62.8[a]	+ 3.8	86	31	32	28	35	2.80	−0.85	2.00	0	3	19[b]	7[b]	3[b]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	28	60.2	+ 2.8	81	23	28	28	37	2.91	−0.39	2.77	0	5	24	4	3	sw.	A. L. Hailey
Springfield	Greene	1,324	46	63.3	+ 5.1	83	23	34	28	36	1.30	−1.75	0.90	0	4	20	8	3	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	63.3	.....	88	12	29	28	38	5.43	.....	2.28	0	6	21	6	4	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**61.4**	**+ 3.5**	**89**	**22†**	**25**	**28**	**56**	**2.75**	**−0.72**	**3.67**	**0**	**4**	**22**	**5**	**4**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	62.4	+ 3.5	84	12	32	28	33	4.31	+1.74	2.20	0	5	17	11	3	sw.	W. G. Bigelow
Clinton	Henry	765	41	61.8	+ 0.3	89	13	30	28	35	2.90	−0.15	1.45	0	5	18	9	4	se.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	60.9	+ 4.8	86	12	29	28	36	2.08	−0.75	1.16	0	5	24	3	4	sw.	John H. Patterson
Lamar	Barton	980	46	63.0	+ 4.1	84	12†	31	28†	42	4.93	+1.77	4.68	0	4	23	4	4	se.	Jesse A. Mann
Lamonte	Pettis	867	33	62.0	+ 4.0	88	12	26	28	37	2.94	+0.26	1.22	0	5	23	5	3	sw.	J. E. Wheeler
Marshall	Saline	779	47	61.6	+ 5.0	84	12	30	28	33	1.18	−1.68	0.74	0	4	23	6	2	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	62.8	+ 5.2	82	12†	30	28	33	3.97	+0.98	3.19	0	4	20	5	6	s.	George A. Kaupp
Warrensburg	Johnson	878	47	63.2	+ 5.2	87	12	31	28	31	3.77	+1.05	2.23	0	5	24	2	5	sw.	E. A. Markey
Warsaw	Benton	687	33	63.5	+ 4.5	85	12	29	28	39	3.43	−0.04	1.16	0	6	24	2	5	s.	Everett Martin
Division means	**and extremes**	.....	..	**62.4**	**+ 4.1**	**89**	**13**	**26**	**28**	**42**	**2.99**	**−0.01**	**4.68**	**0**	**5**	**22**	**5**	**4**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	59.7	+ 4.9	87	12	25	28	39	2.57	+0.12	1.27	0	5	22	6	3	sw.	A. S. Cumming
Chillicothe	Livingston	779	25	58.6	+ 1.8	89	2	25	28	42	1.51	−2.22	0.71	0	4	23	4	4	se.	Wm. J. Olenhouse
Conception	Nodaway	980	45	59.0	+ 3.6	86	8	28	28	33	2.52	−0.18	1.66	0	4	16	11	4	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	61.1[a]	+ 4.8	87	12	24	28	41	1.85	−0.80	0.80	0	5	24	1	6	s.	Fred L. Stiff
Grant City	Worth	1,134	30	58.0	+ 2.9	84	8	24	28	39	2.87	+0.05	2.32	0	3	18	8	5	sw.	Howard Rybolt
Kansas City	Jackson	963	45	63.0	+ 5.3	87	8	31	30	36	1.88	−1.04	0.79	0	6	19	7	5	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	58.4	+ 2.6	86	8	26	28	39	1.66	−1.25	0.68	0	4	..	..	..	.....	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	3.70	+0.86	2.42	0	5	14	15	2	se.	John M. Martin
Lexington	Lafayette	688	49	61.2	+ 3.7	85	12	30	28	31	3.42	+0.44	1.10	0	6	24	5	2	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	59.4	+ 5.9	87	8	27	28	37	3.05	+0.24	1.50	0	5	18	9	4	nw.	R. B. Montgomery
Oregon	Holt	1,048	78	62.6	+ 7.5	88	8	29	28†	35	1.63	−1.02	0.96	0	5	26	2	3	sw.	Mina Wright
St. Joseph	Buchanan	967	24	61.9	+ 5.3	87	8	29	28	34	1.66	−1.07	1.10	0	6	21	6	4	se.	U. S. Weather Bureau
Tarkio	Atchison	916	31	59.6	+ 4.8	90	8	27	28†	37	4.26	+1.66	3.14	0	5	20	8	3	sw.	Albert Volker
Trenton	Grundy	822	38	59.6	+ 3.7	85	8	25	28	35	1.07	−1.85	0.38	0	5	23	4	4	s.	W. H. Estes
Division means	**and extremes**	.....	..	**60.2**	**+ 4.4**	**90**	**8**	**24**	**28**	**42**	**2.34**	**−0.51**	**3.14**	**0**	**5**	**21**	**6**	**4**	**sw.**	
State means	**and extremes**	.....	..	**61.1**	**+ 3.7**	**90**	**8**	**24**	**28**	**56**	**2.45**	**−0.40**	**4.68**	**0**	**4**	**22**	**5**	**4**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Partially estimated

Daily Precipitation for October 1934

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain																																	
Boonville	Missouri																	.07	.60	.50			.12	.20	.55							2.04
Bowling Green	Mississippi																		.09	.11	.24				1.70							2.14
Brunswick	Grand																		.47	.08			.03	.60	.10							1.28
Canton	Mississippi																		.10	2.63				.20	.50							3.43
Clifton Hill	Chariton																	.43	.16	.07			.06	1.28								2.00
Columbia***	Missouri																	.23	.60	.03	.51		.06	1.14								2.57
Downing	Mississippi																		.02	1.73	.15			.17	.32								2.39
Edina	do																			.11	2.10				.51	.16						T.	2.88
Elsberry	do																			.09	.24				1.03	.80							2.16
Farber	do																			.24		.38				.84							1.46
Fayette	Missouri																			.58	.30			.06	.60	.61							2.15
Fulton	do																		.10	.93	.36				.06								1.45
Gorin	Mississippi																		T.	1.96	.45			T.	.70								3.11
Hannibal	do																		.10	.56	.18			T.	1.21								2.05
Hermann	Missouri																		.06	.70	.04	.20				2.16							3.16
Jefferson City	do																		.26	.73	.46	.23		.03		1.70							3.41
Kahoka	Mississippi																				1.50				.40	.14							2.04
Kirksville	do																			2.64	.21				.35								3.20
LaBelle	do																			.12	2.40				.28	.40							3.20
Linneus	Grand																			.29	.31			.05									0.65
Louisiana	Mississippi																		.37	.22					1.15								1.74
Lucerne	Grand																			.32	2.13				.23								2.68
Macon	Chariton																			.15	.42				1.01	.05							1.63
Madison	Mississippi																		.20	.31	.12			.03	1.20	.57							2.43
Memphis	do																		**	.12	1.45					.06							1.63
Mexico	do																	T.		.25	.27	.05			.10	.70							1.37
Milan	Grand																			.30	1.48	.15			.42	.20							2.55
Monroe City	Mississippi																		.03	.58	.26				.98								1.85
New London	do																			1.04	.17					.68							1.89
Palmyra	do																			.14	.67	.16			.31	.81							2.09
Paris	do																			.19	.56				.27	.64							1.66
Perry	do																			.12	.29	.07			T.	.80							1.28
Philadelphia	do																			.05	1.68				.48	.41							2.62
St. Charles	Missouri																		.11	.18	.03	.32				2.19							2.83
St. Louis***	Mississippi																T.	.19	.13	.05	.13				1.45	.28							2.23
St. Louis University*	do																T	.24	.17	.07	.12				.98	.26							1.84
Shelbina	do																			.06	.93				.57	.64							2.20
Shelbyville	do																			1.05	.12				.49	.60							2.26
Steffenville	do																		.20	1.10	.15			T.	.90								2.35
Troy	do																		.05	.17	.03	.14				1.94							2.33
Union	Meramec																		.33	.55	.02	.28				1.80							2.98
Unionville	Chariton																			.44	1.48				.24								2.16
Valley Park	Meramec	T.																	.52	.44	T.	.19				1.60							2.75
Warrenton	Mississippi																	.02	.29	.24	.29				.90	1.53							3.27
Keokuk, Ia.***	do																T.		T.	1.00	.37			T.	.56							T.	1.93
Southeast Lowlands																																	
Bragg City	St. Francis						T.				T.										T.					.64						.80	1.44
Campbell	do																			.13						.88							1.01
Cape Girardeau	Mississippi										.01								1.10	.42		.17				1.24							2.94
Caruthersville	do										.06															.70						.02	0.78
Dexter	St. Francis																				.80					.41						.03	1.24
Doniphan	Black										T.								.24	.07						.90						.15	1.36
Fisk	St. Francis						T.												.07	.26	.03					.53						.02	0.91
Jackson	Mississippi																	.03	.99	.34	.22				1.08							.41	3.07
Marble Hill	do																		.84	.68	.10					1.81						.12	3.55
Morehouse	do																		.69	.55						1.23						.04	2.51
New Madrid	do																		.18	.51						.60						.83	2.12
Parma	St. Francis																			.32						.83						.18	1.33
Poplar Bluff	Black	.31																		.09	.47	.40				1.08							2.35
Sikeston	Mississippi										.02								.40	1 64						1.55						.15	3.76
Cairo, Ill.***	do					T.				T.									.88	.18	T.				.51	.03					1.08	2.68
Ozark Plateau																																	
Arcadia	St. Francis										T.							T.	.75	.69	.11	.22				1.25							3.02
Birchtree (near)	Black																		.18	.10						1.32							1.60
Buffalo	Osage																	1.17	.06		.12					.57							1.92
Caplinger Mills*	do																T.	2.46	T.			.10		.58	.52								3.66
Crystal City	Mississippi																		.15	.11					1.14								1.40
Dean	Neosho																T.	1.96	.16		T.			T.	1.46								3.58
Eldon	Missouri																	T.	.40	2.90	.11	.20		.05		.54							4.20
Farmington	St. Francis										T.									.45	.15					.43							1.03
Fredericktown	do										.52								.45	.54	T.	.19				1.25							2.95
Galena	White																			.55						.29							0.84
Garber	do																	.40	.14		.11				1.65	.31							2.61
Goodland	Black																	.10	.67	1.18	.48					1.06							3.49
Greenville	St. Francis																	.32	.70	.32						1.05						.35	2.74
Hailey	White																		.73		.75		.18										1.66
Koshkonong	Black																		.58	.34	.03					.48							1.43
Lakeside	Osage																	T.	.60	1.56	.33	T.		.04	T	.90							3.43
Lebanon	do																	.51			T.				T.	1.11	.36						1.98
Leeper	Black										T.								.24	.64	.06	.04				1.25						.06	2.29
Lockwood	Osage																	2.65	1.70		.07			.13	.62								5.17
Mountain Grove	White																	.02	**	.10	.30				1.87								2.29
Neosho	Neosho																T.	.78	.27		.06				.78		.03						1.92
Owensville	Gasconade																		.42	.55	.07	.15				1.52							2.71
Rolla	Meramec																	T.	.28	1.32		.25				1.77							3.62
St. Thomas (near)	Osage																		.05	1.43	.50	.23			T	1.45							3.66
Salem	Meramec																	.42	.42	.32	.08				.60	.53							2.37
Seligman	Neosho																	1.82	.18						.80								2.80
Seymour (near)	White																	.04	.08	T.	.02				2.60	.17							2.91
Springfield***	do																	.21	.01	T.	.18				.90								1.30
Stover	Missouri																	.02	.42	3.67	.36			.04	.16	.84							5.51
Versailles	Osage																	.53	2.28	1.06	.50			.06	1.00								5.43
Williamsville	Black										.13	.02							.62	.56	.04					1.05							2.42
Willow Sprgs. (near)	White																		.10	.17		.06				1.87							2.20
Southwest Plain																																	
Appleton City	Osage																T.	2.20	.63		.31			.17	1.00								4.31
Clinton	do																	1.45	.30		.15			.12	.88								2.90
Concordia	Missouri																																
Harrisonville	Osage																T.		.71	.45	.05			.10	.77								2.08

Continued on next page

Daily Precipitation for October 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho																	1.37					.05		.05								1.47
Lamar ‖	Neosho																	.90	3.78		T.			.15	T.	.10							4.93
Lamonte	Missouri																	.18	1.22	.18				.55	.81								2.94
Marshall	do																T.	T.	.74	.05	.02			.37									1.18
Nevada	Osage																.11	3.19	.03					T.	.64								3.97
Warrensburg	Missouri																T.	.52	2.23	.17				.18	.67								3.77
Warsaw	Osage																	1.10	.60	.10	.20			.27	1.16								3.43
Waverly ‖	Missouri																			.95	.10			.10	.71	.09							1.95
Northwest Plateau																																	
Bethany	Grand																		.27	1.27	.37			.50	.16								2.57
Chillicothe ‖‖	do																		T.	.48	.08			.24	.71								1.51
Conception	Missouri																T.		.51	1.46	.20			.35									2 52
Edgerton	do															T.			.80	.05	.03			.68	.29							T.	1.85
Gallatin ‖	Grand																			.50	.15			.67	.11								1.43
Grant City	do																T.		T.	2.32	.16			.39	T.								2.87
Kansas City***	Missouri															T.	T.	.04	.78	.06	.04			.46	.50								1.88
Kidder ‖‖	Grand																T.	T.	T.	.68	.17			.47	.34								1.66
King City	Missouri																		.42	1.48	.94			.78	.08								3.70
Lexington ‖	do																.03		.15	1.06	1.10			.49	.58	.04							3.42
Maryville	do																		.54	1.50	.10			.88									3.05
Oregon	do																.03		.96	.09	.28			.17	.13								1.63
St. Joseph***	do			T.												.01	T.		1.10	.31	.10			.03	.11								1.66
Tarkio	do																.11		.50	3.14	.23		.28										4.26
Trenton	Grand																T.		.19	.38	.14			.17	.19								1.07

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. T. Trace, or less than 0.01 inch.
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. ** Precipitation in the next following measurement; separate dates of fall not recorded. *** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. * Precipitation is for 24-hour period, midnight to midnight ¶ Partially estimated ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for October 1934

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.133	.152	.114	.119	.130	.136	.204	.139	.155	.112	.123	.131	.129	.170	.146	.147	.143	.010	.031	.084	.198	.133	.084	.131	.136	.152	.177	.192	.103	.117	.078	4.009
	Mean temperature	58	62	62	64	63	62	62	63	64	66	67	67	64	61	62	64	66	60	68	71	67	66	69	68	58	62	54	44	53	48	54	62.0
	Wind movement	37	34	40	32	30	34	56	31	41	30	36	32	32	46	39	60	56	40	57	99	95	42	29	50	60	51	71	105	63	35	41	1,504

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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Thunderstorms.—Local, 13th, 16th, 17th 18th, 19th, 20th, 23d, 31st; more or less general on the 24th.

Windstorms.—Locally on the 23d and 24th. (See special report of tornado at Maryville.)

TORNADO AT MARYVILLE, MO.

On October 23d, about 5:15 p. m., a very destructive tornado struck Maryville, Nodaway County, Mo., resulting in the death of five persons, serious injury to twelve, and slight injury to eight others, in addition to property damage estimated at $800,000 to $1,000,000. No damage was done to crops except some haystacks and corn fodder shocks were blown away on farms northeast of Maryville.

The tornado was very local in character, its path being between 300 and 400 feet wide and extending from about three and one-half miles southwest of Maryville northeastward across the town to a Civilian Conservation Camp, northeast of Maryville, where it spent most of its force, finally disintegrating as a tornado about six miles west of Parnell. The total length of the path was approximately fourteen miles.

Mr. R. B. Montgomery, cooperative observer, and other persons witnessing the approach of the tornado reported seeing from one to four funnel-shaped clouds that converged over Maryville and dipped down. Fifty feet from the edge of the path there was practically no wind nor damage. The tornado was accompanied by very little rain, and no hail, thunder, or lightning. Some freakish doings of the tornado were: a dime wedged in a tree trunk; a ten-foot plank driven through the chassis and steel body of an overturned automobile.

ERRATA

September 1934, page 43: Number of days with 0.01 inch or more precipitation at Jefferson City should be 14.

Daily Temperatures for October 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	73	76	78	79	80	74	80	85	83	81	80	86	79	78	81	81	74	65	65	78	79	84	79	74	66	80	71	55	54	60	58	74.7
	Minimum	47	50	53	53	54	56	44	55	53	55	50	52	54	50	49	61	55	49	53	54	52	47	58	60	46	47	45	29	35	31	43	49 7
Columbia	Maximum	71	73	74	74	76	70	75	81	80	78	78	81	73	71	77	81	72	59	65	78	78	81	80	72	66	82	61	54	49	58	60	71.9
	Minimum	48	51	53	54	52	51	44	54	55	54	55	52	56	51	50	60	58	52	55	60	55	49	60	53	49	48	40	29	38	33	36	50.2
Fayette§§	Maximum	68	76	77	79	79	73	79	83	84	83	83	87	79	75	80	80	63	66	68	79	80	82	80	76	69	80	56	55	54	60	55	73.8
	Minimum	44	44	47	48	48	54	41	41	48	51	52	49	54	46	45	60	57	49	49	54	52	44	59	60	44	42	44	29	37	31	31	46.9
Hannibal	Maximum	72	75	75	74	76	69	75	81	80	80	81	79	72	70	78	82	76	59	55	76	76	79	75	73	64	78	69	51	50	56	58	71.4
	Minimum	46	60	52	51	49	55	45	51	54	52	52	55	48	43	47	58	54	44	46	52	54	49	53	58	45	46	42	..	..	36	43	[b]49.7
Jefferson City §§	Maximum	71	75	74	77	77	72	77	80	80	82	80	83	75	71	78	81	68	60	69	79	78	81	83	72	67	82	67	55	53	61	70	73.5
	Minimum	45	50	52	51	50	50	46	51	53	54	55	55	54	47	46	52	62	56	56	55	57	52	53	60	49	46	47	30	35	34	36	49.6
Kirksville	Maximum	70	76	74	75	77	74	78	82	80	77	82	79	73	71	77	77	74	64	53	76	75	76	70	69	65	78	65	59	48	55	52	71.0
	Minimum	46	50	53	50	54	50	42	43	53	50	52	56	50	46	48	60	49	43	46	52	53	47	55	45	43	46	42	26	30	29	42	46.8
Louisiana	Maximum	70	75	77	75	74	70	73	80	77	79	79	80	79	70	79	80	75	65	65	73	80	76	80	73	70	77	64	60	46	53	60	72.1
	Minimum	39	46	48	42	42	54	37	42	48	47	50	45	47	37	47	57	60	48	47	58	58	43	47	57	50	47	49	27	37	29	33	45.7
Macon§§	Maximum	73	74	75	75	78	70	76	82	81	78	79	84	72	71	78	80	62	53	70	73	76	81	76	66	64	79	53	52	50	58	55	70.8
	Minimum	46	51	50	48	49	51	44	51	56	51	54	55	50	45	49	59	51	44	47	49	52	51	55	56	44	48	43	28	31	31	45	47.9
Mexico §§	Maximum	72	75	77	76	78	71	75	80	80	79	80	83	73	70	75	82	65	60	67	77	76	80	80	69	65	79	54	52	49	57	62	71.5
	Minimum	44	48	49	47	47	52	41	43	50	47	50	53	49	43	46	46	56	47	47	50	53	45	46	60	40	44	44	29	29	29	35	45.5
St. Louis	Maximum	71	75	76	75	77	73	75	81	80	81	82	80	72	68	76	80	75	68	61	76	79	82	82	80	67	80	65	52	52	59	68	73.2
	Minimum	50	53	58	56	58	59	54	54	57	62	63	60	53	49	50	56	59	56	50	57	59	59	60	58	54	50	38	36	42	42	41	53.3
Unionville §§	Maximum	70	75	77	76	71	71	75	81	80	79	82	85	74	76	77	77	60	51	67	74	76	79	72	63	64	76	51	51	50	51	53	69.8
	Minimum	41	48	49	50	52	43	43	48	53	49	49	54	51	45	47	50	48	42	44	47	50	46	47	57	42	43	38	25	26	..	..	[b]45.8
Warrenton	Maximum	71	73	73	73	76	69	73	78	79	78	77	78	71	68	74	80	76	63	57	74	76	81	81	78	64	80	71	52	50	59	63	71.5
	Minimum	48	50	57	51	52	57	46	50	51	56	57	58	49	44	46	55	62	53	50	56	55	56	58	59	49	48	46	30	37	34	43	50.4
Southeast Lowlands																																	
Campbell	Maximum	70	75	78	76	73	79	71	79	82	79	81	83	73	75	77	76	78	73	69	80	80	82	83	86	74	75	64	54	59	65	87	75.4
	Minimum	43	42	50	57	53	56	45	42	49	62	57	54	51	48	38	46	58	62	58	59	52	47	48	55	47	40	40	30	32	33	37	48.1
Caruthersville	Maximum	70	75	78	78	72	81	74	77	79	79	82	83	76	71	77	79	81	76	73	82	83	83	85	85	80	76	69	57	63	67	83	76.6
	Minimum	46	50	59	59	59	60	50	50	58	66	59	55	55	50	47	54	59	65	62	62	59	52	55	59	56	46	52	35	36	41	47	53.6
Doniphan	Maximum	73	75	79	78	76	79	75	80	78	83	80	85	65	70	79	79	80	72	68	78	80	82	88	86	76	79	68	53	65	68	86	76.1
	Minimum	42	40	47	50	43	59	42	41	47	62	50	48	42	44	36	48	61	61	62	62	60	43	50	69	50	40	48	29	31	33	37	47.6
Jackson	Maximum	72	74	78	80	80	76	75	80	81	84	82	83	75	71	76	79	75	71	65	78	80	80	84	84	77	76	69	54	55	63	78	75.3
	Minimum	41	41	45	47	47	60	45	42	46	63	57	49	48	40	35	37	61	58	54	58	53	46	49	60	52	39	49	29	33	33	40	47.0
Poplar Bluff	Maximum	73	76	78	79	73	81	78	79	74	82	86	88	74	71	79	80	78	71	66	85	86	86	87	85	75	79	68	57	64	68	84	77.1
	Minimum	43	43	49	49	50	62	53	56	50	63	58	58	51	45	38	49	61	61	59	56	58	56	59	59	46	46	48	30	34	34	40	50.5
Sikeston	Maximum	70	78	80	79	77	79	76	83	82	84	84	85	76	73	80	80	79	78	70	82	86	87	84	85	80	77	75	59	63	66	83	78.1
	Minimum	43	44	51	51	55	59	45	45	51	63	57	52	50	42	39	52	60	61	56	60	55	49	52	52	54	42	51	29	35	36	45	49.5
Cairo, Ill	Maximum	68	72	76	74	72	76	74	78	79	80	82	84	70	67	77	77	77	68	71	81	82	83	83	83	69	75	64	53	57	63	81	74.1
	Minimum	50	50	54	55	58	58	52	53	56	65	62	55	52	47	50	57	62	60	55	62	58	55	55	61	53	47	44	36	39	42	48	53.3
Ozark Plateau																																	
Arcadia §§	Maximum	70	72	71	72	74	73	76	83	76	79	83	83	69	67	75	75	74	64	65	76	81	83	81	81	69	79	60	58	56	65	88	73.5
	Minimum	41	42	43	42	43	47	42	43	46	48	54	54	46	40	40	41	54	59	55	55	53	41	50	55	51	40	46	27	35	30	33	45.0
Birchtree	Maximum	72	71	76	75	76	76	76	81	85	82	83	85	75	76	76	77	75	70	65	76	81	85	84	83	76	79	70	57	69	67	84	76.2
	Minimum	40	40	47	54	49	53	43	43	52	53	48	49	52	40	38	53	60	62	60	62	47	46	54	63	47	40	49	27	41	34	46	48.1
Crystal City §§	Maximum	72	76	76	75	79	74	75	82	81	82	82	82	73	72	78	82	74	70	68	80	80	80	82	86	82	68	82	58	55	54	62	78	74.8
	Minimum	41	42	45	42	43	49	40	40	41	54	52	49	45	39	33	38	61	57	51	52	53	44	48	56	51	39	45	27	32	34	35	44.5
Eldon §§	Maximum	73	76	76	81	78	73	78	82	82	81	81	85	77	74	81	82	68	59	74	78	80	85	85	74	68	81	55	56	57	64	70	74.6
	Minimum	46	46	47	49	51	52	45	45	46	50	52	56	54	47	45	47	60	57	57	58	56	51	51	61	48	47	48	28	29	33	34	48.3
Farmington	Maximum	65	72	75	76	75	78	77	79	80	83	84	85	73	72	70	80	80	72	70	76	78	77	81	80	70	78	69	60	62	62	80	74.8
	Minimum	39	38	39	47	39	47	39	37	40	50	52	49	43	42	39	40	60	60	55	57	48	39	47	60	48	35	45	25	30	31	30	43.5
Garber	Maximum	71	74	75	76	77	76	79	81	82	82	83	83	79	72	79	83	77	75	84	81	82	81	86	89	72	76	70	58	59	68	84	77.2
	Minimum	39	43	43	45	45	48	40	41	41	45	53	47	49	45	43	51	60	60	64	64	48	41	51	55	45	41	52	29	33	33	40	46.3
Koshkonong	Maximum	68	69	74	74	74	74	72	77	75	78	80	82	73	69	76	75	78	73	67	75	80	81	83	82	75	78	68	55	59	65	84	74.0
	Minimum.	46	48	51	60	52	52	51	49	53	.59	62	58	54	48	45	55	61	67	61	62	53	54	59	63	51	48	51	33	38	38	49	52.6
Lebanon §§	Maximum	70	76	75	73	77	78	81	81	83	81	80	83	79	73	80	82	83	69	77	76	78	82	84	76	67	79	56	56	55	64	71	75.0
	Minimum	43	48	47	49	42	47	50	52	43	46	50	50	53	49	49	51	60	61	60	65	55	53	51	60	43	46	51	27	28	35	35	48.4
Mountain Grove	Maximum	69	74	74	75	77	73	78	77	79	83	82	83	76	71	75	79	73	..	70	75	80	82	84	78	68	79	63	58	69	68	80	[b]75.1
	Minimum	42	44	46	55	48	50	43	50	52	53	52	50	53	50	47	47	47	..	59	62	51	52	59	55	45	46	34	27	37	37	44	[a]47.9
Neosho	Maximum	75	76	76	78	78	77	80	81	81	80	79	83	81	77	80	83	78	77	84	81	83	82	80	79	70	81	76	53	56	63	78	77.0
	Minimum	40	45	45	48	47	48	40	46	47	47	48	46	49	52	51	64	61	60	60	66	47	43	56	60	46	42	44	27	31	30	42	47.7
Rolla	Maximum	68	71	72	73	74	70	70	77	79	79	75	78	77	68	75	78	74	71	65	74	75	78	83	78	64	78	73	51	51	59	74	72.0
	Minimum	47	49	48	61	48	55	50	52	52	54	59	53	54	46	44	60	65	58	57	62	53	52	58	60	48	46	44	31	39	35	41	51.0
Springfield	Maximum	69	72	72	73	73	71	75	78	77	79	78	80	76	71	76	80	68	74	81	75	77	78	83	75	67	78	65	54	56	64	77	73.3
	Minimum	50	52	52	56	58	57	51	53	55	55	60	56	58	56	53	61	62	61	64	60	56	59	64	53	48	52	40	34	41	40	41	53.3
Southwest Plain																																	
Appleton City	Maximum	65	74	74	77	79	76	74	81	80	81	82	84	80	73	79	77	74	66	83	76	81	80	82	76	70	77	68	54	50	56	55	73.7
	Minimum	47	49	52	53	53	57	46	50	53	52	55	51	56	52	51	64	59	54	56	65	51	50	61	59	45	48	46	32	37	34	43	51.0
Clinton	Maximum	72	75	74	83	80	72	78	81	81	82	81	84	89	73	80	75	75	60	73	78	78	81	79	75	73	74	64	60	49	50	59	73.8
	Minimum	44	47	50	57	53	53	53	46	50	53	53	50	55	52	49	64	56	56	57	62	50	50	52	57	44	47	44	30	36	34	42	49.9
Harrisonville §§	Maximum	73	79	75	77	81	77	81	84	84	81	84	86	82	76	80	80	58	61	83	75	81	80	81	68	71	79	58	56	51	62	60	74.3
	Minimum	44	47	50	53	51	50	45	48	49	51	52	53	55	50	49	53	55	51	50	58	50	49	53	56	40	43	44	29	31	31	34	47.5
Lamar §§	Maximum	72	72	77	80	80	75	81	81	80	82	80	84	84	79	79	77	69	74	82	78	78	84	83	68	70	79	57	58	56	65	75	75.5
	Minimum	47	47	49	50	54	54	46	48	53	53	53	54	56	54	55	67	61	63	65	53	50	50	61	45	45	50	31	31	33	33	50	50.5
Lamonte	Maximum	73	77	78	80	80	80	79	85	83	81	84	88	82	79	82	80	72	58	78	80	82	83	84	70	69	78	61	56	54	63	59	75.4
	Minimum	41	48	50	52	51	50	43	48	54	52	51	53	55	49	52	63	56	53	57	56	58	57	50	54	42	48	45	26	32	31	33	48.7
Marshall	Maximum	72	74	74	77	79	74	79	83	82	80	81	84	77	71	78	80	75	59	71	77	76	82	80	76	66	79	70	54	51	60	57	73.5
	Minimum	47	51	53	55	53	55	46	55	56	53	55	53	54	49	49	62	54	52	54	58	54	51	54	53	46	49	45	30	34	31	34	49.8
Nevada	Maximum	71	72	74	76	77	73	78	78	79	79	79	82	80	75	77	77	72	74	82	76	79	78	82	74	67	77	69	55	52	60	69	74.0
	Minimum	49	51	51	52	55	55	45	56	54	52	52	51	56	58	54	55	62	54	61	65	55	48	62	55	45	52	48	30	38	31	45	51.5
Warrensburg	Maximum	72	76	79	79	79	75	79	84	81	79	84	87	83	80	81	79	73	57	82	75	79	81	81	74	70	76	67	55	53	62	58	74.8
	Minimum	50	51	52	54	54	56	49	54	58	52	53	56	57	50	53	64	55	52	53	65	53	51	60	58	46	51	46	31	36	33	49	51.7
Warsaw	Maximum	73	76	77	78	79	75	81	83	83	84	82	85	82	78	82	82	76	67	82	78	80	83	83	77	68	83	70	57	56	63	67	76.5
	Minimum	43	49	58	51	50	53	42	49	51	51	50	49	55	53	51	65	63	58	59	65	57	48	59	60	44	45	48	29	37	31	41	50.5
Northwest Plateau																																	
Chillicothe §§	Maximum	73	89	76	76	79	71	79	84	79	78	81	84	74	75	79	78	60	53	71	75	79	80	76	62	66	78	54	55	51	59	54	71.9
	Minimum	47	47	48	50	51	50	41	48	51	52	48	50	53	38	49	52	49	47	46	51	50	46	39	57	42	48	41	25	29	28	34	45.4
Grant City	Maximum	70	74	76	68	79	72	79	84	76	70	70	72	77	67	72	79	70	55	58	64	75	75	70	71	66	74	69	50	50	55	51	69.0
	Minimum	49	46	48	52	54	44	40	55	54	53	42	50	55	51	51	65	46	44	50	57	49	45	56	52	40	45	38	24	28	28	42	46.9
Kansas City	Maximum	74	80	75	80	81	73	82	87	83	79	82	85	81	79	81	79	59	57	84	74	80	81	83	74	70	79	62	56	52	63	58	74.6
	Minimum	56	54	51	54	61	52	46	59	59	54	50	54	56	54	60	59	54	51	56	61	54	48	62	55	49	53	39	32	35	31	34	51.4
Kidder §§	Maximum	71	76	76	78	78	70	78	86	82	76	79	85	75	78	79	78	60	54	70	71	76	81	77	64	64	78	52	53	49	59	52	71.1
	Minimum	40	47	50	51	52	51	46	47	53	52	52	51	52	49	50	52	46	46	45	52	47	47	47	53	41	42	39	26	27	30	32	45.6
Lexington §§	Maximum	72	78	78	78	79	72	79	84	81	80	82	85	82	78	80	79	55	58	79	73	79	80	81	60	67	77	56	54	53	61	58	72.8
	Minimum	45	50	52	55	55	53	48	54	57	54	53	54	57	55	54	54	54	51	51	57	53	51	51	59	45	46	44	30	31	32	34	49.6
Maryville	Maximum	73	73	74	76	80	71	81	87	78	79	79	85	75	77	79	82	71	56	60	70	77	79	75	72	64	78	64	56	49	60	51	72.0
	Minimum	46	47	49	52	52	47	44	55	50	53	50	51	55	51	52	64	45	44	50	58	46	48	56	50	38	44	36	27	28	28	38	46.9
Oregon	Maximum	75	80	79	80	82	75	84	88	81	84	84	87	84	81	80	83	71	56	68	72	80	82	82	77	69	81	69	59	56	66	56	75.8
	Minimum	51	51	52	55	54	49	49	59	54	55	51	54	55	52	56	66	47	46	52	59	48	51	59	49	41	50	38	29	29	33	40	49.5
St. Joseph	Maximum	73	76	76	77	81	72	81	87	77	79	80	84	79	77	79	82	61	55	74	72	78	80	79	69	68	80	61	58	51	63	53	73.0
	Minimum	54	54	54	57	57	53	47	62	59	56	49	55	57	55	58	61	51	48	53	57	51	50	60	53	45	54	37	29	33	33	34	50.8
Trenton	Maximum	73	74	74	73	76	70	75	85	82	76	79	81	75	73	76	75	74	59	58	72	74	79	73	70	66	80	75	53	51	56	54	71.3
	Minimum	48	50	49	52	51	52	41	53	53	51	50	50	55	50	48	62	49	46	52	58	53	46	56	50	45	47	40	25	30	28	43	47.8

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 11-21-34—945.

NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXVIII NOVEMBER 1934 No. 11

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

The month was unusually mild, with fair weather prevailing during the first half, except around the 3d-4th, and a remarkably wet period covering most of the second half of the month. Temperatures were decidedly above normal from about the 3d to 10th, the 16th to 21st, and the 24th to 28th. The only days of notably subnormal temperatures were the 1st, 2d, 11-12th, 22-23d, and the 30th. Some parts of the southeastern quarter of the State that had not had killing frost previously this season experienced the first killing frost between the 1st and the 14th of this month.

Heavy rain fell pretty generally on the 3d-4th, but there followed a period of about ten days of excellent open weather, suitable for outdoor operations. A rainy period began about the 16th and continued through the remainder of the month, and, in addition, a remarkable snowstorm occurred on the 29-30th in the western and central sections (see special article). The result was, a slightly heavier average precipitation for the State than ever before recorded in November (record for years 1888-1934). The average was 5.68 inches, whereas, the heaviest November average in the past was 5.46 inches in 1931.

The copious precipitation was very beneficial in restoring to the subsoil some of the severe loss of moisture sustained during the summer drought. Water supplies for farms and towns were enhanced and made secure for a time at least. A flood of considerable severity occurred in the middle portions of the Grand River from the 21st to the 24th, and stages were unusually high, but not bankful, in the Osage River. In the lower Missouri River and the Mississippi at St. Louis the water rose to normal and above for the first time in the last sixteen months and was considerably above normal stage the last six days of the month.

Seasonal work on farms was generally well in hand at the end of the month. Wheat, rye, barley, and recently sown alfalfa were in good to excellent condition.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 48.5°, or 4.0° above normal. The highest monthly mean was 54.1° at Caruthersville, and the lowest monthly mean was 43.5° at Tarkio. The highest temperature recorded was 84° at Garber on the 7th, and the lowest was 16° at Kidder on the 23d. The greatest daily range was 49° at Dean on the 8th.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 5.68 inches, or 3.12 inches more than normal. The greatest local monthly amount was 10.04 inches at Sikeston, and the least local monthly amount was 2.51 inches at St. Louis University. The greatest amount in any twenty-four hours was 5.68 inches at Bragg City on the 21st-22d. The average number of days with 0.01 inch or more of precipitation was 10. The snowfall for the State averaged 4.6 inches, or 3.6 inches more than normal. The greatest monthly snowfall recorded was 16.0 inches at Gallatin.

MISCELLANEOUS PHENOMENA

Flood.—In Grand River 21st-24th.

Fog.—Dense, 9th, 12th, 23d, 27th.

Frost.—Light, 1st, 6th, 11th; heavy, 1st, 2d; killing, 1st, 12th, 14th.

Hail.—Light, on 2d at Seymour and 27th at Lockwood; moderate, on 1st at Morehouse.

Halos.—Solar, 2d, 4th, 19th, 24th, 25th; lunar, 15th, 17th, 19th, 20th, 24th, 25th, 27th.

(Continued on page 55)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.03	30.48	11	29.28	3	9.4	28	sw.	18	81	60	64	58
Kansas City ...	30.02	30.54	11	29.33	3	9.5	42	n.	21	84	61	70	54
St. Joseph	30.01	30.52	11	29.34	3	8.8	32	n.	21	81	63	72	52
St. Louis	30.04	30.48	14	29.22	3	14.2	43	sw.	30	74	60	62	60
Springfield	30.04	30.47	11	29.30	3	11.3	31	se.	2	78	57	62	62
Cairo, Ill.....	30.08	30.47	15	29.36	3	10.1	32	sw.	30	76	55	58	66
Keokuk, Iowa.	30.03	30.52	14	29.14	30	8.9	26	sw	30	78	61	67	49

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	41.6	− 2.9	87	15	3.26	+0.70	6.54	1.00	....	7	..	..	..
1889....	39.9	− 4.6	76	6	3.43	+0.87	6.25	1.36	0.6	7	..	..	..
1890....	46.5	+ 2.0	80	14	2.31	−0.25	4.70	0.83	T.	5	..	..	..
1891....	39.6	− 4.9	82	− 7	3.60	+1.04	9.75	0.25	....	8	..	..	..
1892....	40.1	− 4.4	79	9	2.60	+0.04	6.21	0.18	1.0	6	11	7	12
1893....	40.9	− 3.6	79	− 1	1.59	−0.97	4.72	0.08	0.3	4	14	9	7
1894....	41.0	− 3.5	80	3	1.58	−0.98	5.40	0.20	T.	4	15	9	6
1895....	41.6	− 2.9	82	− 4	3.37	+0.81	7.06	0.52	3.2	8	10	7	13
1896....	42.3	− 2.2	82	− 5	2.18	−0.38	6.80	0.70	0.2	6	11	7	12
1897....	43.4	− 1.1	82	− 3	2.40	−0.16	6.21	0.27	T.	6	13	8	9
1898....	39.9	− 4.6	79	− 8	2.28	−0.28	4.31	0.85	2.3	6	14	8	8
1899....	49.5	+ 5.0	82	16	1.90	−0.66	5.29	0.69	0.2	7	11	9	10
1900....	43.7	− 0.8	84	7	2.58	+0.02	8.76	0.20	0.2	6	15	7	8
1901....	43.6	− 0.9	84	9	1.38	−1.18	4.34	0.32	0.3	4	17	7	6
1902....	50.1	+ 5.6	85	18	3.52	+0.96	6.21	1.51	0.4	9	8	9	13
1903....	40.9	− 3.6	79	2	1.24	−1.32	3.26	0.20	1.1	5	13	8	9
1904....	46.3	+ 1.8	83	11	0.22	−2.34	0.89	0.00	T.	2	21	5	4
1905....	45.8	+ 1.3	83	2	1.94	−0.62	3.58	0.65	T.	6	18	6	6
1906....	42.5	− 2.0	88	− 3	2.60	+0.04	10.07	1.13	5.0	8	12	6	12
1907....	43.8	− 0.7	88	11	2.52	−0.04	6.03	0.55	T.	4	19	4	7
1908....	47.6	+ 3.1	87	9	4.14	+1.58	9.41	1.50	0.2	8	15	7	8
1909....	53.6	+ 9.1	87	11	4.43	+1.87	12.52	1.20	0.4	8	12	7	11
1910....	42.0	− 2.5	83	11	0.38	−2.18	1.07	0.00	0.1	3	15	8	7
1911....	39.1	− 5.4	83	− 3	2.55	−0.01	4.63	0.37	1.1	7	13	6	11
1912....	45.9	+ 1.4	85	12	1.52	−1.04	4.27	0.11	0.1	3	20	5	5
1913....	51.7	+ 7.2	80	11	2.73	+0.17	4.82	0.25	T.	7	10	8	12
1914....	48.6	+ 4.1	89	2	0.65	−1.91	2.07	T.	0.1	3	19	6	5
1915....	49.5	+ 5.0	87	12	2.76	+0.20	5.25	0.82	0.1	5	16	7	7
1916....	46.9	+ 2.4	85	3	2.49	−0.07	5.60	1.45	0.1	4	19	4	7
1917....	46.1	+ 1.6	80	8	1.05	−1.51	7.75	0.00	T.	3	14	5	11
1918....	44.9	+ 0.4	85	12	3.18	+0.62	11.00	1.34	1.2	6	15	4	11
1919....	42 2	− 2.3	78	2	3.62	+1.06	7.96	1.17	1.0	6	15	5	10
1920....	40.9	− 3.6	82	6	1.21	−1.35	2.75	0.00	T.	6	12	6	12
1921....	45.6	+ 1.1	84	10	2.82	+0.26	11.78	0.00	0.4	5	13	7	10
1922....	47.8	+ 3.3	84	15	3.82	+1.26	6.75	1.11	T.	7	16	6	8
1923....	45.1	+ 0.6	79	14	2.15	−0.41	4.45	0.26	3.0	6	15	6	9
1924....	46.7	+ 2.2	88	4	1.72	−0.84	4.11	0.51	0.5	4	15	8	7
1925....	42.8	− 1.7	80	− 2	2.99	+0.43	7.75	0.40	2.0	6	16	6	8
1926....	39.6	− 4.9	78	0	2.98	+0.42	5.68	0.25	4.3	7	11	7	12
1927....	46.8	+ 2.3	89	12	3.55	+0.99	7.89	0.03	0.9	7	6	9	15
1928....	44.6	+ 0.1	79	9	5.10	+2.54	10.88	0.74	0.5	10	13	4	13
1929....	39.0	− 5.5	78	− 8	1.46	−1.10	4.47	0.11	2.1	6	11	8	11
1930....	45.8	+ 1.3	83	8	2.93	+0.37	6.10	1.27	T.	5	18	5	7
1931....	52.2	+ 7.7	87	17	5.46	+2.90	9.72	2.58	1.4	11	10	5	15
1932....	39.5	− 5.0	75	− 9	1.82	−0.74	3.93	0.59	4.5	5	16	5	9
1933....	45.9	+ 1.4	83	7	0.84	−1.72	2.09	0.06	0.2	4	16	6	8
1934....	48.5	+ 4.0	84	16	5.68	+3.12	10.04	2.51	4.6	10	14	5	11
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	44.5	.....	89	− 9	2.56	.....	12.52	0.00	1.0	6	14	7	9

Climatological Data for November 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	49.3	+ 7.7	75	7	26	12†	34	5.67	+3.63	1.10	8.5	10	14	2	14	se.	O. K. Benecke
Clifton Hill	Randolph	781	35	48.6[k]	+ 5.2	74	7	25	23	..	5.42	+3.28	1.79	12.0	10	12	3	15	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	48.8	+ 5.5	77	7	25	23	35	4.40	+2.20	1.07	1.9	12	12	10	8	se.	U. S. Weather Bureau
Downing	Schuyler	876	13	45.6	+ 4.0	71	18	21	23	32	4.46	+2.60	1.17	8.0	12	14	4	12	w.	James Taylor
Elsberry	Lincoln	449	3	48.0	.....	77	19	19	15	43	3.08	.....	1.07	0	7	13	9	8	se.	Ray E. Mills
Fayette	Howard	661	54	48.7¶	+ 6.5	..	..	..	..	..	4.92¶	+2.79	....	6.0	11¶	..	..	..	.....	.....
Fulton	Callaway	818	46	48.3	+ 4.1	79	7	23	12	40	4.48	+2.12	1.35	T.	10	16	4	10	s.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	6.06	+4.07	1.50	3.0	10	14	6	10	se.	W. L. Harker
Hannibal	Marion	759	42	47.6	+ 5.5	73	19	26	1†	31	5.65	+3.59	1.70	0	12	15	3	12	se.	Hannibal Water Dept.
Jefferson City	Cole	557	44	49.2	+ 5.1	79	7	27	1†	36	3.22	+0.85	1.13	1.0	8	14	11	5	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	45.5	+ 4.9	71	18	22	23	33	6.63	+4.72	2.25	14.0	10	10	4	16	nw.	Prof. J. S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	6.16	.....	1.56	6.0	10	10	10	10	w.	J. Robert Hall
Louisiana	Pike	469	40	48.2	+ 4.1	75	18†	23	12	30	5.42	+3.00	1.65	0	8	16	9	5	w.	Stark Bro's Nurseries
Macon	Macon	875	35	46.2	+ 3.4	74	18	23	23	34	5.94	+3.84	1.45	9.0	12	12	6	12	w.	W. C. Brown
Mexico	Audrain	800	45	46.4	+ 3.5	75	19	24	1†	35	5.42	+3.04	1.45	T.	10	17	2	11	w.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	6.56	+4.43	2.10	0	10	11	8	11	n	J. S. Conway
St. Charles	St. Charles	520	46	48.9	+ 3.6	79	7	23	15	39	3.40	+0.88	1.09	0	9	12	13	5	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	50.4	+ 5.0	76	7	31	23	30	2.66	−0.17	1.18	T.	8	15	6	9	s.	**Section Center**
St. Louis University	St. Louis City	578	22	50.3	+ 3.8	75	6	31	14†	33	2.51	−0.11	0.89	0	8	14	4	12	s.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	5.10	+2.91	1.20	2.5¶	12	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	46.3	+ 2.8	72	18	24	1†	29	8.70	+6.59	3.10	1.0	12	12	9	9	s.	Frank Hall
Unionville	Putnam	1,062	41	43.7[a]	+ 3.4	70	18	20	23†	35	5.99	+4.03	1.55	13.0	11	15	3	12	nw	John H. Schick
Warrenton	Warren	816	52	49.5	+ 6.3	77	7	25	23	34	4.43	+1.74	1.38	T.	7	12	11	7	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	46.8	+ 5.7	73	19	26	23	28	4.86	+2.92	1.12	T	16	12	3	15	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**47.8**	**+ 4.7**	**79**	**7**	**19**	**15**	**43**	**5.03**	**+2.71**	**3.10**	**3.6**	**10**	**13**	**7**	**10**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	50.0	.....	77	1	23	15	44	8.21	.....	3.87	0	11	21	2	7	n.	Jeff. King
Caruthersville	Pemiscot	265	38	54.1	+ 3.7	78	1	31	12†	39	8.94	+4.98	3.15	0	8	19	6	5	s.	Sam Smith
Doniphan	Ripley	344	30	50.8	+ 3.5	80	7	20	15	43	4.48	+0.95	2.00	0	9	15	5	10	e.	W. W. Martin
Jackson	Cape Girardeau	428	43	50.2	+ 3.6	75	7	22	15	37	7.99	+4.56	4.94	0	6	16	3	11	n.	John G. Putz
Marble Hill	Bollinger	470	39	51.3	+ 6.1	81	1†	20	15	42	5.47	+1.84	2.34	0	7	16	5	9	n.	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	9.20	+5.13	5.20	0	10	15	7	8	sw.	John A. Spence
Poplar Bluff	Butler	339	29	51.7	+ 4.0	82	7	23	15	42	5.99	+2.37	2.50	0	9	18	8	4	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	52.6	+ 5.4	80	1	25	15†	46	10.04	+6.30	5.40	0	9	16	7	7	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	62	52.6	+ 5.3	76	7	33	12	29	8.45	+4.77	5.00	0	9	13	6	11	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**51.7**	**+ 4.5**	**82**	**7**	**20**	**15**	**46**	**7.85**	**+3.99**	**5.68**	**0**	**9**	**17**	**5**	**8**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	53	48.4	+ 4.5	80	7	22	15	44	5.09	+1.47	1.32	0	8	20	3	7	n.	Arcadia College
Birchtree (near)	Shannon	1,000	39	50.9	+ 4.3	81	7	21	24	41	3.52	+0.39	1.80	0	5	19	0	11	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	6.74	.....	3.05	12.0	7	18	3	9	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	4.90	.....	1.17	6.0	9	13	6	11	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	48.8	.....	82	7	20	15	45	3.32	.....	1.02	0	7	13	5	12	sw.	Pittsburgh Plate Glass Co.
Dean †‡	McDonald	1,000	30	49.1	− 0.2	79	8	21	23	49	7.74	+4.40	2.29	4.0	10	16	3	11	ne.	H. E. Dean
Eldon	Miller	934	39	48.6[b]	+ 3.8	79	7	25	23	40	4.91	+2.42	1.88	6.0	8	14	7	9	sw.	E. H. Shepherd
Farmington	St. Francois	918	23	48.9	+ 4.1	78	18	22	12	37	4.05	+0.30	1.75	0	5	15	6	9	n.	H. O. Miller
Garber	Taney	950	0	51.4	.....	84	7	24	23	43	4.16	.....	1.83	3.0	9	15	1	14	e.	William H. Durham
Goodland	Iron	1,000	41	48.7	+ 4.0	81	7	19	15	47	4.72	+1.80	2.00	0	7	16	4	10	n.	F. M. Adams
Greenville	Wayne	381	25	49.0	+ 3.6	81	7	18	15	47	5.09	+1.41	2.25	0	7	16	6	8	se.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	7.32		3.01	6.0	4	16	10	4	e.	A. W. Madison
Koshkonong	Oregon	958	33	51.6	+ 2.6	80	7	26	23	35	3.45	+0.15	1.22	0	7	13	5	12	e.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	48.4	+ 2.8	78	7	20	30	38	5.01	+2.39	1.58	7.0	9	15	3	12	se.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	51.2	+ 4.2	77	7	28	23	32	6.18	+3.73	1.89	8.0	12	15	4	11	se.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	49.6	+ 3.7	79	7	24	23	35	3.62	+0.86	1.34	T.	10	15	5	10	w.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	50.6	+ 3.3	75	7	23	1†	43	7.18	+4.02	1.15	4.5	13	12	4	14	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	50.3	+ 5.3	79	7	25	23	33	3.72	+1.20	1.58	0	8	13	6	11	se.	F. H. Lane
Salem	Dent	1,173	30	49.3	+ 3.2	81	7	23	12	38	3.00	+0.38	1.39	0	5	14	8	8	s.	E. E. Martin
Seligman	Barry	1,542	33	50.7[b]	+ 3.4	77	7	24	23†	33	7.51	+4.64	2.62	12.0	7	15[b]	2[b]	11[b]	se.	Floyd E. Fawver
Seymour (near)	Webster	1,642	28	49.4	+ 3.5	77	7	23	1†	37	3.81	+1.14	1.59	4.0	10	14	3	13	s.	A. L. Hailey
Springfield	Greene	1,324	46	49.8	+ 4.1	78	7	27	30	27	5.70	+2.91	2.31	15.6	12	17	6	7	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	2	50.7	.....	80	7	26	1†	36	7.03	.....	2.16	11.1	11	13	3	14	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**49.8**	**+ 3.5**	**84**	**7**	**18**	**15**	**49**	**4.96**	**+1.80**	**3.05**	**4.3**	**8**	**15**	**5**	**10**	**se.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	49.4	+ 3.4	76	7	26	23	32	5.35	+3.11	1.54	4.2	14	11	11	8	sw.	W. G. Bigelow
Clinton	Henry	765	41	49.0	+ 2.0	77	7	24	23	38	7.70	+5.63	1.70	10.0	12	10	11	9	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	46.4	+ 3.9	77	7	21	23	37	7.13	+5.06	1.65	9.5	12	12	6	12	sw.	John H. Patterson
Lamar	Barton	980	46	49.3	+ 3.0	76	7	28	23†	40	5.69	+3.36	1.50	6.0	10	14	2	14	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	47.9	+ 3.5	75	7	24	1†	40	6.69	+4.53	1.46	11.0	14	10	9	11	sw.	J. E. Wheeler
Marshall	Saline	779	47	48.2	+ 3.0	75	7	26	23†	30	6.26	+4.00	1.52	12.0	11	14	8	8	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	49.7	+ 4.9	74	7†	27	23	36	6.01	+3.98	1.54	3.5	14	13	4	13	s.	George A. Kaupp
Warrensburg	Johnson	878	47	49.2	+ 4.2	75	7	25	23	37	5.76	+3.76	1.57	14.0	13	15	3	12	ne.	E. A. Markey
Warsaw	Benton	687	33	50.8	+ 3.6	79	7	25	12†	37	5.98	+3.39	1.28	8.0	14	11	5	14	sw	Everett Martin
Division means	**and extremes**	.....	..	**48.9**	**+ 3.5**	**79**	**7**	**21**	**23**	**40**	**6.32**	**+4.08**	**1.70**	**8.7**	**13**	**12**	**7**	**11**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	45.2	+ 2.4	73	7	19	23	35	7.31	+5.48	2.23	6.0	12	14	2	14	se.	A. S. Cumming
Chillicothe	Livingston	779	25	46.2	+ 4.5	73	7†	21	23	36	6.76	+4.42	1.28	10.0	13	13	6	11	se.	Wm. J. Olenhouse
Conception	Nodaway	980	45	43.6	+ 2.2	64	19†	20	23	28	7.11	+5.64	2.05	5.7	11	8	8	14	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	46.7[b]	+ 4.9	77	6	18	23	41	4.31	+2.78	0.93	9.5	11	17	2	11	e.	Fred L. Stiff
Grant City	Worth	1,134	30	43.8	+ 1.9	71	7	18	23	31	7.48	+5.86	2.77	4.0	11	7	8	15	sw.	Howard Rybolt
Kansas City	Jackson	963	45	48.0	+ 4.3	78	7	22	23	36	5.40	+3.57	2.08	5.0	13	11	6	13	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	44.0	+ 2.2	74	7	16	23	38	7.13	+5.22	2.08	10.0	11	..	..	..	.....	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	7.02	+5.28	1.20	8.0	9	6	13	11	s.	John M. Martin
Lexington	Lafayette	688	49	47.2	+ 3.0	77	7	23	23	39	7.11	+5.04	2.57	13.5	11	14	8	8	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	44.0	+ 4.6	73	7	19	23	34	6.74	+5.11	2.85	8.0	11	9	5	16	nw.	R. B. Montgomery
Oregon	Holt	1,048	78	46.0	+ 5.5	75	7	22	1†	32	5.91	+4.18	2.14	6.0	10	14	3	13	nw.	Mina Wright
St. Joseph	Buchanan	967	24	46.8	+ 3.4	73	6	25	23	30	5.22	+3.26	1.32	6.1	11	12	4	14	se.	U. S. Weather Bureau
Tarkio	Atchison	916	31	43.5	+ 3.4	71	6	23	23	40	4.77	+3.29	1.40	3.5	8	14	2	14	nw	Albert Volker
Trenton	Grundy	822	38	45.1	+ 2.9	70	18	18	23	32	7.52	+5.64	1.93	8.0	12	12	5	13	s.	W. H. Estes
Division means	**and extremes**	.....	..	**45.4**	**+ 3.5**	**78**	**7**	**16**	**23**	**41**	**6.54**	**+4.74**	**2.85**	**7.4**	**11**	**12**	**5**	**13**	**se.**	
State means	**and extremes**	.....	..	**48.5**	**+ 4.0**	**84**	**7**	**16**	**23**	**49**	**5.68**	**+3.12**	**5.68**	**4.6**	**10**	**14**	**5**	**11**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated.

Daily Precipitation for November 1934

Stations	Drainage-basins	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri			33	.59													.01	.56	.01	.45	.12	.65	.02			.01		.14		1.30		4.19
Bowling Green	Mississippi			.45	1.20															.20		.07	.23			.34			.54		1.10		4.13
Brunswick	Grand			.95	.40														.60	.17	1.10	.06	.87				.08		.52		.92		5.67
Canton	Mississippi			.47	.87	.20													.20	.12	.12	.48	.48	.01			.23		.49		1.52		5.19
Clifton Hill	Chariton			1.79															.49	.10		.85	.73				.06	.15	.14	.06	1.05		5.42
Columbia***	Missouri		.16	.93													T.		.68	.08	.29	.80	.02			.06	.01	.26	T.	.51	.60		4.40
Downing	Mississippi			1.17		.48													.45	.19	.25	.36	.38				.12	.08	.46	.02	.50		4.46
Edina	do			.46	.82	.36													.51	.32	.13	.03	.70	.03			.08		.48		1.52		5.44
Elsberry	do				.27														.02		T.	.34	.08				.25		1.07		1.05		3.08
Farber	do			1.08	.84														.28			.15	.20	.28							1.40		4.23
Fayette	Missouri																																¶4.92
Fulton	do			.59	.83													.02	.50		.04	.27	.42				.12		.34		1.35		4.48
Gorin	Mississippi			1.50		.61													.68	.38	.15	.47	.24				.14		.57	T.	1.32		6.06
Hannibal	do			1.24	.30	.02													.43		.23	.50	.30				.33	.02	.58	.03	1.67		5.65
Hermann	Missouri			.25	1.30															.02		.14	.03				.34		.31		1.48		3.87
Jefferson City	do			.41	.72																.12	.45	.39				.16		.27		.70		3.22
Kahoka	Mississippi			.60	2.00	.50													.50	.31	.18	.30	.85					.10		.55	.95		6.84
Kirksville	do			1.46		.56													.70	.10	.26	.46	.44					.18	.22		2.25		6.63
LaBelle	do			.70	1.70	.42													.36	.54	.25	.15	.92				.12		.70		1.20		7.06
Linneus	Grand			.95	.20	.19													.73	T.	1.19	.15	.75	T.			.05		.39	T.	1.56		6.16
Louisiana	Mississippi			1.20	.50	.05													.25			.37					.40		1.00		1.65		5.42
Lucerne	Grand			.68	.30	.28													.93		.79	.13	1.02	.03			.07		.64		.96		5.83
Macon	Chariton			1.45	.65	.10													.54	.47	.30	.13	.67	.02			.05		.33		1.23		5.94
Madison	Mississippi			.62	1.33														.23	.37	.43	.22							.28		1.06		4.54
Memphis	do			1.16	.70	.15													.43	.15	.10	T.	.35	T.	T.		.13		.47	**	1.65		5.29
Mexico	do			.83	1.13														.33	T.	.10	.29	.77	.10			.12		.30		1.45		5.42
Milan	Grand			.83	.70															.62	1.04	.20	.72			.07			.45		1.45		6.08
Monroe City	Mississippi			2.10	.26	.02													.48	T.	.60	.79	.28				.18		.25		1.60		6.56
New London	do			.14	1.12															.11	.05		.94	.17				T.			2.04		4.57
Palmyra	do			.59	1.10														.12	.20	.03	.79	.64	.21			.20	.14	.38		1.48		5.88
Paris	do			.68	1.35	.05													.50	.07	.40	.45	.70	.11			.11		.35		1.25		6.02
Perry	do			.72	1.10														.27	.10	T.	.42	.43				.20	T.	.19	T.	1.35		4.78
Philadelphia	do			.54	1.56	.10													.38			.84	.54	.20			.20		.25		1.50		6.11
St. Charles	Missouri			.08	1.09		.03															.35	.35				.30	.03	.84		.33		3.40
St. Louis**	Mississippi			.66		T.												T.	T.	T.	.04	1.17	.01				.17	.14	T.	.14	.33		2.66
St. Louis University*	do			.66		T.												T.			.07	.88	.01				.21	.13		.17	.38		2.51
Shelbina	do			.55	1.15	.03													.40	.18	.23	.14	.71	.02			.07	T.	.42	T.	1.20		5.10
Shelbyville	do			1.00																.68	.23	.67					.36				.90		3.84
Steffenville	do			3.10	.30	.15													.30	1.30	.20	.75	.25				.15	.05	.50		1.65		8.70
Troy	do			.12	1.22																	.12	.28				.24		.95		1.23		4.16
Union	Meramec			.07	1.30																T.	.20	.20				.15		.95	.02	1.01		3.90
Unionville	Chariton			.70	.26	.26													.63	.07		1.12	.33	.13			.10		.84		1.55		5.99
Valley Park	Meramec			T.	.85	T.												.02				.40	.41				.24	T.	.63	T.	.93		3.48
Warrenton	Mississippi		T.	1.38	.26																	T.	.45				.25	T.	.85	.02	1.22		4.43
Keokuk, Ia.***	do		.01	1.11	.01	.34					T.							.01	.23	.30	.17	1.07	.02			.08	.15	.46	.03	.05	.82		4.86
Southeast Lowlands																																	
Bragg City	St. Francis	T.		2.35																		3.82	1.86			.20			1.00		.57		9.80
Campbell	do	.50		1.70																	.15	.30	3.87	.07			.08	1.15	.04	.05	.30		8.21
Cape Girardeau	Mississippi	.34			1.53																.10	2.34	2.02	.03			.22	T.	.86		.20		7.64
Caruthersville	do	.18			1.80																.11	2.35	3.15				.05	1.05			.25		8.94
Dexter	St. Francis	T.	.51		.95																.16	3.05	1.28						1.17				7.12
Doniphan	Black			.98																	T.	.27	2.00	.25			.13	.08	.17	.14	.46		4.48
Fisk	St. Francis			.11	.96																.23	.19	.97	2.40	T.		.23		.42		.23		5.74
Jackson	Mississippi			1.73																		.19	4.94	.11			.21	.81					7.99
Marble Hill	do			1.35																		.28	2.34				.32	.12	.76		.30		5.47
Morehouse	do	.20		1.64																	.16	.12	5.20	.50			.14	.12	.82		.30		9.20
New Madrid	do	.40			1.54																	.20	1.50	4.10	.02		.15	.02	1.10		.40		9.43
Parma	St. Francis	.19			1.85																.19	.11	3.50	1.97	.06		.06		1.00		.27		9.20
Poplar Bluff	Black	.05		.73	.65																.40	.43		2.50			.55		.30		.38		5.99
Sikeston	Mississippi	.34		1.85																	.27	.27	5.40	.40			.08		1.10		.33		10.04
Cairo, Ill.***	do			1.57							T.										.29	.08	4.94	.14			.14	.99		.26	.04		8.45
Ozark Plateau																																	
Arcadia	St. Francis	T.		.61	.81																	.01	1.32	.65			.11		.33		1.25		5.09
Birchtree (near)	Black			.80																		.10	.72					.10			1.80		3.52
Buffalo	Osage			1.06	.72	.10																1.08		.52			.21				3.05		6.74
Caplinger Mills*	do		.50	1 17														.08			1.10	.34	.59			.21		T.	T.	.48	.43		4.90
Crystal City	Mississippi			.17	.62														T.			T.	.91	.34	T.		.15		.11	T.	1.02		3.32
Dean	Neosho			.56														.76			1.76	.53	1.30	.36		.68	.45	T		.78	.56		7.74
Eldon	Missouri			.60	1.42																	.21	.16	.35			.18		.11		1.88		4.91
Farmington	St. Francis			.85																		T.	1.75				.35		.53		.57		4.05
Fredericktown	do	.08		.43	.95																		1.42	1.03			.26		.35		.76		5.28
Galena	White			.66	.38																	1.95	1.04	.35			.22		.03		1.22		5.85
Garber	do			.79	T.																.42	.21	.60	.14			.15	.02		.46	1.37		4.16
Goodland	Black			1.19																		16	.72	.15			.10		.40		2.00		4.72
Greenville	St. Francis			1.52																		.12	2.25	.27			.23		.33		.37		5.09
Hailey	White			3.01																		1.65	1.68							.98			7.32
Koshkonong	Black			.74																		.10	.90								1.22		3.45
Lakeside	Osage			1.19	1.02																	.17	.12	.47	T.		.17		.06	.02	1.67		4.89
Lebanon	do			.32	1.58													.24	T.		.30	.50					.19		.38	.56	.94		5.01
Leeper	Black	.09		.62	.35																	.02	1.38	.59			.12		.32		.83		4.32
Lockwood	Osage			1.35														.23	.10		.48	.74	.45	.32		.20	.41	.01	T.	.30	1.59		6.18
Mountain Grove	White		.03	1.20																		.10	.11	.53	.03		.18	.10		.08	1.26		3.62
Neosho	Neosho			.90														.35	.21		1.15	1.14	.48	1.00		.31	.31	.31	.04		.27	.71		7.18
Owensville	Gasconade			.15	1.35															T.			.18	.17	T.		.21		.10	.08		1.25		3.49
Rolla	Meramec			.18	1.58																	T.	.12	.17			.18		.18	.03	1.28		3.72
St. Thomas (near)	Osage			.25	1.15																	T.	.22	.45			.15		.23		1.28		3.73
Salem	Meramec			1.02																			.29	T.			.19	.11			1.39		3.00
Seligman	Neosho		T	1.67																		2.62	1.10	.14		.38		T.		.48	1.12		7.51
Seymour (near)	White		.02	1.05																	.17	.32	.39	.09			.08	.10		.19	1.40		3.81
Springfield ***	do		.02	1.03														T			1.19	.74	.22	.07		.08	.01	.02	.01	1.72	.59		5.70
Stover	Missouri			.58	.57														.44			.88	.15	1.25	.01		.07			.18		1.72		5.85
Versailles	Osage			1.32	.17														.20	T		.77	.32	1.63				.14	.05	.27	.20	1.96		7.03
Williamsville	Black			.57	.68																	.09	1.21	.77			.12		.28		.55		4.27
Willow Sprgs. (near)	White			.69	.22																	.18	.42	.06			.23		.18		1.43		3.41
Southwest Plain																																	
Appleton City	Osage		T.	1.54														.10	.01	.21	.29	1.02	.47	.46			.18	.19	.02	.04	.07	.75		5.35
Clinton	do			1.60														.20		.48	.35	.92	.68	.72			.10		.45	.50	.20	1.50		7.70
Concordia	Missouri																																
Harrisonville	Osage			.80	.29													.02		.85	.02	1.65	.16	1.54			.03	.53		.09		1.15		7.13

Continued on next page

Daily Precipitation for November 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho	....	....	1.07	....	....	....	....	....	....	....	....	....	....	....	....	.70	....	....	1.70	.39	1.35	.05	....	....	.82	.04	.05	.07	.64	.16	....	7.04
Lamar ‖	Neosho	....	....	.75	.45	....	....	....	....	....	....	....	....	....	....	....	T.	.15	....	....	1.50	.20	1.10	....	....	....	.48	....	.03	.03	1.00	....	5.69
Lamonte	Missouri	....	.21	.95	....	....	....	....	....	....	....	....	....	....	....	....	.02	.02	.67	.30	1.18	1.00	.15	....	....	.05	....	.50	.03	.15	1.46	....	6.69
Marshall	do	....	....	1.46	.06	....	....	....	....	....	....	....	....	....	....	....	....	T.	.91	1.19	....	.26	.54	....	....	....	.09	.23	.22	.10	1.20	....	6.26
Nevada	Osage	....	.18	1.54	....	....	....	....	....	....	....	....	....	....	....	....	.15	T.	.20	.95	.61	.94	.31	....	....	.37	.14	.10	.01	.15	.36	....	6.01
Warrensburg	Missouri	....	....	1.57	.03	....	....	....	....	....	....	....	....	....	....	....	T.	.03	.55	.16	.40	.30	1.11	....	....	T.	.12	.19	.03	.13	1.14	....	5.76
Warsaw	Osage	....	....	.98	.13	....	....	....	....	....	....	....	....	....	....	....	.02	T.	.17	.05	1.28	.70	.91	....	....	.03	.12	.05	.29	.20	1.05	....	5.98
Waverly ‖	Missouri	....	....	.84	.26	....	....	....	....	....	....	....	....	....	....	....	....	....	.72	.10	.70	.06	1.55	.14	....	....	.07	....	.55	....	.92	....	5.91
Northwest Plateau																																	
Bethany	Grand	....	....	.90	....	.08	....	....	....	....	....	....	....	....	....	....	....	.16	1.16	.10	2.13	.14	1.24	....	....	.40	....	.50	.10	....	.40	....	7.31
Chillicothe ‖‖	do	....	....	.67	.38	.01	....	....	....	....	....	....	....	....	....	....	....	....	.46	.11	.88	.17	.97	.76	....	....	.06	....	.91	.10	1.28	....	6.76
Conception	Missouri	....	....	1.13	....	....	....	....	....	....	....	....	....	....	....	....	T.	.26	2.05	....	1.10	.44	.52	....	....	.44	.12	.24	.39	T.	.42	....	7.11
Edgerton	do	....	....	.28	....	....	....	....	....	....	....	....	....	....	....	....	....	.18	.38	.18	.25	.93	.60	....	....	.66	T.	.16	....	.24	.45	....	4.31
Gallatin ‖	Grand	....	....	.45	.51	.08	....	....	....	....	....	....	....	....	....	....	....	....	.91	....	1.53	.16	2.10	T.	....	....	.21	....	1.06	....	1.30	....	8.31
Grant City	do	....	....	1.00	....	....	....	....	....	....	....	....	....	....	....	....	....	.98	1.79	....	1.21	.19	.94	....	....	.33	.34	.08	.29	T.	.33	....	7.48
Kansas City***	Missouri	....	.16	.37	....	....	....	....	....	....	....	....	....	....	....	....	.05	.54	.17	.59	.33	1.90	.21	....	....	.67	T.	.10	T	.17	.14	....	5.40
Kidder ‖‖	Grand	....	....	.34	.35	....	....	....	....	....	....	....	....	....	....	....	.01	....	.84	.01	1.90	.12	2.08	....	....	....	.34	....	.44	T.	.70	....	7.13
King City	Missouri	....	....	1.20	....	....	....	....	....	....	....	....	....	....	....	....	....	.95	.45	T.	1.02	.62	.81	....	....	.94	....	.55	....	T	.48	....	7.02
Lexington ‖	do	....	....	.63	.20	....	....	....	....	....	....	....	....	....	....	....	T.	....	.69	.05	1.20	.20	2.57	.05	....	....	.24	....	.30	....	.98	....	7.11
Maryville	do	....	....	.74	....	....	....	....	....	....	....	....	....	....	....	....	....	1.32	1.53	....	.60	.40	.60	..	....	.25	.10	.28	.19	....	.73	....	6.74
Oregon	do	....	....	.43	....	....	....	....	....	....	....	....	....	....	....	....	....	.74	1.40	....	.45	.70	.79	....	....	.24	.07	.44	....	....	.65	....	5.91
St. Joseph***	do	....	.06	.33	T.	....	....	....	....	....	....	....	....	....	....	....	T.	.91	....	.31	.66	1.10	.23	....	....	.69	T.	.43	T.	.17	.33	....	5.22
Tarkio	do	....	....	.98	....	....	....	....	....	....	....	....	....	....	....	....	....	1.30	.10	....	.43	....	1.14	....	....	.14	....	.45	....	....	.23	....	4.77
Trenton	Grand	....	....	.63	.04	.80	....	....	....	....	....	....	....	....	....	....	....	.09	.80	....	1.52	.17	1.93	....	....	T.	.09	.31	.47	T.	1.17	....	7.52
.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for November 1934

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.154	.082	....	.185	.150	.123	.157	.142	.109	.081	.147	.086	.071	.129	.080	.055	.110	.147	.134	.114	.115	.021	.044	.034	.115	.105	.032	.060	.006	....	....	2.987
	Mean temperature	40	48	50	56	57	55	58	53	55	52	44	43	50	42	46	54	57	66	69	67	58	38	40	44	46	50	48	47	41	34	..	50.2
	Wind movement	103	45	119	88	83	65	69	68	54	47	88	63	59	92	65	47	55	129	122	155	84	89	107	59	107	95	82	127	73	103	..	2,542

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from page 52

Sleet.—21st, 22d, 29th, 30th.

Smoke.—Dense, 12th, 26th, 27th.

Thunderstorms.—Local, 2d, 17th, 19th, 20th, 21st, 22d, 27th, 29th, 30th; more or less general, 3d, 18th.

Windstorms.—19th, 27th. (See special windstorm notes).

SPECIAL WINDSTORM NOTES

On November 19th, about 7.30 p. m., a windstorm passed about three miles east of Steffenville, Lewis County, destroying one vacant house, four barns, several outbuildings, and wrecked two windmills. The damage was estimated at $3,000. (Notes by Mr. Frank Hall, Cooperative Observer).

On November 27th, at 7 p. m., a strong wind did some damage to buildings at Jackson, Cape Girardeau County. (Amount of damage not estimated).

RECORD-BREAKING NOVEMBER SNOWSTORM

During the evening and night of November 29-30th an unusually heavy wet snow occurred in central and western sections of the State, resulting in much damage to telephone, telegraph, and transmission lines and poles, breaking down trees and limbs, and blockading highways. The most damage was done in the vicinity of Marshall and Boonville, while highways were blocked near Springfield, Boonville, Lamonte, Versailles, Chillicothe, Bethany, and Downing. Highway traffic was completely tied up between Boonville and Marshall Junction, and also near Springfield, forcing motorists to spend the night and most of the following day in hotels, tourist camps, or private homes near the blockades.

Amounts of ten inches or more, for this storm, were reported from Buffalo, Chillicothe, Clifton Hill, Gallatin, Kirksville, Lamonte, Lexington, Marshall, Milan, Seligman, Springfield, Stover, Unionville, and Warrensburg.

Mr. E. A. Markey, Cooperative Observer at Warrensburg, reports that he can remember as far back as 1875 but does not recall a time when snow did as much damage as this one.

Mr. J. C. Patterson, Cooperative Observer at Marshall, reports this the most destructive snowstorm in years.

While in some parts of the western half of the State the snowfall in connection with this storm was the heaviest of record for November, the eastern third of the State had little or no snow, but moderate to heavy rain.

Daily Temperatures for November 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	51	59	61	60	64	71	75	68	64	61	53	60	64	59	59	63	67	74	70	71	65	52	47	53	55	55	57	55	45	39	..	59.9
	Minimum	27	32	48	40	43	38	42	38	38	42	31	26	34	29	30	43	48	57	58	57	49	30	26	33	39	42	37	40	34	29	..	38.7
Columbia	Maximum	45	58	59	65	62	73	77	53	65	60	52	53	64	46	60	65	70	75	73	73	63	43	48	56	54	52	57	47	41	34	..	58.1
	Minimum	26	34	47	43	42	38	44	42	40	39	32	26	39	29	33	45	53	59	61	60	43	28	25	35	37	41	40	41	34	28	..	39.5
Fayette§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hannibal	Maximum	44	56	58	60	61	69	69	59	61	57	46	50	59	49	56	65	67	72	73	69	62	54	43	50	49	46	49	50	40	40	..	56.1
	Minimum	26	31	42	41	44	38	47	38	36	45	31	27	41	27	28	43	51	56	63	59	53	32	26	30	35	40	36	40	37	30	..	39.1
Jefferson City §§	Maximum	49	60	60	67	64	75	79	58	68	62	52	55	66	48	60	68	70	76	75	72	58	38	48	57	56	52	59	48	40	33	..	59.1
	Minimum	27	30	39	51	44	41	45	43	39	39	32	29	30	30	30	34	43	53	63	60	55	37	27	27	35	43	37	42	39	32	..	39.2
Kirksville	Maximum	48	54	57	58	62	67	66	57	62	54	46	52	50	48	57	63	65	71	68	68	64	48	45	51	48	45	46	46	40	37	..	54.8
	Minimum	23	30	45	39	38	38	41	35	35	41	34	25	39	24	26	30	50	54	54	56	45	28	22	30	35	39	34	37	33	27	..	36.2
Louisiana	Maximum	55	50	60	63	60	63	68	55	59	55	50	52	55	52	53	65	66	75	75	70	65	60	44	50	52	55	52	50	42	41	..	57.1
	Minimum	28	24	48	43	48	33	43	40	34	46	32	23	35	35	26	41	50	58	62	60	54	40	25	26	37	35	35	40	40	34	..	39.2
Macon§§	Maximum	46	57	59	59	62	68	73	51	63	58	49	53	61	44	59	63	68	74	70	72	56	35	46	53	49	47	50	44	36	32	..	55.2
	Minimum	24	30	38	40	40	40	45	36	36	44	30	27	34	26	25	32	45	56	58	57	54	34	23	29	36	40	35	38	35	31	..	37.3
Mexico §§	Maximum	44	58	60	62	63	72	74	51	63	61	50	51	61	44	56	65	69	73	75	72	58	41	46	50	56	50	54	48	42	36	..	56.8
	Minimum	24	26	32	40	41	37	41	37	36	38	31	24	27	26	28	30	43	50	57	58	54	35	25	26	33	38	35	42	36	32	..	36.1
St. Louis	Maximum	45	57	60	67	64	74	76	54	64	61	49	51	64	45	56	65	70	71	73	64	63	60	46	51	51	52	58	53	48	58	..	59.0
	Minimum	33	32	49	46	48	44	52	43	38	41	36	34	36	31	34	42	50	58	62	57	59	33	31	34	36	42	43	41	40	33	..	41.9
Unionville §§	Maximum	46	56	57	57	62	67	67	51	62	55	49	52	61	47	57	60	65	70	68	66	55	32	44	55	50	43	46	38	33	31	..	53.4
	Minimum	..	23	33	32	38	38	40	33	33	35	27	27	29	25	26	29	42	50	51	55	51	30	20	20	31	37	36	36	31	29	..	[a]34.0
Warrenton	Maximum	51	57	59	65	61	74	77	68	65	59	53	52	63	54	57	65	67	76	74	69	64	60	48	53	52	48	50	53	43	42	..	59.3
	Minimum	26	31	48	42	44	40	49	40	36	45	30	28	39	26	27	42	49	58	61	60	58	34	25	30	33	41	35	43	38	32	..	39.7
Southeast Lowlands																																	
Campbell	Maximum	77	62	66	67	66	68	76	67	68	69	59	50	63	47	54	62	69	72	71	66	64	62	45	44	51	51	59	59	52	49	..	61.2
	Minimum	33	28	56	44	45	36	45	48	39	35	35	26	29	30	23	24	35	48	56	55	58	43	35	27	30	42	41	41	37	37	..	38.7
Caruthersville	Maximum	78	63	68	68	67	70	75	71	69	68	68	50	62	59	55	63	68	72	75	72	67	65	50	52	59	60	64	60	56	63	..	64.6
	Minimum	39	34	56	45	50	37	46	50	42	50	39	31	35	35	31	33	44	50	61	58	59	49	38	35	36	49	50	44	42	41	..	43.6
Doniphan	Maximum	69	59	68	70	68	75	80	70	70	68	55	55	70	60	60	65	70	68	75	69	66	63	55	55	55	48	59	59	50	50	..	63.5
	Minimum	34	28	42	39	42	32	42	40	36	45	32	24	28	30	20	23	37	48	61	59	60	43	35	25	42	42	38	36	41	39	..	38.1
Jackson	Maximum	62	58	62	67	64	67	75	67	66	64	56	48	67	58	56	62	67	72	72	67	68	63	49	51	52	57	58	58	50	61	..	61.5
	Minimum	32	29	55	44	49	32	38	46	40	33	31	27	34	30	22	27	40	51	58	57	52	42	33	27	30	40	43	43	43	38	..	38.9
Poplar Bluff	Maximum	64	60	65	70	70	73	82	72	73	70	58	57	69	58	54	67	65	69	74	74	74	70	59	55	56	62	60	59	53	58	..	65.0
	Minimum	33	29	53	43	46	34	40	43	37	46	33	26	31	30	23	25	36	47	61	60	52	40	35	27	31	38	38	38	38	38	..	38.4
Sikeston	Maximum	80	61	66	66	70	72	78	78	72	68	61	55	64	61	62	67	70	72	73	69	66	64	47	53	52	61	58	61	55	50	..	64.4
	Minimum	34	30	55	50	45	44	45	47	37	50	33	28	34	30	25	25	39	51	55	56	58	45	35	31	30	43	48	44	41	40	..	40.9
Cairo, Ill	Maximum	49	63	66	67	65	69	76	63	70	63	49	50	62	47	58	64	69	72	73	67	65	61	46	52	56	59	60	59	59	63	..	61.4
	Minimum	36	36	55	48	50	40	48	45	41	47	36	33	38	34	34	38	46	54	58	61	59	42	36	35	36	47	50	43	43	37	..	43.7
Ozark Plateau																																	
Arcadia §§	Maximum	53	60	59	67	65	74	80	64	72	64	52	68	69	48	59	64	69	61	69	63	60	53	51	53	53	58	55	54	58	37	..	60.4
	Minimum	31	27	34	43	45	32	36	47	33	38	33	25	28	30	22	27	39	50	58	58	52	45	29	26	29	30	34	37	39	36	..	36.4
Birchtree	Maximum	67	61	61	68	66	71	81	69	72	71	67	59	61	58	59	61	68	68	71	69	68	61	60	59	59	59	58	59	46	44	..	63.4
	Minimum	26	27	51	39	55	42	42	46	36	42	34	23	37	28	22	30	41	50	60	57	57	47	28	21	29	41	38	35	36	32	..	38.4
Crystal City §§	Maximum	48	62	61	69	65	77	82	57	70	64	51	54	68	47	61	68	74	74	75	68	62	54	49	51	53	56	59	50	57	39	..	60.8
	Minimum	28	28	34	45	48	32	39	41	36	39	29	23	25	29	20	23	35	47	63	62	59	47	30	25	27	37	32	40	40	38	..	36.7
Eldon §§	Maximum	48	60	60	63	65	74	79	63	70	60	52	57	58	50	..	..	78	75	73	73	58	39	50	50	57	54	60	63	50	32	..	[b]59.7
	Minimum	27	27	33	42	41	39	39	43	37	39	30	27	27	30	28	..	38	62	62	59	55	38	25	27	30	36	35	39	38	31	..	[a]37.4
Farmington	Maximum	60	55	62	62	63	62	75	60	63	60	54	55	67	61	57	62	68	78	70	68	70	62	52	52	53	58	52	58	57	56	..	61.1
	Minimum	35	32	45	40	40	44	40	30	32	32	28	22	30	35	28	35	35	52	41	52	52	42	42	25	30	38	35	37	38	35	..	36.7
Garber	Maximum	61	63	62	69	66	76	84	70	75	65	55	59	73	64	52	72	74	75	71	75	66	59	53	58	61	59	59	55	47	39	..	63.9
	Minimum	27	30	50	37	43	33	43	46	40	47	30	25	32	39	33	39	42	57	61	59	57	35	24	26	34	40	32	40	39	31	..	39.0
Koshkonong	Maximum	67	54	64	64	64	73	80	69	71	64	53	56	70	62	59	65	69	69	71	63	59	52	56	58	63	60	55	49	46	62	..	62.5
	Minimum	32	36	51	40	49	41	52	52	39	51	35	31	38	32	29	36	46	54	60	59	57	37	26	30	31	41	42	33	31	33	..	40.8
Lebanon §§	Maximum	56	61	61	65	64	73	78	71	68	62	56	64	50	61	68	70	74	72	72	74	42	50	56	58	56	59	48	38	30	46	..	60.1
	Minimum	25	26	37	41	41	39	43	40	39	25	26	26	30	32	39	44	51	60	58	55	35	24	24	36	38	41	41	38	30	20	..	36.8
Mountain Grove	Maximum	54	53	64	64	63	74	79	69	72	64	54	55	67	52	58	65	67	72	72	70	62	58	51	53	54	57	57	54	45	40	..	60.6
	Minimum	32	31	46	39	42	39	51	44	39	36	29	25	38	29	31	37	45	56	56	53	55	32	24	32	32	40	38	37	38	28	..	38.5
Neosho	Maximum	62	66	65	66	65	67	75	74	71	71	58	57	67	67	61	61	68	72	72	68	68	60	58	59	59	58	55	50	44	34	..	62.6
	Minimum	23	23	48	37	35	35	41	41	40	47	25	25	36	40	38	42	47	61	58	58	52	31	30	38	38	37	36	37	34	29	..	38.7
Rolla	Maximum	55	57	61	65	61	72	79	72	66	58	52	51	65	59	58	65	70	74	73	69	66	59	47	52	55	50	58	54	45	41	..	60.3
	Minimum	29	32	52	42	45	39	47	44	39	45	32	27	38	28	27	42	50	60	62	60	59	34	25	28	35	42	35	42	39	31	..	40.3
Springfield	Maximum	48	59	59	66	62	71	78	64	70	60	50	56	65	51	56	64	69	72	69	70	60	45	48	53	55	54	56	45	43	31	..	58.3
	Minimum	30	37	47	44	43	44	52	47	46	41	34	34	44	34	37	46	51	59	56	55	45	28	27	38	38	42	44	40	31	27	..	41.4
Southwest Plain																																	
Appleton City	Maximum	51	62	60	66	65	64	76	68	66	60	53	55	60	60	54	54	65	69	71	68	63	50	45	52	52	49	52	52	43	36	..	58.0
	Minimum	28	35	48	40	42	41	44	42	41	41	33	31	44	32	37	47	49	61	60	55	50	31	26	34	41	41	42	42	36	28	..	40.7
Clinton	Maximum	48	68	58	68	60	62	77	66	68	59	48	56	64	57	60	60	64	70	72	70	62	52	46	62	60	52	52	52	45	40	..	59.3
	Minimum	25	30	49	38	38	38	46	40	38	39	30	28	40	32	33	45	46	57	57	56	50	31	24	32	38	38	38	38	38	30	..	38.7
Harrisonville §§	Maximum	51	63	57	65	65	74	77	55	68	64	54	57	70	48	64	55	63	74	68	66	55	31	49	55	50	55	51	44	38	31	..	57.2
	Minimum	25	26	37	35	38	39	40	37	36	35	27	30	33	28	30	37	45	48	60	53	49	28	21	26	35	38	38	39	34	25	..	35.7
Lamar §§	Maximum	50	69	58	68	66	71	76	65	70	61	53	60	67	54	61	53	68	73	71	70	57	33	53	59	52	57	55	44	40	37	..	59.0
	Minimum	29	29	39	42	40	41	46	45	44	39	34	31	31	37	37	43	47	53	65	55	55	33	28	28	32	40	39	40	38	29	..	39.6
Lamonte	Maximum	50	64	58	68	65	70	75	59	68	62	54	54	67	50	59	58	66	73	71	71	57	40	50	61	58	54	54	46	39	33	..	58.5
	Minimum	24	31	45	39	40	40	43	38	35	38	29	29	27	28	30	45	48	56	58	56	39	29	24	33	37	41	38	38	32	28	..	37.3
Marshall	Maximum	47	60	58	62	63	72	75	67	65	59	50	55	64	55	57	59	67	74	71	71	64	41	47	55	53	52	53	51	41	32	..	58.0
	Minimum	27	33	43	41	40	42	45	39	38	44	30	28	39	27	31	46	50	56	63	52	38	27	26	33	39	40	38	40	31	26	..	38.4
Nevada	Maximum	64	66	60	67	64	70	74	65	66	60	50	56	66	56	60	54	66	74	70	68	60	44	49	57	52	54	57	48	42	40	..	59.3
	Minimum	28	37	45	42	41	43	48	41	40	40	32	29	46	34	39	46	49	51	56	55	44	30	27	37	42	40	42	40	32	28	..	40.1
Warrensburg	Maximum	50	62	58	65	65	72	75	63	66	62	54	65	66	60	61	56	65	73	70	68	62	48	42	58	57	53	52	50	40	35	..	59.1
	Minimum	27	33	47	41	41	41	46	39	38	42	31	28	43	28	32	47	50	55	58	56	48	29	25	35	39	41	40	38	30	28	..	39.2
Warsaw	Maximum	52	61	60	68	64	73	79	71	71	63	53	58	66	59	63	60	71	75	72	72	67	57	50	61	58	55	59	55	45	36	..	61.8
	Minimum	26	33	49	41	43	36	42	42	41	38	29	25	39	33	32	45	48	60	63	57	55	32	25	32	38	42	40	43	36	29	..	39.8
Northwest Plateau																																	
Chillicothe §§	Maximum	48	61	58	58	68	71	73	52	64	59	52	56	63	45	62	59	66	73	70	68	52	55	49	53	52	51	50	42	36	30	..	56.5
	Minimum	24	25	36	38	40	37	39	36	33	40	27	24	31	26	26	31	47	54	52	57	52	31	21	31	37	39	38	39	34	28	..	35.8
Grant City	Maximum	43	54	55	52	59	69	71	58	58	54	45	52	52	51	56	52	57	65	68	65	56	42	42	49	45	42	44	45	37	34	..	52.4
	Minimum	20	33	45	35	37	39	40	34	34	36	27	27	37	25	26	43	48	53	48	55	38	25	18	33	36	36	36	35	30	27	..	35.2
Kansas City	Maximum	47	65	59	64	65	75	78	55	65	60	52	58	68	47	63	54	64	73	70	66	58	36	49	53	46	55	49	45	38	32	..	57.0
	Minimum	28	37	45	42	42	41	42	40	35	38	31	29	40	31	34	50	52	54	54	58	36	28	22	37	41	42	41	38	32	27	..	38.9
Kidder §§	Maximum	47	60	57	58	60	69	74	52	62	57	49	56	62	44	62	55	64	72	69	64	53	31	53	50	44	48	48	40	34	30	..	54.1
	Minimum	22	22	33	37	38	38	41	35	34	35	28	28	30	25	26	31	47	49	48	55	50	29	16	17	36	36	36	37	31	27	..	33.9
Lexington §§	Maximum	48	64	56	64	64	74	77	58	69	63	54	57	68	50	58	59	64	74	69	69	57	32	49	54	54	54	54	50	42	36	..	57.2
	Minimum	27	27	35	41	41	42	45	39	36	38	32	29	29	29	29	37	48	50	57	57	53	32	23	24	34	39	40	42	35	29	..	37.3
Maryville	Maximum	46	56	55	54	60	70	73	58	62	55	51	57	61	50	62	53	58	63	69	64	55	36	44	51	43	42	43	42	35	31	..	53.8
	Minimum	21	32	45	34	34	37	41	34	34	37	27	29	34	27	28	43	46	51	47	54	36	25	19	33	38	35	36	33	29	26	..	34.8
Oregon	Maximum	50	59	58	58	66	73	75	61	67	58	56	61	66	53	63	57	60	61	69	59	55	36	48	57	45	51	45	45	35	31	..	55.9
	Minimum	22	33	46	37	37	45	47	34	37	36	28	31	38	25	31	46	47	48	47	53	35	25	22	35	39	36	37	34	29	26	..	36.2
St. Joseph	Maximum	48	61	58	58	62	73	73	55	66	57	53	58	65	47	63	53	63	69	70	63	57	34	47	53	46	51	47	43	35	31	..	55.3
	Minimum	27	34	44	40	42	45	45	38	38	38	30	33	39	30	33	49	50	51	51	56	33	26	25	35	40	39	41	35	31	27	..	38.2
Trenton	Maximum	53	56	56	58	60	69	67	64	60	55	49	53	55	48	56	58	60	70	68	67	63	41	40	48	50	48	48	46	37	35	..	54.6
	Minimum	23	30	47	40	38	37	40	35	34	36	30	24	36	27	26	42	38	55	51	57	41	28	18	29	32	39	38	37	33	28	..	35.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 12-21-34—945.

QC1.C5
NMS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

MISSOURI SECTION

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VOL. XXXVIII DECEMBER 1934 No. 12

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GENERAL SUMMARY

Temperatures were below normal during most of the month and the average for the State was the lowest December average, except that of 1932, since 1927. It was in strong contrast with December 1933, which was unusually mild. But there were no extraordinary extremes of low temperature; it was a month of rather frequent changes, with moderately low temperature periods predominating—on the whole, an agreeable introduction to the winter season.

Precipitation was less than normal everywhere, except at a few scattered stations, mostly in the southern half of the State. The deficiencies were large in the upper northwestern counties, where several stations had less than one-fourth inch for the month. In the southeastern counties the precipitation was ample, though less than normal at most stations. For immediate needs, the moisture situation was satisfactory in all sections. Snowfall averaged more than usual for December and was decidedly more than normal at most stations in a belt extending from west to east across the central third of the State. Some unusually heavy 24-hour amounts were reported on the 19-20th in the east-central counties.

Farm work made fair progress, but was interrupted considerably by muddy fields and roads. Livestock was generally in only fair condition, as rough feed was scarce and not much pasturing on wheat and other grains could be permitted, owing to the soft ground. Wheat, rye, barley, and alfalfa were in good to excellent condition.

River stages in the St. Louis district were generally above normal, but at Kansas City the stage averaged below normal. This was the first month at St. Louis with monthly average stage above normal since May 1933.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 31.6°, or 2.5° below normal. The highest monthly mean was 39.8° at Caruthersville, and the lowest monthly mean was 23.7° at Unionville. The highest temperature recorded was 69° at Garber on the 28th, and the lowest was 3° below zero at Downing on the 26th. The greatest daily range was 44° at St. Charles on the 27th.

PRECIPITATION

The average precipitation for the State, 117 stations reporting, was 1.66 inches, or 0.41 inch less than normal. The greatest local monthly amount was 4.12 inches at Campbell, and the least local monthly amount was 0.05 inch at Unionville. The greatest amount in any twenty-four hours was 1.66 inches at Poplar Bluff on the 19th. The average number of days with 0.01 inch or more of precipitation was 7. The snowfall for the State averaged 5.0 inches, or 1.5 inches more than normal. The greatest monthly snowfall recorded was 11.6 inches at Waverly.

MISCELLANEOUS PHENOMENA

Earthquake.—Light at New Madrid on 30th.

Fog.—Dense, 5th, 21st, 24th, 25th, 28th, 29th, 30th, 31st.

Glaze.—18th, 24th, 25th, 26th, 28th, 29th, 30th, 31st.

Halos.—Solar, 11th, 20th, 21st, 23d, 27th; lunar, 15th, 16th, 17th, 19th, 20th, 21st, 23d.

Sleet.—9th, 14th, 16th, 17th, 18th, 23d, 24th, 25th, 26th, 29th, 30th, 31st.

Smoke.—Dense, 5th, 9th, 11th, 21st.

Thunderstorms.—Locally on 25th.

Windstorms.—No damaging winds reported.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.15	30.60	26	29.76	28	8.7	27	sw.	3	86	76	77	37
Kansas City ...	30.16	30.66	7	29.71	28	10.1	32	nw.	25	84	73	79	42
St. Joseph	30.15	30.64	7	29.75	21	9.1	29	nw.	8	85	73	78	45
St. Louis	30.15	30.57	26	29.64	19	11.9	30	w.	19	81	71	75	33
Springfield	30.15	30.57	7	29.77	18	11.1	25	se.	2	86	72	77	50
Cairo, Ill.....	30.19	30.56	5	29.56	19	9.4	25	sw.	3	82	69	72	50
Keokuk, Iowa.	30.17	30.68	26	29.74	19	8.3	28	sw.	3	80	72	77	28

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	35.9	+ 1.8	70	0	2.29	+0.22	3.70	0.70	....	6	..	..	..
1889....	46.8	+12.7	80	2	0.96	−1.11	4.60	0.00	0.1	3	..	..	..
1890....	36.0	+ 1.9	76	− 3	1.03	−1.04	2.65	T.	4.6	3	..	..	..
1891....	39.8	+ 5.7	72	− 1	1.90	−0.17	4.50	0.16	....	6	..	..	..
1892....	29.4	− 4.7	75	−22	2.38	+0.31	6.73	0.51	4.8	6	8	7	16
1893....	35.2	+ 1.1	76	− 7	0.95	−1.12	3.85	0.10	2.7	5	11	11	9
1894....	36.7	+ 2.6	75	− 7	2.13	+0.06	5.79	T.	1.3	5	14	8	9
1895....	34.3	+ 0.2	69	− 8	6.13	+4.06	13.67	1.28	3.4	8	9	8	14
1896....	38.6	+ 4.5	79	− 5	0.93	−1.14	3.90	0.02	T.	3	13	8	10
1897....	29.3	− 4.8	74	−14	2.80	+0.73	6.61	0.76	6.3	7	8	8	15
1898....	28.7	− 5.4	74	−20	1.69	−0.38	3.55	0.50	5.1	5	17	6	8
1899....	30.4	− 3.7	75	−13	2.11	+0.04	6.10	0.50	6.6	9	12	9	10
1900....	35.6	+ 1.5	68	− 3	0.69	−1.38	3.45	0.05	0.6	4	14	8	9
1901....	28.5	− 5.6	71	−29	2.93	+0.86	6.72	0.82	6.9	8	11	7	13
1902....	30.7	− 3.4	68	− 7	2.91	+0.84	9.31	0.94	3.1	8	10	4	17
1903....	30.2	− 3.9	65	−11	1.51	−0.56	4.62	0.13	2.3	5	16	7	8
1904....	32.9	− 1.2	75	−10	1.50	−0.57	4.52	0.12	6.0	5	16	7	8
1905....	33.3	− 0.8	66	− 2	1.45	−0.62	5.02	T.	1.7	4	18	6	7
1906....	36.1	+ 2.0	73	0	2.27	+0.20	8.87	0.56	0.6	8	8	6	17
1907....	37.7	+ 3.6	76	3	1.84	−0.23	4.52	0.14	3.7	7	11	7	13
1908....	38.4	+ 4.3	80	− 4	0.85	−1.22	1.82	0.00	T.	3	16	7	8
1909....	24.9	− 9.2	76	−17	2.86	+0.79	6.17	0.80	7.7	8	12	6	13
1910....	31.2	− 2.9	67	− 5	1.25	−0.82	5.38	0.43	2.4	4	16	5	10
1911....	36.7	+ 2.6	74	−11	2.80	+0.73	4.55	1.27	5.1	7	13	6	12
1912....	36.5	+ 2.4	72	2	0.59	−1.48	2.36	0.00	0.6	3	19	5	7
1913....	38.3	+ 4.2	74	− 3	2.27	+0.20	3.70	1.00	6.6	7	9	4	18
1914....	26.8	− 7.3	68	−18	2.48	+0.41	5.84	0.57	6.6	9	7	5	19
1915....	34.7	+ 0.6	68	−13	2.77	+0.70	9.38	0.35	7.8	6	12	6	13
1916....	31.3	− 2.8	82	−29	1.85	−0.22	7.08	0.19	4.4	6	15	6	10
1917....	25.5	− 8.6	82	−23	0.74	−1.33	2.84	0.07	7.3	5	11	7	13
1918....	40.0	+ 5.9	83	−12	3.21	+1.14	8.86	1.21	7.8	7	13	6	12
1919....	25.5	− 5.6	74	−22	0.69	−1.38	4.30	0.00	0.7	3	12	4	15
1920....	35.6	+ 1.5	77	−10	1.93	−0.14	6.76	0.40	2.3	5	13	7	11
1921....	36.9	+ 2.8	74	− 8	1.86	−0.21	3.74	0.13	1.9	6	13	7	11
1922....	36.3	+ 2.2	75	− 6	2.11	+0.04	5.25	0.00	0.2	5	15	6	10
1923....	41.0	+ 6.9	82	− 4	3.06	+0.99	7.27	0.25	0.8	8	11	6	14
1924....	27.7	− 6.4	80	−28	3.43	+1.36	6.70	0.67	4.6	7	13	6	12
1925....	31.6	− 2.5	69	−10	1.45	−0.62	3.69	0.30	4.8	4	13	7	11
1926....	32.6	− 1.5	75	−12	2.18	+0.11	6.74	0.55	2.4	6	11	5	15
1927....	29.9	− 4.2	74	−11	2.68	+0.61	7.84	0.52	2.9	6	15	5	11
1928....	36.2	+ 2.1	81	0	2.24	+0.17	5.04	0.23	1.4	5	14	6	11
1929....	35.2	+ 1.1	76	− 9	1.66	−0.41	5.46	0.15	3.7	6	13	5	13
1930....	34.2	+ 0.1	70	2	1.23	−0.84	3.78	0.18	1.9	5	15	6	10
1931....	42.7	+ 8.6	80	11	2.57	+0.50	9.32	0.42	1.7	8	11	6	14
1932....	31.2	− 2.9	77	−21	4.46	+2.39	9.87	1.01	5.7	7	12	6	13
1933....	39.1	+ 5.0	78	− 7	1.82	−0.25	4.65	0.76	0.4	5	12	7	12
1934....	31.6	− 2.5	69	− 3	1.66	−0.41	4.12	0.05	5.0	7	10	6	15
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	34.1	.....	83	−29	2.07	.....	13.67	0.00	3.5	6	13	6	12

Climatological Data for December 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	53	31.4	+ 0.8	55	15	3	11	35	0.94	−0.71	0.27	6.0	12	13	2	16	se.	O. K. Benecke
Clifton Hill	Randolph	731	35	29.9	− 1.1	50	15	0	11	33	1.64	+0.01	0.90	11.1	7	9	4	18	.....	Dr. A. J. Bradsher
Columbia	Boone	784	44	31.0	− 2.2	56	15	5	11	32	1.19	−0.67	0.32	8.0	10	8	5	18	nw.	U. S. Weather Bureau
Downing	Schuyler	876	13	26.2	− 3.4	45	27	− 8	26	43	0.38	−1.12	0.17	2.9	4	7	8	16	sw.	James Taylor
Elsberry	Lincoln	449	3	30.8	.....	51	2	7	11†	34	2.30	.....	0.85	8.7	9	5	18	8	se.	Ray E. Mills
Fayette	Howard	680	54	29.0[e]	− 2.1	49	27	1	11	33	0.75	−0.93	0.27	5.5	6	8[e]	5[e]	13[e]	n.	Harry P. Mason
Fulton	Callaway	818	46	30.0	− 3.5	56	15	3	11	42	1.64	−0.39	0.45	6.5	10	11	0	20	se.	Clyde C. Herring
Gorin	Scotland	700	47	....	.....	..	..	..	..	..	0.71	−0.95	0.16	3.0	6	11	4	16	nw.	W. L. Harker
Hannibal	Marion	759	42	29.5	− 2.0	47	2	1	26	37	1.19	−0.35	0.43	7.6	10	12	4	15	n.	Hannibal Water Dept.
Jefferson City	Cole	557	44	31.1	− 1.8	59	15	5	11†	40	2.89	+0.95	0.97	10.3	12	6	14	11	e.	Mrs. Frank Kliegel
Kirksville	Adair	969	45	27.0	− 2.6	48	18	− 2	26	35	0.21	−1.40	0.17	2.2	2	12	6	13	n.	Prof. J. S. Stokes
Linneus	Linn	816	2	....	.....	..	..	..	..	..	0.81	.....	0.60	9.0	6	13	6	12	nw.	J. Robert Hall
Louisiana	Pike	469	40	30.0	− 1.8	45	2	4	26	32	1.55	−0.21	0.75	5.8	6	9	13	9	w.	Stark Bro's Nurseries
Macon	Macon	875	35	27.4	− 2.7	52	15	2	11†	42	0.68	−0.86	0.35	4.5	6	9	10	12	n.	W. C. Brown
Mexico	Audrain	800	45	29.0	− 2.8	53	2	3	11†	42	1.45	−0.55	0 45	7.0	10	11	0	20	nw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	13	....	.....	..	..	..	..	..	0.64	−1.03	0.33	5.0	5	7	11	13	s.	J. S. Conway
St. Charles	St. Charles	520	46	32.6	− 2.3	53	27	7	11	44	2.01	+0.13	0.70	9.3	7	7	14	10	w.	Martin L. Comann
St. Louis	**St. Louis City**	568	61	33.4	− 1.5	51	2	10	26	33	1.95	−0.26	0.72	8.8	11	9	4	18	s.	**Section Center**
St. Louis University	St. Louis City	578	22	32.8	− 1.5	51	2	11	26	32	1.73	−0.75	0.80	8.5	11	9	5	17	nw.	St. Louis University
Shelbina	Shelby	779	41	....	.....	..	..	..	..	..	1.22	−0.41	0.70	8.5	6	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	36	28.7	− 1.9	48	16	0	26	37	1.01	−0.62	0.40	7.0	6	9	7	15	n.	Frank Hall
Unionville	Putnam	1,062	41	23.7	− 3.9	44	15	− 1	11†	36	0.05	−1.57	0.03	0.7	2	7	1	23	s.	John H. Schick
Warrenton	Warren	816	52	31.5	− 0.9	53	15	4	11	37	2.11	−0.03	0.60	7.5	12	8	8	15	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	63	27.0	− 2.6	47	15	− 1	26	37	0.91	−0.54	0.28	6.5	11	5	4	22	nw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**29.6**	**− 2.1**	**59**	**15**	**− 3**	**26**	**44**	**1.24**	**−0.52**	**0.97**	**6.7**	**8**	**9**	**7**	**15**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	8	34.6	.....	50	24†	12	11	22	4.12	.....	1.12	0	14	10	6	15	s.	Jeff. King
Caruthersville	Pemiscot	265	38	39.8	− 1.1	57	24†	15	11	28	3.24	−1.04	1.25	T.	7	12	4	15	n.	Sam Smith
Doniphan	Ripley	344	30	36.0	− 1.8	57	23	12	11	32	3.07	−0.50	0.94	0.6	14	11	3	17	w.	W. W. Martin
Jackson	Cape Girardeau	428	43	34.8	− 1.8	53	2	12	11	28	2.74	−0.48	0.88	1.0	9	5	3	23	n.	John G. Putz
Marble Hill	Bollinger	470	39	35.7	− 1.0	55	2†	10	11	26	1.69	−1.82	0.50	T	9	5	11	15	n	R. A. DeWitt
Morehouse	New Madrid	289	23	....	.....	..	..	..	..	..	3.89	+0.12	1.24	0.8	10	9	8	14	n.	John A. Spence
Poplar Bluff	Butler	339	29	35.6	− 2.2	56	23	12	11†	32	3.71	−0.23	1.66	3.0	8	16	1	14	w.	Mrs. J. H. Wolpers
Sikeston	Scott	318	27	37.0	− 0.7	54	2	13	11	27	3.65	−0.20	1.05	1.5	11	13	6	12	n.	John A. LaFont
Cairo, Ill	Alexander, Ill	356	62	37.6	− 0.2	54	2	14	11	29	3.30	−0.10	1.17	1.5	13	7	7	17	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**36.4**	**− 1.3**	**57**	**23†**	**10**	**11**	**32**	**3.17**	**−0.61**	**1.66**	**0.9**	**11**	**10**	**5**	**16**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	53	32.0	− 2.3	51	2	8	11	38	2.17	−0.80	0.95	2.5	9	11	7	13	n.	Arcadia College
Birchtree (near)	Shannon	1,000	39	35.0	− 1.4	59	24	8	11	32	3.00	+0.25	1.00	2.5	7	12	2	17	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	4	....	.....	..	..	..	..	..	1.45	.....	0.66	7.3	4	5	9	17	.....	C. M. McCallister
Caplinger Mills	Cedar	750	8	....	.....	..	..	..	..	..	1.25	.....	0.61	5.0	3	12	6	13	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	32.2	.....	54	2	9	11†	38	1.70	.....	1.06	6.1	5	10	3	18	n.	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	30	35.0	− 2.5	66	25	6	11	41	2.31	+0.04	1.25	3.5	7	15	4	12	nw.	H. E. Dean
Eldon	Miller	934	39	31.5	− 2.8	60	15	4	12	43	1.36	−0.72	0.61	9.0	7	8	12	11	nw.	E. H. Shepherd
Farmington	St. Francois	918	23	33.4	− 3.3	57	2	6	11	30	3.27	+0.51	1.30	3.5	6	9	11	11	nw.	H. O. Miller
Garber	Taney	950	0	37.0	.....	69	28	6	11	39	1.67	.....	0.93	3.4	10	11	6	14	e.	William H. Durham
Goodland	Iron	1,000	41	33.1	− 1.7	53	15	4	11†	37	2.05	−0.50	...	6.0	9	10	3	18	n.	F. M. Adams
Greenville	Wayne	381	25	34.0	− 2.2	59	5	10	11	41	2.30	−0.73	0.87	0.3	6	10	6	15	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	9	....	.....	..	..	..	..	..	1.09	.....	0.92	2.0	2	5	15	11	ne.	A. W. Madison
Koshkonong	Oregon	958	33	36.5	− 1.9	52	15†	10	11	33	2.71	−0.70	1.17	2.0	11	11	3	17	ne.	Geo. R. Hitt
Lebanon	Laclede	1,265	46	32.0	− 2.8	59	29	5	12†	38	2.57	+0.09	0.86	5.0	8	12	9	10	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	28	35.6	− 0.5	61	15	10	11	33	2.13	+0.07	1.12	7.5	6	15	8	8	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	33	33.4	− 1.3	53	17	6	11	29	1.94	−0.54	0.62	6.5	11	11	5	15	n.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	47	35.6	− 1.5	57	15†	9	8†	40	1.38	−1.11	0.58	1.8	9	13	11	7	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	34	33.6	− 1.0	53	16†	6	11	30	2.70	+0.54	0.80	8.5	10	8	5	18	w.	F. H. Lane
Salem	Dent	1,173	30	33.2	− 2.2	51	15†	5	8	30	2.42	+0.04	0.79	6.5	10	10	4	17	s.	E. E. Martin
Seligman	Barry	1,542	33	36.8[a]	− 0.5	61	28	8	11	34	1.37	−1.13	0.95	2.0	6	13[a]	7[a]	10[a]	w.	Floyd E. Fawver
Seymour (near)	Webster	1,642	28	33.4	− 2.0	55	29	5	8†	28	2.01	−0 30	0.65	6.0	7	8	8	15	se.	A. L. Hailey
Springfield	Greene	1,324	46	34.0	− 2.2	59	15	8	11	25	1.54	−0.77	0.53	5.0	9	12	6	13	se.	U. S. Weather Bureau
Versailles	Morgan	1,087	2	32.7	.....	59	15	1	11	35	2.03	.....	0.74	6.8	10	9	3	19	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**34.0**	**− 1.9**	**69**	**28**	**1**	**11**	**43**	**2.07**	**−0.41**	**1.30**	**4.7**	**7**	**10**	**7**	**14**	**nw.**	
Southwest Plain																				
Appleton City	St. Clair	853	39	33.2	− 1.4	54	15†	8	7†	32	1.29	−0.37	0.60	7.1	8	10	12	9	sw.	W. G. Bigelow
Clinton	Henry	765	41	32.2	− 2.5	53	15	6	11	33	1.96	+0.09	0.68	8.0	10	11	4	16	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	904	56	28.6	− 2.7	54	22	0	11	41	1.37	−0 32	0.65	8.5	6	7	8	16	nw.	John H. Patterson
Lamar	Barton	980	46	33.7	− 1.5	61	15	11	8†	34	0.99	−0.99	0.50	5.0	4	14	6	11	sw.	Jesse A. Mann
Lamonte	Pettis	867	33	29.0	− 4.9	53	15	2	11	28	1.79	+0.04	0.57	8.2	9	4	16	11	nw.	J. E. Wheeler
Marshall	Saline	779	47	30.8	− 1.1	56	15	4	11	34	2.00	+0.32	0.60	9.0	9	11	6	14	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	41	34.2	− 1.1	61	15	9	7†	33	1.11	−0.72	0.60	5.0	5	13	6	12	ne.	George A. Kaupp
Warrensburg	Johnson	878	47	32.0	− 1.4	57	15	4	11	36	2.48	+0 72	1.33	8.0	10	13	3	15	sw.	E. A. Markey
Warsaw	Benton	687	33	34.6	− 1.1	60	15	5	11	36	2.17	−0.11	0.84	10.0	11	9	5	17	n.	Everett Martin
Division means	**and extremes**	.....	..	**32.0**	**− 2.0**	**61**	**15**	**0**	**11**	**41**	**1.64**	**−0.17**	**1.33**	**7.6**	**8**	**10**	**7**	**14**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	39	27.4	− 2.7	48	15†	0	11	34	0.23	−1.02	0.15	1.5	3	12	4	15	nw.	A. S. Cumming
Chillicothe	Livingston	779	25	27.4	− 5.5	52	15	1	11	43	0.42	−1.04	0.20	4.0	5	12	5	14	n.	Wm. J. Olenhouse
Conception	Nodaway	980	45	26.2	− 3.0	45	22†	0	11†	29	0.34	−0.60	0.18	2.0	4	10	4	17	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	14	29.4[a]	− 1.0	53	15	2	7†	29	0.37	−0.84	0.15	2.7	3	14	0	17	n.	Fred L. Stiff
Grant City	Worth	1,134	30	26.6	− 1.4	45	15†	− 1	11	34	0.15	−0.92	0.15	2.0	1	5	7	19	sw.	Howard Rybolt
Kansas City	Jackson	963	45	31.1	− 1.4	55	15	7	7	28	0.53	−0.80	0.22	4.4	7	9	6	16	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	42	26.1	− 3.1	51	15	− 2	7†	42	0.57	−0.69	0.20	5.0	4	..	..	..	.....	Roscoe L. Terry
King City	Gentry	1,095	8	....	.....	..	..	..	..	..	0.19	−0.88	0.14	3.0	4	3	10	18	n.	John M. Martin
Lexington	Lafayette	688	49	29.8	− 2.2	55	15	5	7†	42	1.22	−0.56	0.53	9.8	7	11	7	13	e.	Miss Carrie Loomis
Maryville	Nodaway	1,169	44	26.2	− 0.6	48	22	− 1	11	32	0.17	−0.83	0.13	1.9	3	6	9	16	nw.	R. B. Montgomery
Oregon	Holt	1,048	78	29.0	+ 0.3	55	2	1	26	33	0.53	−0.84	0.22	2.5	5	13	3	15	nw.	Mina Wright
St. Joseph	Buchanan	987	24	29.0	− 1.8	51	15	4	26	27	0.27	−0.87	0.15	2.6	5	12	4	15	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	31	25.2	− 1.2	47	22	0	11†	32	0.46	−0.42	0.18	6.5	5	7	8	16	ne.	Albert Volker
Trenton	Grundy	822	38	27.9	− 1.7	46	22†	2	11†	36	0.61	−0.78	0.32	2.0	6	7	9	15	s.	W. H. Estes
Division means	**and extremes**	.....	..	**27.8**	**− 1.9**	**55**	**2†**	**− 2**	**7†**	**43**	**0.50**	**−0.74**	**0.53**	**3.6**	**4**	**9**	**6**	**16**	**nw.**	
State means	**and extremes**	.....	..	**31.6**	**− 2.5**	**69**	**28**	**− 3**	**26**	**44**	**1.66**	**−0.41**	**1.66**	**5.0**	**7**	**10**	**6**	**15**	**nw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated.

Daily Precipitation for December 1934

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri	.10		.01				.20				.01				.04				.24		.01	.12		T.	.06	.03		T.		.28		1.10
Bowling Green	Mississippi			.66				.08								.05	.03			.45			.14			**	.30				.10		1.81
Brunswick	Grand	.07		.05				.15								.03				.27		.09			.01	.06	.04			.02	.14	.01	0.94
Canton	Mississippi	.04		.18					.02		.01	T.								.47						.05	.12						0.89
Clifton Hill	Chariton							.20		T.						.10			T.	.90		.27			T.	.15			.01	.01		T.	1.64
Columbia***	Missouri		T.	T.			.06	.08	T.	.01	T.				T.	.06		T.	.20	.12	T.	.24			.05	.12			T.	.25		T.	1.19
Downing	Mississippi			T.				T.	T.	T.						.05				.11					T.		.17		.05				0.38
Edina	do	.10						.04	T.	T.	T.									.30							T.						0.44
Elsberry	do			.64				.10	.05	.02						T.				.85		.18			.08	T.	.20		T.	T.	.18		2.30
Farber	do			.22				.24									.10			.48		T.	.12								.10		1.26
Fayette	Missouri							.20		T.	T.					.01				.27		**	.13		T	T.			T.		.14	T.	0.75
Fulton	do			.25				.13			.04	T.				.07				.45		T.	.10		T.	.07	.13		T.	T.	.38	.02	1.64
Gorin	Mississippi			.13			T	.14	.14	T.	T.									.08	T.				.06		.16	T.				T.	0.71
Hannibal	do		.07	.28				.10	.02	.02						.08				.43					.07	.09	.03		T.	T.			1.19
Hermann	Missouri			.50				.06			.03	.01				.03	.02			.61					.02	.02					.30		1.60
Jefferson City	do	.09		.20				.27	.02	.04		.07				.15				.97			.30				.02		.04		.72		2.89
Kahoka	Mississippi			.45				.02												.12							T.						0.59
Kirksville	do									T.										.17					.04								0.21
LaBelle	do	.07		.22				.08	.06											.35						.05				.10			0.93
Linneus	Grand	.60		.03				.06	T.		T.	T.				T.		T.		.09		T.				.01	.02	T.	T.				0.81
Louisiana	Mississippi		**	.75				.05			T.									.45					**	.30							1.55
Lucerne	Grand			.04				T.												.05							.18						0.27
Macon	Chariton							.04								.03				.35		.11				.05	.10			T.			0.68
Madison	Mississippi																																
Memphis	do	.20		T.			T.	T.			T.									.12						T	.20			T.	T.		0.52
Mexico	do	.11		.11				.15			.05	T.				.10		T.		.45		T.	.10		.10	.10	.18						1.45
Milan	Grand	.21		.43					.08	.05						.18				.08							.32						1.35
Monroe City	Mississippi						.06									.12				.33				.09					.04			T.	0.64
New London	do	.04		.58				.14				T.				T.	.12			**	.74		.09			.24	.07				T.		2.02
Palmyra	do	.16		.33				.04												.60													1.13
Paris	do		.05	.11				.06			.04					.09					.50					.16	.13				.11		1.25
Perry	do		T.	.17				.10								.10				.50					T.	.20			T.			T.	1.07
Philadelphia	do	.04		.19				.05												.80							.20						1.08
St. Charles	Missouri			.54				.08		T.	.10					.09				.70	T										.30		2.01
St. Louis***	Mississippi		.14	.21			T.	.06	T.	.08	.01					.07			.57	.15	T.	T.			.35	.07	T		T.	.24		T.	1.95
St. Louis University*	do		.14	.19				.04	.01	.09	T.					.03			.66	.14					.26	.02			T.	.15		T.	1.73
Shelbina	do	.04	T.	.10				.12								.04				.70							.22						1.22
Shelbyville	do			.10				.08								.04				.63							.20						1.05
Steffenville	do			.10			.07	.07	T.	T.						.22		T.		.40					.15	T.							1.01
Troy	do			.55				.04			.04					.04				.55			.03		.12		.10				.15		1.62
Union	Meramec			.52				.05			.06					.06				.80			.22	.15	.02						.40		2.28
Unionville	Chariton	.02	T.																	.03						T.						T.	0.05
Valley Park	Meramec			.42				.10	T.		.10					T.				.91	T.		T.		.05	T.	.32			T.	.42	T.	2.32
Warrenton	Mississippi		.04	.50				.10	T.	.03	T.					.05				.60					.13	.12	.15		.02	.30	.07	T.	2.11
Keokuk, Ia. ***	do		.15	.13			.01	T	.02	.08	T					T.			.16	.04	T.				.09	.18			.04			.01	0.91
Southeast Lowlands																																	
Bragg City	St. Francis			T				.80												1.10					.56		.26		.05	.09	.08	.52	3.46
Campbell	do		.10	.79				.10								.04			.18	.94		.08			.13	.64	.10		.05	.40	.14	.43	4.12
Cape Girardeau	Mississippi			.36	.04			T.	T.											1.00	.01		.05			.05	.30			.05	.40		2.26
Caruthersville	do			.45			T.	T.												1.25						.34	.30		.05	.12		.73	3.24
Dexter	St. Francis			.88				T.										T.		1.20					.12	T.	.52				.72	.20	3.64
Doniphan	Black		.11	.61				.08								.03			.38	.56		.16			.11	.34	.05		.06	.49	.02	.07	3.07
Fisk	St. Francis			.54				.11	T.	T.						T.	T.			.32					.11	.12			T	T.	.74		1.94
Jackson	Mississippi	.10		.60				.10	T.		T.	T.				.02				.88		.05			.08	.32				.59			2.74
Marble Hill	do			.33				.06			.07												.10			.05	.06	.28			.50	.24	1.69
Morehouse	do			.73				.05			T.					T.			T.	1.24		.10			.13	.25	.27		T.	.62	.24	.26	3.89
New Madrid	do			.56				.10	.17								.06			1.20	.02		.10			.17	.66		.01	.04	.54		3.63
Parma	St. Francis			.72				.07	T.											1.15		.07				.11	.61			.05	.50		3.28
Poplar Bluff	Black			.55				.22												1.66			.10			.14	.32			.12	.60		3.71
Sikeston	Mississippi			.67				.20								.03				1.05		.05			.05		.50		.03	.44	.38	.25	3.65
Cairo, Ill. ***	do	T.	.21	.27				.09	T.	T.	.02					.01			1.00	.17		.05			.09	.52			.01	.47	T.	.39	3.30
Ozark Plateau																																	
Arcadia	St. Francis			.34				.05	T		.01	T.				T.				.95			.11		.06	.03	.07		T.		.55		2.17
Birchtree (near)	Black			.58				.10			T.					.05			1.00		.06				.36				.85			3.00
Buffalo	Osage							.23								.05				.51											.66		1.45
Caplinger Mills*	do						T.	.13		T.	T.					T.			.61	T.					T.	T.			T.	.51	T.		1.25
Crystal City	Mississippi			.30				T.			T.					T.	.03			1.06					.15	T.	.16						1.70
Dean	Neosho		.16					.18		T.	T.					.08		T.	1.10	.15					.42	T.				.22	T.	T.	2.31
Eldon	Missouri			.09				.24			T.	T.				.05				.61			.17		T.	.06					.14		1.36
Farmington	St. Francis							.05				T.								.40					1.30	.40	.52		.60				3.27
Fredericktown	do			.25				.03		T.										.88		.12			.12	.07	.12				.50		2.09
Galena	White							.24												1.04	.04				.12					.04			1.48
Garber	do	T.	.05					.17			T.					.04			.93	.06					.11	.03				.23	.03	.02	1.67
Goodland	Black		**	**				**			.75									.40		.05				.35	.25			.25			2.05
Greenville	St. Francis			.87				.11								T.				.85		.11				.13			T.	.23			2.30
Hailey	White																		.92						.17					T.	T.		1.09
Koshkonong	Black		.24	.60				.20			T.								.65	.52		.15			.10	.06			.10	.05	.04	2.71
Lakeside	Osage			.12				.30	T.		T	T.				.11				.74		T.	.27		.02	.02	T.		T.	.02	.87		2.47
Lebanon	do				T	T.			.13	.54							.18				.54		T.			.12				.08	.12	.86	2.57
Leeper	Black	T.		.31				.12	T.		.01						.04			1.03		.09			.03	.02	.10			.04	.60			2.39
Lockwood	Osage							.35			.05								.30	.82					T.	T.				.60	.01		2.13
Mountain Grove	White		.35	.10				.16			T								.25	.15		.02			.15	.10			.02	.62	.02		1.94
Neosho	Neosho	T.	.02					.12		T.	T.					.08			.58	.10							.02		.05	.37	.04		1.38
Owensville	Gasconade			.35		.09	.11				.20	T.								.70			.25		.08						.65		2.43
Rolla	Meramec			.30				.21				.02				.11				.70			.15		.07	.30	.04				.80		2.70
St. Thomas (near)	Osage			.23				.16	T.							.03				.64		T.	.18		.05						.62		1.91
Salem	Meramec		.09	.12				.19			T					.05				.12	.67		.12		.30	.14				.62			2.42
Seligman	Neosho		T.					.10			T.					.05	T.			.75	.20				.09	T.			T	.18	T.		1.37
Seymour (near)	White		.10					.30												.35	.30				.40	T.			T.	.52	.04		2.01
Springfield ***	do		.05	.01			.01	.27	T.	T.	T.	T.				.01				.49	.04	T.	T.		T.	.13	T.	T.		T.	.53	T.	T.	1.54
Stover	Missouri							.21				T.								.48		.23							T.	.13	.69		1.74
Versailles	Osage		T.				T.	.24		T.	T.					.10				.36		.28			.07	T.			.03	.74	.05	.01	2.03
Williamsville	Black			.38				.09	.01								.08			.98	.01				.10	.03	.24			.01	.65	.01	2.59
Willow Sprgs. (near)	White			.55				.11								.06				.93		.06			.12		.12		.01	.20	.41		2.57
Southwest Plain																																	
Appleton City	Osage							.10		T.	T.					.01			.15	.40		.01			T.	.01			.01	.60			1.29
Clinton	do							.28								.05				.40		.20			.03	.17	.04		.07	.68		.04	1.96
Harrisonville	Osage		.03					.17		T.						.03				.65											.41	.08	1.37
Joplin	Neosho							.03								.05			.64							.06				.40	.02		1.20

Continued on next page

Daily Precipitation for December 1934—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																
Lamar ‖‖	Neosho			T.				.11								T.				.50										.10	.28	T.	0.99
Lamonte	Missouri						.10	.28		**	T					.30			.33	.24		.40			.05	.04						.05	1.79
Marshall	do						T.	.25			.06					.42			T	.60		.12			.06	T.			.12	.37			2.00
Nevada	Osage							.10								.02			.60							T			.01	.38	T	T.	1.11
Warrensburg	Missouri	T.					.10	.20			T.					.15			.03	1.33		.11			T	.03			.03	.25	.25		2.48
Warsaw	Osage	.02						.30								.05			.30	.45		.13			.02	.02	T.		.01	.84	T.	.03	2.17
Waverly ‖‖	Missouri	.11						.14								.06				.82		.15			.08	T.	.06		.02	.05	.20		1.69
Northwest Plateau																																
Bethany	Grand			T.			.05	.10										T.	T.	.08						T.			T.				0.23
Chillicothe ‖‖	do							.11										T.		.20		.06			T.	.02	.03		T.				0.42
Conception	Missouri		T				.18			T.	T.						T.	.03	.08						T.	.05			T.		T.		0.34
Edgerton	do						.15	.12			T.			T.					.10						T	T.			T.	T.	T.		0.37
Gallatin ‖‖	Grand			.47				.28								.03				.20		.09				T.	.30		.10				1.47
Grant City	do	T.	T.	T			.15	T.			T.							T.	T.	1	T.					T.						T.	0.15
Kansas City***	Missouri			T.			.16	.01		T.	T.					.01			.22			T.			.01	.02			T	.10	T.	T.	0.53
Kidder ‖‖	Grand	.20		T.				.15								T.		T.		.10					T.		.12		T				0.57
King City	Missouri		T.				.10	.04		T.						T.	T.								.03	T			.02				0.19
Lexington ‖‖	do	.06						.24								.03				.53		.05							.07		.24	T.	1.22
Maryville	do			.02			.13			T	T.								.02							T.			T.		T.		0.17
Oregon	do	T.		T.			.10	.05		T.	T.						T.	T.	.13							.22	T.		.03		T.		0.53
St. Joseph***	do		T.				.15		T.	T.	T.					T.	.01		.08	T.		T.			T.	.01			.02		T.	T	0.27
Tarkio	do		.08				.18				T.							.07	.10							.03							0.46
Trenton	Grand			.07			T	.06		T.	T.					.03	T.	T.		.10	T.				T.	.03	.32		T.				0.61

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for December 1934

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.013	.045	.051	.034	.056	.066	****	****	****	****	****	****	****	****	****	****	.385	.021	.028	****	****	.034	.004	††††	††††	****	****	.109	§§§§	¶¶¶¶	.001	0.805
	Mean temperature	38	40	34	38	38	29	24	23	32	21	20	28	35	38	46	40	40	34	30	29	30	41	36	36	40	20	34	40	38	34	36	33.6
	Wind movement	178	92	141	170	80	131	74	138	126	154	125	76	116	80	62	112	70	65	87	94	66	90	83	68	71	132	80	74	77	76	37	3,025

**** Daily evaporation included in next measurement; ice cover on tank. †††† —.004. ‡‡‡‡ —.003. §§§§ —.016. ¶¶¶¶ —.019.
Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.

Daily Temperatures for December 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	41	45	46	39	40	42	27	31	30	26	24	40	37	35	55	54	47	42	36	42	40	47	49	39	37	41	48	44	46	35	36	40.0
	Minimum ...	20	29	27	24	19	25	8	9	18	13	3	16	28	29	31	35	31	29	23	11	30	26	32	27	31	6	15	36	22	21	32	22.8
Columbia.	Maximum...	44	49	42	41	48	39	24	28	31	20	24	40	38	36	56	41	43	36	31	39	39	46	42	33	40	20	49	46	39	35	37	37.9
	Minimum ...	26	37	29	27	23	24	12	17	15	10	5	21	30	31	35	34	30	30	16	16	32	29	30	29	20	8	17	39	23	23	27	24.0
Fayette§§	Maximum...	..	..	..	..	..	31	31	33	30	23	27	39	88	36	48	38	41	35	28	40	40	47	38	34	38	22	49	45	30	36	36	°35.9
	Minimum ...	..	..	..	..	..	27	10	5	30	10	1	6	27	30	32	33	30	31	25	9	21	28	30	31	31	8	16	20	29	25	27	°22.0
Hannibal	Maximum...	41	47	42	38	39	41	28	24	26	21	23	37	40	35	45	46	41	36	34	34	37	39	40	30	32	32	46	41	41	38	37	36.5
	Minimum ...	27	30	27	26	24	27	12	13	17	11	3	16	28	29	30	32	29	28	25	20	27	27	26	22	25	1	9	35	20	20	32	22.5
Jefferson City §§	Maximum...	57	51	34	43	50	33	31	29	34	22	26	42	41	37	59	41	45	34	27	39	39	49	41	35	42	22	51	49	35	37	41	39.2
	Minimum ...	25	27	30	27	24	26	18	9	21	11	5	5	25	31	31	36	31	29	27	12	15	28	30	30	31	11	11	18	35	27	27	23.0
Kirksville.	Maximum...	35	35	37	35	37	38	22	25	25	20	20	38	35	33	45	43	39	48	34	36	37	40	44	27	25	22	43	40	36	36	35	34.4
	Minimum ...	27	18	24	20	17	20	8	11	19	10	0	15	27	27	28	31	28	26	23	20	28	25	24	25	20	− 2	8	22	15	14	30	19.6
Louisiana	Maximum...	40	45	37	40	38	33	28	22	27	22	22	37	40	40	39	37	40	37	30	37	37	40	37	40	36	33	42	43	43	41	38	36.2
	Minimum ...	30	28	35	27	22	28	17	15	15	12	5	15	31	30	30	31	30	29	28	19	25	28	30	23	28	4	10	32	30	22	33	23.9
Macon§§	Maximum...	38	42	30	36	41	29	25	27	27	19	25	39	38	35	52	37	43	34	28	40	40	43	36	31	33	23	47	43	23	36	37	34.7
	Minimum ...	20	23	28	23	20	28	7	11	19	11	2	4	24	28	28	34	29	28	24	17	23	26	29	21	25	2	5	22	21	18	22	20.1
Mexico §§	Maximum...	43	53	35	41	43	34	25	28	30	22	25	39	40	35	52	40	42	36	37	37	38	45	42	32	36	22	48	44	33	37	34	37.6
	Minimum ...	25	27	29	26	22	24	10	9	20	11	3	3	24	27	29	34	29	27	25	15	17	28	29	25	26	5	6	21	28	21	26	21.0
St. Louis	Maximum...	47	51	44	45	43	41	29	25	32	26	25	44	42	38	48	50	42	39	32	35	42	40	42	36	37	34	50	49	47	39	45	40.0
	Minimum ...	31	35	31	30	29	29	16	16	22	14	12	20	32	31	30	34	30	30	27	20	32	30	30	28	32	10	17	36	30	28	35	26.7
Unionville §§	Maximum...	33	37	28	35	35	22	24	24	25	14	20	33	33	35	44	35	38	33	28	33	32	42	31	28	31	21	35	34	20	36	34	30.7
	Minimum ...	18	18	23	17	17	18	9	11	17	10	− 1	− 1	18	24	24	24	29	27	22	21	21	24	25	19	19	− 1	− 1	20	14	13	19	16.7
Warrenton	Maximum...	46	49	44	42	43	40	30	23	30	28	26	42	40	37	53	51	41	38	35	35	39	41	41	34	35	36	50	45	45	34	40	39.1
	Minimum ...	27	32	29	26	22	29	15	12	16	10	4	15	29	30	28	35	28	28	25	14	28	29	34	26	31	6	13	36	27	25	31	23.9
Southeast Lowlands																																	
Campbell	Maximum...	42	47	46	44	42	42	40	35	35	34	24	36	36	36	43	43	42	40	42	36	42	41	48	50	50	44	35	50	50	49	46	41.6
	Minimum ...	30	27	33	27	25	30	27	17	26	20	12	18	25	25	21	37	32	25	29	20	29	30	30	32	30	24	19	32	44	36	42	27.5
Caruthersville	Maximum...	48	56	53	50	49	49	45	35	37	37	28	42	46	43	54	56	45	43	43	46	49	47	55	57	56	57	46	51	51	49	52	47.6
	Minimum ...	33	33	43	30	33	33	30	19	29	24	15	18	29	28	26	43	35	29	33	23	36	34	36	40	36	31	22	38	48	41	44	32.0
Doniphan	Maximum...	51	54	46	52	50	52	38	34	40	35	34	48	52	42	50	52	48	40	39	45	43	50	57	49	40	47	39	47	49	46	46	45.6
	Minimum ...	30	25	32	23	21	23	20	14	28	21	12	16	22	20	23	40	37	25	29	19	25	29	28	38	26	26	16	35	40	38	37	26.4
Jackson	Maximum...	45	53	51	49	44	41	36	28	32	32	29	41	43	39	43	46	43	40	39	38	43	44	50	45	46	44	39	48	47	43	47	42.2
	Minimum ...	33	31	39	28	24	30	25	17	24	18	12	13	23	21	25	37	30	24	29	23	29	33	32	33	36	19	16	32	42	34	40	27.5
Poplar Bluff	Maximum...	49	55	52	53	50	49	35	32	35	34	34	44	54	50	48	51	49	45	40	42	42	49	56	49	42	44	41	49	49	46	47	45.6
	Minimum ...	31	26	30	23	22	28	16	16	26	19	12	12	24	23	23	37	29	24	23	19	26	34	28	23	28	19	17	37	41	37	38	25.5
Sikeston	Maximum...	49	54	51	52	49	45	39	29	33	38	32	43	45	43	44	46	48	44	41	41	45	47	52	50	49	52	41	49	49	48	48	44.9
	Minimum ...	34	32	40	27	28	31	25	18	25	20	13	19	27	19	25	39	31	25	31	24	32	33	34	36	30	25	19	34	45	37	42	29.0
Cairo, Ill.	Maximum...	47	54	49	49	46	44	32	28	32	31	30	41	45	41	51	51	42	47	39	43	47	45	52	51	53	49	45	50	50	48	49	44.5
	Minimum ...	36	36	34	31	33	32	23	20	26	19	14	21	30	29	31	36	31	28	30	27	38	37	38	37	36	20	20	44	41	38	40	30.8
Ozark Plateau																																	
Arcadia §§	Maximum...	48	51	45	49	43	40	27	29	31	23	31	47	47	41	50	44	49	32	33	42	39	46	41	44	45	28	43	46	44	42	45	40.8
	Minimum ...	29	30	35	29	21	21	25	10	19	14	8	9	18	20	20	32	29	23	23	11	14	28	30	31	32	20	14	19	37	32	32	23.1
Birchtree	Maximum...	48	44	47	50	49	43	29	31	38	34	32	48	48	49	51	51	48	42	38	41	48	48	51	59	44	45	48	46	46	44	45	44.7
	Minimum ...	26	36	28	26	21	29	23	21	24	14	8	16	26	20	21	34	31	21	20	12	28	21	29	34	26	19	21	33	40	34	41	25.3
Crystal City §§	Maximum...	49	54	40	48	47	39	26	29	34	25	28	47	44	42	53	43	42	37	32	36	39	44	43	38	39	21	52	51	42	40	44	40.8
	Minimum ...	31	29	39	29	21	26	24	16	20	14	9	9	24	24	29	33	32	28	27	9	12	27	32	30	30	14	14	21	36	30	31	24.2
Eldon§§	Maximum...	45	47	44	46	50	32	32	30	34	32	28	44	40	41	60	39	45	36	28	27	42	39	49	40	45	43	26	53	51	36	38	40.5
	Minimum ...	26	25	29	29	24	22	16	11	22	14	5	4	21	30	30	33	31	28	27	10	14	26	26	30	31	12	10	25	36	26	26	22.5
Farmington	Maximum...	52	57	47	48	49	42	40	35	33	30	27	42	42	45	47	42	40	35	35	40	42	42	44	45	43	38	42	45	44	44	45	42.0
	Minimum ...	32	33	30	28	20	30	21	10	21	12	6	13	23	28	30	33	32	27	23	10	28	30	35	35	30	10	15	28	28	35	35	24.9
Garber	Maximum...	48	49	42	52	55	49	37	39	45	33	32	52	46	47	62	58	51	40	36	51	51	58	55	51	47	48	42	69	59	51	47	48.5
	Minimum ...	21	31	26	24	20	26	16	8	20	18	6	13	26	21	32	36	31	26	28	21	29	24	27	40	27	20	20	39	39	37	40	25.5
Koshkonong	Maximum...	50	50	43	50	49	45	37	33	43	37	32	49	48	49	52	51	48	40	36	46	51	50	52	50	46	45	37	48	47	46	46	45.4
	Minimum...	27	31	29	28	27	32	19	12	25	17	10	16	33	26	28	41	33	27	28	22	35	29	35	36	29	22	15	35	36	39	27.6	
Lebanon §§	Maximum...	46	48	49	35	45	45	50	30	31	37	29	28	43	40	40	50	48	45	40	31	42	39	51	40	44	48	40	47	59	42	40	42.0
	Minimum ...	21	33	30	24	24	22	24	12	9	24	14	5	5	25	26	27	28	30	29	25	10	29	29	29	31	12	12	21	21	25	30	22.1
Mountain Grove	Maximum...	48	48	41	46	49	43	31	31	38	23	30	47	45	43	51	44	53	46	33	42	40	48	48	46	43	37	42	49	45	42	43	42.4
	Minimum ...	24	33	25	26	22	28	7	9	21	13	6	18	29	22	29	30	34	27	16	16	33	27	34	29	34	15	17	35	34	32	35	24.5
Neosho	Maximum...	43	54	47	47	47	46	40	33	38	31	31	42	44	49	57	57	48	49	36	44	44	52	51	47	57	57	48	53	53	42	40	46.0
	Minimum ...	18	36	24	24	20	23	12	9	22	16	9	21	26	26	33	35	28	30	28	24	31	24	24	24	25	17	21	43	38	32	35	25.1
Rolla	Maximum...	45	48	42	43	48	42	31	29	35	32	25	42	40	39	52	53	44	40	33	38	37	46	45	43	42	41	49	53	48	42	45	41.7
	Minimum ...	27	36	28	28	22	30	15	10	23	14	6	12	30	27	31	36	30	28	24	10	31	30	34	31	31	13	19	37	32	30	35	25.5
Springfield	Maximum...	42	44	37	44	48	39	31	32	35	21	28	44	40	43	59	52	48	37	30	45	43	52	43	45	45	29	42	58	47	41	42	41.5
	Minimum ...	22	37	24	28	28	29	10	13	21	11	8	23	30	29	34	33	31	30	24	26	32	30	36	37	29	14	23	37	34	33	30	26.6
Southwest Plain																																	
Appleton City	Maximum...	38	43	43	45	51	45	30	30	31	29	26	40	40	40	54	54	42	42	32	42	43	49	49	40	43	43	42	47	47	32	34	40.8
	Minimum ...	22	28	28	24	27	28	8	12	24	17	8	24	30	30	36	35	30	31	22	17	31	29	35	31	28	11	21	37	30	25	32	25.5
Clinton	Maximum...	40	42	42	42	46	43	29	32	34	28	24	39	36	36	53	52	45	35	34	42	40	52	47	38	43	43	42	48	43	32	35	39.7
	Minimum ...	20	26	28	28	23	27	10	12	21	16	6	21	20	30	32	35	35	30	21	15	32	26	32	32	32	10	19	42	28	25	31	24.7
Harrisonville§§	Maximum...	40	44	36	43	50	32	33	31	33	23	28	44	38	39	40	39	48	34	38	41	44	54	42	36	40	27	47	45	31	32	33	38.2
	Minimum ...	16	21	24	23	20	23	3	4	19	10	0	3	22	27	27	28	27	28	18	15	22	25	29	27	26	5	6	24	27	20	24	19.1
Lamar§§	Maximum...	44	52	40	47	52	39	32	36	37	23	32	43	41	48	61	40	46	35	35	45	44	56	44	49	51	29	48	50	40	38	37	42.4
	Minimum ...	24	24	26	26	25	25	12	11	25	18	11	11	28	30	31	34	28	29	25	21	34	28	32	36	30	14	14	29	35	29	31	25.0
Lamonte	Maximum...	41	46	39	44	45	39	24	31	32	23	25	40	35	35	53	41	48	35	32	41	43	52	41	35	41	31	31	32	33	34	40	37.5
	Minimum ...	18	29	27	24	20	22	6	8	22	9	2	20	30	30	29	34	28	29	10	13	31	27	31	29	30	8	10	10	15	16	18	20.5
Marshall	Maximum...	37	42	41	39	44	42	26	31	30	22	26	40	37	34	56	53	44	39	32	43	40	52	50	50	39	38	47	49	44	32	44	40.1
	Minimum ...	18	29	26	26	23	25	7	10	15	14	4	19	29	29	33	34	30	29	23	15	32	28	28	27	17	6	17	15	22	21	19	21.6
Nevada	Maximum...	40	51	46	47	52	43	32	35	36	28	29	44	41	43	61	50	44	38	32	44	46	56	45	47	48	44	45	48	38	34	35	42.6
	Minimum ...	24	38	26	28	27	27	9	14	25	17	9	25	30	30	35	33	26	30	20	18	34	29	34	31	28	11	23	35	28	26	32	25.9
Warrensburg	Maximum...	40	48	41	43	48	43	28	32	32	27	26	41	38	38	57	53	50	40	32	40	39	54	48	35	40	40	48	48	39	31	33	40.4
	Minimum ...	21	28	26	27	25	25	6	9	25	15	4	21	31	29	34	34	30	29	23	18	33	28	32	31	31	8	12	17	24	22	31	23.5
Warsaw	Maximum...	42	50	42	46	52	47	31	33	31	28	28	43	41	43	60	58	48	43	33	46	40	54	47	41	48	48	50	50	48	35	35	43.3
	Minimum ...	22	34	28	29	22	30	9	11	26	16	5	20	30	31	35	35	28	31	23	15	33	28	35	33	34	12	18	37	33	27	34	25.9
Northwest Plateau																																	
Chillicothe §§	Maximum...	37	41	32	37	41	25	31	31	29	18	24	41	34	37	52	37	47	34	31	38	38	51	38	32	33	25	47	42	24	34	35	35.4
	Minimum ...	18	24	26	23	19	22	3	5	21	13	1	2	22	27	27	34	31	29	22	15	23	26	23	25	27	3	4	24	22	18	22	19.4
Grant City	Maximum...	39	34	35	33	36	36	16	27	26	19	21	39	37	30	45	41	44	40	34	41	36	45	43	30	32	24	43	39	34	31	31	34.2
	Minimum ...	14	23	21	20	17	14	4	7	17	7	− 1	15	27	23	28	32	28	30	20	18	29	25	27	22	24	0	9	33	15	14	29	19.1
Kansas City	Maximum...	42	45	36	40	49	34	23	35	31	19	29	43	38	39	55	39	46	34	32	43	42	54	45	36	40	23	45	46	30	32	35	38.1
	Minimum ...	25	33	27	26	21	17	7	23	17	11	7	26	31	31	38	34	32	31	22	24	31	30	30	29	13	7	23	30	23	24	24	24.1
Kidder §§	Maximum...	39	39	30	35	42	24	31	28	28	18	25	40	33	36	51	37	42	33	25	40	38	49	35	32	33	25	45	42	24	32	34	34.4
	Minimum ...	16	16	23	23	18	19	− 2	− 2	19	10	1	2	21	24	25	32	30	29	20	14	23	25	27	24	26	3	3	23	20	18	22	17.8
Lexington§§	Maximum...	42	47	36	43	47	27	32	33	30	21	26	43	34	40	55	38	50	34	30	41	41	54	41	35	39	27	49	46	27	33	34	37.9
	Minimum ...	22	23	28	26	23	24	5	5	24	15	5	7	25	29	30	34	30	31	23	18	21	27	30	26	30	6	7	26	26	21	25	21.7
Maryville	Maximum...	36	34	33	35	40	32	15	31	25	18	24	41	34	29	47	37	44	38	31	43	34	48	42	30	32	18	41	38	29	30	33	33.6
	Minimum ...	14	25	21	18	18	14	4	7	17	8	− 1	16	26	23	29	32	27	31	20	18	28	24	27	23	18	0	9	28	16	15	27	18.8
Oregon	Maximum...	45	55	37	39	45	37	17	33	28	20	25	45	38	35	51	42	50	41	32	47	39	49	46	32	35	21	46	38	28	32	34	37.5
	Minimum ...	19	26	21	24	20	16	5	9	18	8	2	20	29	25	30	32	30	31	19	22	28	25	26	24	19	1	13	26	19	20	27	20.5
St. Joseph.	Maximum...	40	40	32	36	46	32	21	33	29	17	26	41	38	35	51	40	48	35	31	45	39	51	41	33	35	18	44	42	27	32	34	35.9
	Minimum ...	23	30	23	26	23	15	6	21	17	9	5	22	27	26	34	33	33	29	21	26	29	28	28	27	8	4	18	27	22	22	20	22.0
Trenton	Maximum...	36	40	34	36	37	28	20	26	24	18	27	39	34	32	45	44	40	35	33	34	35	46	38	33	32	30	46	40	40	32	36	34.5
	Minimum ...	18	26	24	23	19	20	6	10	18	12	2	17	31	26	30	34	30	30	21	16	29	28	27	24	28	2	10	34	18	18	30	21.3

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 1-23-35—945.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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VOL. XXXVIII ANNUAL SUMMARY, 1934 No. 13

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GENERAL SUMMARY

The year 1934 in Missouri was neither the warmest nor the driest year of record, but it had the most disastrous period of summer heat and drought ever experienced in the State, so far as records show. The year as a whole was warmer in 1921 and 1931, and it was drier, considering the whole year, in 1894, 1901 (driest of record), 1917, and 1930. In this connection, the table "Comparative annual data for the State", brings out interesting facts. And for a special article on the record-breaking spell of heat and drought, lasting from about June 1 to August 10, and practically destroying the corn crop, see page 40 of Climatological Data for August 1934. This was the outstanding feature of the year.

Some other marked features of the year were (1) the very low temperatures at the end of February, (2) the cold March, (3) the cool period prevailing from about the middle of August and on through September, (4) the fine rains of the second half of August and through September, (5) the remarkable revival of vegetation in September and the flourishing of new fall crops, (6) the rather cold December.

The paragraphs below, "Weather by months", give details of the principal occurrences through the year. For still further details, the monthly reports of Climatological Data should be consulted.

TEMPERATURE

The annual mean temperature for the State was 57.4°, or 2.4° above normal. The highest annual mean was 62.0° at Caruthersville, and the lowest was 54.3° at Grant City. The highest temperature recorded was 117° at Louisiana, on July 18th; the lowest was 26° below zero at Louisiana, on February 27th. The greatest daily range was 64° at Jefferson City on March 20th.

PRECIPITATION

The average precipitation for the State was 34.21 inches, or 5.87 inches less than normal. The greatest annual amount was 53.71 inches at Caruthersville, and the least was 24.86 inches at Lucerne. The greatest local monthly amount was 15.09 inches at Farmington, in September, and the least local monthly amount was none at Palmyra, in July. The greatest precipitation in any 24 hours was 6.47 inches at Farmington, on September 12th. The average number of days with 0.01 inch or more of precipitation was 82.

The snowfall averaged 23.0 inches, or 4.7 inches more than normal. The greatest annual amount was 52.3 inches at Clifton Hill, and the least annual amount was 0.7 inch at Caruthersville. The greatest monthly snowfall was 20.5 inches at Mexico, in February.

THE WEATHER BY MONTHS

JANUARY.—Excepting the sudden cold wave of the 28-30th, temperatures were mostly very mild. From the 10th to the 24th there was no hard freezing, and on several nights the temperature remained well above the freezing point. Precipitation was unusually light, and, this being the fourth successive month with considerable deficiencies, the lack of moisture was becoming serious.

FEBRUARY.—Strong temperature fluctuations and some very cold weather in the last ten days, especially on the 26-28th, characterized the month. At a few stations the lowest temperatures ever recorded so late in the winter occurred on the morning of the 27th; for example, 26° below zero at Louisiana, 24°

(Continued on page 66)

CONDENSED STATE SUMMARY FOR 1934

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	36.1	+ 5.2	71	− 6	1.24	−0.98	2.73	0.37	5
February	32.5	− 0.5	79	−26	1.27	−0.74	3.15	0.34	5
March	41.2	− 2.4	82	− 3	2.36	−0.78	7.78	0.05	7
April	56.5	+ 1.2	90	24	2.41	−1.48	4.70	0.65	7
May	69.0	+ 4.6	110	31	1.89	−2.84	4.64	0.22	5
June	80.4	+ 6.8	108	47	2.85	−1.90	5.95	0.23	7
July	86.2	+ 8.4	117	48	1.11	−2.67	5.22	0.00	4
August	80.6	+ 4.4	115	41	3.90	−0.04	10.47	0.07	9
September	65.6	− 3.6	95	32	7.39	+3.25	15.09	4.07	12
October	61.1	+ 3.7	90	24	2.45	−0.40	5.51	0.65	4
November	48.5	+ 4.0	84	16	5.68	+3.12	10.04	2.51	10
December	31.6	− 2.5	69	− 3	1.66	−0.41	4.12	0.05	7
Year	57.4	+ 2.4	117	−26	34.21	−5.87	15.09	0.00	82

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Precipitation					Number of days		
	Mean	Highest	Lowest	Average	Greatest annual	Least annual	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	52.9	111	−32	41.22	54.85	32.77	....	81	....	....	....
1889	54.3	107	− 9	37.91	56.27	20.18	....	85	....	....	....
1890	54.7	110	−19	35.71	63.15	16.98	....	82	....	....	....
1891	53.9	104	−13	38.04	47.71	26.84	....	93	....	....	....
1892	52.8	102	−31	42.76	59.51	31.32	....	92	141	95	130
1893	52.7	107	−20	38.19	53.00	27.03	....	77	155	117	93
1894	55.1	111	−35	33.18	47.51	18.68	15.4	73	170	120	75
1895	52.9	106	−26	39.30	63.18	26.75	23.7	85	161	108	96
1896	55.5	108	−10	44.63	58.92	29.06	12.6	86	154	111	101
1897	55.0	108	−16	38.82	57.80	23.49	19.5	86	167	104	94
1898	54.4	104	−20	53.67	80.08	39.05	18.6	102	162	102	101
1899	54.0	108	−32	37.22	66.01	27.21	28.8	82	166	110	89
1900	55.6	105	−16	38.34	51.53	26.04	18.5	90	171	106	88
1901	55.5	116	−29	25.28	39.22	16.66	19.2	72	190	98	77
1902	54.1	103	−17	44.96	65.64	34.89	16.7	103	159	103	103
1903	53.6	102	−25	40.15	51.64	32.20	16.5	96	170	96	99
1904	53.2	100	−23	41.68	55.83	32.06	18.8	89	180	99	87
1905	53.6	103	−40	45.41	71.25	31.94	22.3	97	174	91	100
1906	55.0	101	−13	37.09	59.92	21.81	28.2	98	165	89	111
1907	55.4	109	−15	41.87	53.78	23.23	12.8	95	173	82	110
1908	56.8	102	−10	43.56	58.27	30.78	9.7	91	184	92	90
1909	55.8	110	−20	45.16	57.59	34.73	18.3	92	173	90	102
1910	54.6	109	−24	37.91	52.42	14.37	17.2	82	183	81	101
1911	56.7	113	−19	38.94	50.03	28.13	15.2	88	166	86	113
1912	53.5	105	−36	38.68	53.27	23.90	39.6	81	192	80	94
1913	56.5	110	−12	37.47	54.85	25.07	26.0	87	174	80	111
1914	56.1	109	−18	34.72	47.09	25.16	26.4	81	171	86	108
1915	55.0	102	−24	49.88	64.62	36.15	25.3	98	160	86	119
1916	55.3	109	−29	41.45	50.61	28.17	18.2	87	191	77	98
1917	52.6	107	−23	32.06	48.31	22.58	13.9	80	186	83	96
1918	55.4	111	−25	37.06	52.91	24.89	27.2	84	185	80	100
1919	55.3	106	−23	40.14	58.49	26.53	10.2	86	181	81	103
1920	54.3	105	−10	37.17	52.77	24.09	15.4	89	171	82	113
1921	58.2	109	− 8	43.77	61.33	21.48	11.1	92	178	93	99
1922	56.8	108	− 6	39.99	56.59	29.15	8.2	85	192	80	93
1923	55.3	108	−11	41.53	64.54	23.98	8.6	98	165	88	112
1924	53.0	106	−28	39.73	54.55	30.11	28.3	92	173	91	102
1925	55.6	110	−15	39.06	53.47	31.13	16.4	84	171	94	100
1926	54.5	108	−20	43.07	61.99	32.04	23.2	95	160	86	119
1927	55.6	102	−24	55.06	82.67	30.71	13.4	101	163	91	111
1928	55.2	102	−18	45.59	67.40	28.28	6.8	90	174	94	98
1929	53.5	105	−23	46.61	62.34	32.17	22.3	102	155	93	117
1930	55.9	114	−31	31.27	55.26	19.06	17.6	75	194	84	87
1931	58.0	110	− 5	40.27	52.27	29.89	14.2	93	175	82	108
1932	55.6	109	−21	37.79	60.29	25.49	16.0	85	178	93	95
1933	57.3	108	−22	36.21	59.32	20.46	8.0	86	175	95	95
1934	57.4	117	−26	34.21	53.71	24.86	23.0	82	187	89	89
Period	**55.0**	**117**	**−40**	**40.08**	**82.67**	**14.37**	**18.3**	**88**	**172**	**92**	**101**

Climatological Data for Year 1934

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain																				
Brunswick	Chariton	652	54	58.4	113	July 20†	−17	Feb. 27	56	35.70	13.32	Sept.	0.93	July	32.6	102	220	50	95	sw.
Clifton Hill	Randolph	731	36	57.3	113	July 25	−19	Feb. 27	26	36.25	9.20	Sept.	0.39	July	52.3	82	202	73	90	.....
Columbia	Boone	784	45	57.1	111	July 25	−14	Feb. 27	45	33.17	8.31	Sept.	0.67	July	28.5	99	163	121	81	s.
Downing	Schuyler	876	14	55.2	115	Aug. 9	−13	Feb. 27	26	27.23	7.64	Sept.	0.38	Dec.	27.4	89	203	82	80	sw.
Elsberry	Lincoln	449	4	55.7	111	July 20	−24	Feb. 27	4	25.80	5.50	Sept.	0.27	July	24.9	77	129	153	83	se.
Fayette	Howard	680	55	57.1	113	July 24†	−16	Feb. 27	52	30.28	7.66	Sept.	0.75	Dec.	30.8	94	..	..	..	.....
Fulton	Callaway	818	47	56.0	111	July 24†	−20	Feb. 27	43	32.43	7.88	Sept.	0.94	July	22.9	87	200	66	99	s.
Gorin	Scotland	700	..	....	...	.....	....	.....	48	30.84	8.80	Sept.	0.36	July	21.0	69	197	106	62	se.
Hannibal	Marion	759	43	56.7	112	July 20	−10	Feb. 27	51	29.79	6.28	Sept.	0.09	July	34.5	93	161	72	132	sw.
Jefferson City	Cole.	557	45	57.3	112	July 24†	− 9	Feb. 27†	53	38.28	9.55	Sept.	1.08	May	28.1	99	167	119	79	s.
Kirksville	Adair.	969	46	55.4	111	July 19†	−12	Feb. 27	53	34.47	8.98	Sept.	0.21	Dec.	33.9	65	179	89	97	sw.
Linneus	Linn	816	..	....	...	.....	....	.....	3	31.89	8.34	Sept.	0.43	July	28.3	81	190	96	79	e.
Louisiana	Pike	469	41	56.2	117	July 18	−26	Feb. 27	54	27.26	5.42	Nov.	0.05	July	21.1	72	194	111	60	s.
Macon	Macon	875	36	55.7	115	July 20	−10	Feb. 27	42	30.11	9.14	Sept.	0.26	July	36.8	81	195	89	81	w.
Mexico	Audrain	800	46	55.8	116	July 19	−17	Feb. 27†	57	37.16	7.22	Sept.	1.11	May	40.7	87	233	34	98	sw.
Monroe City	Monroe	748	..	....	...	.....	....	.....	14	32.26	6.56	Nov.	0.64	Dec.	29.5	75	156	111	98	n.
St. Charles	St. Charles	520	47	57.3	114	July 20†	−11	Feb. 27	57	34.21	7.42	Sept.	0.22	May	21.3	90	182	118	65	nw.
St. Louis	**St. Louis City**	568	98	58.5	110	July 24	2	Feb. 27	98	29.19	5.86	Sept.	0.54	May	23.2	95	167	93	105	s.
St. Louis University	St. Louis City	578	23	57.9	110	July 24	0	Feb. 27	24	25.69	5.22	Sept.	0.60	May	25.0	94	197	77	91	nw.
Shelbina	Shelby	779	..	....	...	.....	....	.....	42	31.74	8.71	Sept.	0.73	Jan.	34.0	83	..	..	..	.....
Steffenville	Lewis	650	37	55.8	113	Aug. 8	−16	Feb. 27	42	37.11	10.30	Sept.	0.48	July	37.0	80	168	121	76	s.
Unionville	Putnam	1,062	42	55.0	114	Aug. 8†	−12	Feb. 27	42	29.54	6.91*	Sept.	0.05	Dec.	29.9	74	..	..	..	.....
Warrenton	Warren	816	53	57.4	112	July 24	− 6	Feb. 27	45	35.10	7.06	Sept.	0.56	May	32.5	87	130	152	83	sw.
Keokuk, Iowa	Lee, Iowa	614	63	55.2	110	July 20†	− 7	Feb. 27	63	28.19	6.40	Sept.	0.81	Jan.	24.5	98	142	81	142	sw.
Division means	**and extremes**	.....	..	**56.6**	**117**	**July 18**	**−26**	**Feb. 27**	..	**31.46**	**13.32**	**Sept.**	**0.00**	**July**	**30.4**	**84**	**181**	**96**	**88**	**s.**
Southeast Lowlands																				
Campbell	Dunklin	314	9	59.0	110	Aug. 7	4	Jan. 30†	9	48.15	8.57	Aug.	1.01	Oct.	2.0	97	217	65	83	s.
Caruthersville	Pemiscot	265	39	62.0	108	Aug. 7	4	Feb. 27	43	53.71	9.35	Aug.	0.78	Oct.	0.7	86	171	93	101	.....
Doniphan	Ripley	344	31	59.5	114	Aug. 8	2	Feb. 27	31	38.48	8.48	Aug.	0.93	May	3.8	92	193	86	106	s.
Jackson	Cape Girardeau.	428	44	59.2	112	July 24	− 3	Feb. 27	45	42.92	7.99	Nov.	0.92	May	7.5	84	121	76	168	s.
Marble Hill	Bollinger	470	40	59.0	114	July 24	− 6	Feb. 27	42	37.81	5.82	Aug.	0.36	May	5.3	76	161	109	95	n.
Morehouse	New Madrid	289	..	....	...	.....	....	.....	24	42.49	9.20	Nov.	1.33	May	4.3	87	207	87	71	s.
Poplar Bluff	Butler	339	30	58.7	109	Aug. 7	2	Feb. 27	31	39.87	6.05	Aug.	0.14	July	5.7	84	231	57	77	s.
Sikeston	Scott	318	28	60.6	111	July 24	3	Feb. 27	38	42.27	10.04	Nov.	1.13	May	4.8	98	177	111	77	s.
Cairo, Ill.	Alexander, Ill.	356	63	59.6	105	July 24	4	Feb. 27	63	37.91	8.45	Nov.	0.92	June	4.2	115	118	101	146	n.
Division means	**and extremes**	.....	..	**59.7**	**114**	**July 24†**	**− 6**	**Feb. 27**	..	**43.24**	**10.04**	**Nov.**	**0.14**	**July**	**4.2**	**92**	**178**	**83**	**104**	**s.**
Ozark Plateau																				
Arcadia	Iron	926	54	55.7	108	Aug. 9	−14	Feb. 27	57	40 08	7.87	Sept.	0.63	July	9.8	92	209	62	94	s.
Birchtree(near)	Shannon	1,000	40	58.2	111	Aug. 9	− 1	Feb. 27	41	37.12	7.74	Sept.	1.17	May	8.2	65	240[a]	36[a]	88[a]	n.
Buffalo	Cedar	1,200	..	....	...	.....	....	.....	4	35.53	10.78	Sept.	0.88	Aug.	32.1	61	235	60	70	.....
Caplinger Mills	Dallas	750	..	....	...	.....	....	.....	8	30.77	8.21	Sept.	0.30	July	19.3	68	183	114	68	sw.
Crystal City	Jefferson	420	0	....	112	July 24	....	.....	0	....	....	.....	.....	.....	.....	..	..	..	..	.....
Dean	McDonald	1,000	31	59.3	114	July 24†	6	Dec. 11	36	40.18	9.97	Sept.	0.21	July	13.2	75	216	65	84	se.
Eldon	Miller	934	40	57.1	113	July 24	− 8	Feb. 27	36	32.35	5.86	Sept.	0.83	May	31.7	74	126[b]	154[b]	83[b]	sw.
Farmington	St. Francis	918	24	57.6	114	Aug. 9	−22	Feb. 27	38	35.61	15.09	Sept.	0.23	June	10.5	48	216*	79[a]	69[a]	s.
Goodland	Iron	1,000	42	56.4	111	July 24†	−20	Feb. 27	42	41.91	8.20	Sept.	0.79	July	16.3	82	201	68	96	s.
Greenville	Wayne	381	26	57.0	113	Aug. 9	− 8	Feb. 27	28	43.11	10.47	Aug.	0.36	Feb.	4.3	64	202	87	76	sw.
Hailey	Barry	1,350	..	....	...	.....	....	.....	10	38.05	7.32	Nov.	1.01	July	13.5	56	200	109	56	ne.
Koshkonong	Oregon	958	34	60.4	112	Aug. 9	1	Feb. 27	35	32.51	4.96	Aug.	0.29	July	11.0	83	190[b]	68[b]	105[b]	sw.
Lebanon	Laclede	1,265	47	57.4	112	July 24	− 9	Feb. 27	48	32.14	5.01	Nov.	0.61	July	31.5	77	238[b]	49[b]	76[b]	s.
Lockwood	Dade	1,078	29	59.5	110	July 24	− 3	Feb. 27	39	43.11	8.82	Sept.	1.02	July	36.5	84	223	80	62	sw.
Mountain Grove(near)	Wright	1,463	34	57.7	110	Aug. 9	− 3	Feb. 27	38	32.56	6.20	Sept.	0.38	July	20.3	100	210	65	90	s.
Neosho	Newton	1,011	48	59.6	107	July 24	2	Jan. 30	52	30.44	7.18	Nov.	0.54	July	7.2	86	209	88	68	sw.
Rolla	Phelps	1,099	35	57.9	108	Aug. 8	−11	Feb. 27	51	45.27	11.17	Sept.	0.50	July	26.5	92	111	84	170	se.
Salem	Dent	1,173	31	57.2	112	Aug. 8	−17	Feb. 27	34	37.96	10.09	Sept.	0.23	July	17.8	89	177[a]	103[a]	84[a]	s.
Seligman	Barry	1,542	34	59.3	106	July 24	4	Jan. 30	32	38.59	7.85	Sept.	0.55	July	28.0	75	193[a]	70[a]	81[a]	w.
Seymour(near)	Webster	1,642	29	56.7	108	July 24	− 9	Feb. 27	29	36.94	7.12	Sept.	0.43	July	20.5	84	185	86	94	s.
Springfield	Greene	1,324	47	58.2	106	July 24	0	Feb. 27	47	32.58	6.50	Sept.	0.89	July	36.1	104	202	84	79	s.
Versailles	Morgan	1,037	3	58.6	114	July 24	−10	Feb. 27	3	39.98	9.66	Sept.	0.54	July	34.8	98	194	74	97	sw.
Division means	**and extremes**	.....	..	**58.0**	**114**	**July 24†**	**−22**	**Feb. 27**	..	**36.19**	**15.09**	**Sept.**	**0.21**	**July**	**20.2**	**78**	**195**	**83**	**88**	**sw.**
Southwest Plain																				
Appleton City	St. Clair	853	40	58.6	108	July 19	− 6	Feb. 27	43	27.94	5.35	Nov.	0.07	Aug.	18.4	80	146	166	53	sw.
Clinton	Henry	765	42	58.3	116	July 24	−11	Feb. 27	48	37.09	7.70	Nov.	0.83	Aug.	32.5	90	181	109	75	sw.
Harrisonville	Cass	904	57	56.3	112	Aug. 10	−10	Feb. 27	60	32.51	7.13	Nov.	0.87	Feb.	29.5	87	185	72	108	sw.
Lamar	Barton	980	47	58.5	109	July 20†	− 1	Feb. 27	54	35.67	7.99	Sept.	0.64	July	21.2	69	226	53	86	sw.
Lamonte	Pettis	867	34	57.6	113	July 24	−12	Feb. 27	49	39 10	6.69	Nov.	1.17	Feb.	39.8	86	202	93	70	sw.
Marshall	Saline	779	48	58.3	111	July 20	− 6	Feb. 27	45	38.30	11.33	Sept.	0.91	Feb.	39.5	80	228	91	46	sw.
Nevada	Vernon	862	42	59.0	108	July 24†	− 5	Feb. 27	43	32.28	8.28	Sept.	0.15	Aug.	18.5	68	206[a]	60[a]	98[a]	s.
Warrensburg	Johnson	878	48	58.4	113	July 24	− 6	Feb. 27	55	33.89	8.64	Sept.	0.61	Feb.	39.0	81	214[a]	54[a]	96[a]	sw.
Warsaw	Benton	687	34	59.6	115	July 24	−16	Feb. 27	40	29.19	5.98	Nov.	1.17	Jan.	27.5	91	192	67	106	s.
Division means	**and extremes**	.....	..	**58.3**	**116**	**July 24**	**−16**	**Feb. 27**	..	**34.23**	**11.33**	**Sept.**	**0.07**	**Aug.**	**29.5**	**81**	**198**	**84**	**83**	**sw.**
Northwest Plateau																				
Bethany	Harrison	916	40	55.5	112	Aug. 9	−25	Feb. 27	42	30.35	7.86	Sept.	0.05	Mar.	14.0	70	206	84	75	nw.
Chillicothe	Livingston	779	26	55.4	114	July 20†	−23	Feb. 27	29	31.52	9.42	Sept.	0.42	Dec.	28.3	75	213	82	70	se.
Conception	Nodaway	980	46	54.9	110	Aug. 8	−14	Feb. 26	51	26.49	7.11	Nov.	0.06	Mar.	18.2	62	136	147	82	nw.
Edgerton	Platte	856	15	56.8	111	Aug. 10	−21	Feb. 27	24	27.06	6.15	Sept.	0.37	Dec.	21.3	85	239[a]	32[a]	93[a]	s.
Grant City	Worth	1,134	31	54.3	111	Aug. 9	−18	Feb. 27	43	26.41	7.48	Nov.	0.15	Dec	16.8	69	113	141	111	sw
Kansas City	Jackson	963	46	58.5	111	Aug. 10	−13	Feb. 27	46	27.15	6.44	Sept.	0.49	Jan.	16.2	96	160	109	96	sw.
Kidder	Caldwell	1,020	43	54.8	112	July 13	−12	Feb. 27	47	29.83	7.13	Nov.	0.57	Dec.	27.2	78	..	..	..	s.
King City	Gentry	1,095	..	....	...	.....	....	.....	9	29.80	7.02	Nov.	0.19	Dec.	22.4	76	102	184	79	sw.
Lexington	Lafayette	688	50	57.1	112	July 25	− 7	Feb. 27	51	38.52	9.39	Sept.	0.88	Jan.	43.1	94	210	104	51	sw.
Maryville	Nodaway	1,169	45	55.8	113	Aug. 9	−11	Feb. 27	41	27.65	6.74	Nov.	0.17	Dec.	29.2	79	152	106	107	nw.
Oregon	Holt	1,048	79	57.7	112	July 15†	− 9	Feb. 26	79	24.96	7.43	Sept.	0.27	Mar.	21.5	73	231	65	69	sw.
St. Joseph	Buchanan	967	25	57.1	110	Aug. 10	−10	Feb. 27	63	32.46	7.05	Sept.	0.27	Dec.	20.3	88	188	89	88	sw.
Tarkio	Atchison	916	32	54.8	112	Aug. 9	−12	Feb. 27	41	28.52	6.79	Sept.	0.46	Dec.	29.0	69	173	112	80	sw.
Trenton	Grundy	822	39	56.2	113	July 20	−19	Feb. 27	40	31.64	7.52	Nov.	0.46	Mar.	21.1	83	202	91	72	s.
Division means	**and extremes**	.....	..	**56.1**	**114**	**July 20†**	**−25**	**Feb. 27**	..	**29.62**	**9.42**	**Sept.**	**0.05**	**Mar.**	**23.5**	**78**	**179**	**103**	**83**	**sw.**
State means	**and extremes**	.....	..	**57.4**	**117**	**July 18**	**−26**	**Feb. 27**	..	**34.21**	**15.09**	**Sept.**	**0.00**	**July**	**23.0**	**82**	**187**	**89**	**89**	**sw.**

† Also on other dates ¶ Estimated * Partially estimated

[a], [b], [c], indicate the number of days missing from records, a, 1; b, 2; c, 3; etc

Monthly and Annual Mean Temperatures for the Year 1934, with Departures from Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	35.9	+ 9.2	33.0	+ 3.2	41.2	− 0.7	57.8	+ 3.6	70.8	+ 6.6	82.2	+ 9.2	88.5	+12.4	82.3	+ 8.1	66.6	− 0.4	62.2	+ 6.9	49.3	+ 7.7	31.4	+ 0.8	58.4	+ 5.6
Clifton Hill	35.2	+ 7.1	31.4	+ 1.2	39.5	− 2.7	56.0	+ 2.5	69.8	+ 6.2	81.7	+ 9.3	88.4[l]	+12.0	80.8[h]	+ 4.8	65.6	− 3.0	60.6	+ 3.9	48.6[k]	+ 5.2	29.9	− 1.1	57.3	+ 3.8
Columbia	35.6	+ 6.4	31.5	− 0.2	39.8	− 2.8	56.3	+ 1.4	68.8	+ 4.5	80.4	+ 7.6	86.8	+ 9.9	80.1	+ 4.5	65.2	− 3.0	61.0	+ 4.4	48.8	+ 5.5	31.0	− 2.2	57.1	+ 3.0
Downing	33.2	+ 7.8	28.6	− 3.7	37.8	− 3.8	54.2[a]	+ 1.0	69.1	+ 6.4	80.8	+ 9.4	85.3	+ 8.9	79.2	+ 4.3	64.0	− 3.6	58.4	+ 2.5	45.6	+ 4.0	26.2	− 3.4	55.2	+ 2.5
Elsberry	35.2	.....	28.8	.....	39.1	.....	54.5	.....	67.0	.....	78.8	.....	85.0	.....	78.4	.....	64.8	.....	58.2	.....	48.0	.....	30.8	.....	55.7	.....
Fayette	35.2	+ 8.2	33.0	+ 2.4	40.3	− 1.6	56.0	+ 1.8	68.7	+ 4.9	81.2	+ 8.4	87.3	+10.1	80.3	+ 4.4	65.2	− 2.9	60.4	+ 4.0	48.7[¶]	+ 6.5	29.0[e]	− 2.1	57.1	+ 3.7
Fulton	34.3	+ 4.8	29.3	− 3.8	39.2	− 4.9	54.8	+ 0.2	68.0	+ 3.4	79.4	+ 6.2	85.5	+ 7.8	78.6	+ 2.2	64.4	− 4.5	60.4	+ 3.0	48.3	+ 4.1	30.0	− 3.5	56.0	+ 1.2
Hannibal	35.0	+ 7.9	30.0	+ 0.3	39.0	− 2.0	56.4	+ 3.0	70.6	+ 7.0	81.0	+ 8.5	87.0	+10.2	79.0	+ 4.0	64.8	− 2.9	60.6[b]	+ 4.6	47.6	+ 5.5	29.5	− 2.0	56.7	+ 3.7
Jefferson City	35.2	+ 5.4	31.6	− 0.5	39.8	− 3.8	55.7	− 0.8	69.8	+ 5.1	81.0	+ 7.2	87.6[a]	+ 9.5	79.4[c]	+ 2.7	65.5	− 3.8	61.6	+ 4.8	49.2	+ 5.1	31.1	− 1.8	57.3	+ 2.5
Kirksville	33.2	+ 8.4	29.4	+ 2.3	38.0	− 1.7	54.2	+ 2.3	69.2	+ 6.9	80.7	+ 9.0	86.2	+10.2	78.6	+ 4.6	63.8	− 2.5	58.9	+ 4.2	45.5	+ 4.9	27.0	− 2.6	55.4	+ 3.8
Louisiana	35.1	+ 7.0	29.1	− 1.8	39.6	− 3.9	55.2	+ 1.2	67.8	+ 4.1	80.8	+ 8.7	87.1	+10.7	78.8	+ 3.9	64.3	− 3.7	58.9	+ 2.7	48.2	+ 4.1	30.0	− 1.8	56.2	+ 2.6
Macon	32.7	+ 5.2	28.6	− 1.0	37.0	− 5.2	54.4	+ 1.3	69.6	+ 6.1	82.3	+ 9.9	87.7	+10.5	79.7	+ 3.6	63.4	− 4.5	59.4	+ 3.1	46.2	+ 3.4	27.4	− 2.7	55.7	+ 2.5
Mexico	34.4	+ 6.4	29.4	− 0.7	37.7	− 4.3	55.2	+ 1.4	68.6	+ 4.6	80.5	+ 7.3	86.9	+ 9.6	79.2	+ 3.2	63.9	− 4.6	58.5	+ 2.2	46.4	+ 3.5	29.0	− 2.8	55.8	+ 2.2
St. Charles	35.8	+ 4.8	29.7	− 3.6	39.6	− 4.9	56.2	+ 0.6	69.8	+ 6.7	81.7	+ 7.8	86.8	+ 8.7	79.8	+ 3.0	66.4	− 1.9	60.7	+ 2.5	48.9	+ 3.6	32.6	− 2.3	57.3	+ 2.1
St. Louis	37.8	+ 6.7	31.4	− 3.4	40.8	− 3.3	57.0	+ 0.9	71.2	+ 4.2	82.6	+ 7.6	87.2	+ 8.4	80.0	+ 2.5	66.6	− 3.9	63.2	+ 4.4	50.4	+ 5.0	33.4	− 1.5	58.5	+ 2.3
St. Louis University	36.9	+ 6.7	30.0	− 2.2	40.4	− 3.2	56.8	+ 1.6	70.6	+ 4.5	82.2	+ 7.3	87.0	+ 6.9	79.6	+ 2.4	66.2	− 4.0	62.1	+ 3.2	50.3	+ 3.8	32.8	− 1.5	57.9	+ 2.1
Steffenville	33.8	+ 6.4	30.0	+ 0.3	37.4	− 4.8	55.0	+ 1.9	69.2	+ 5.4	80.7	+ 8.1	87.0	+ 9.2	79.0	+ 2.5	64.0	− 5.0	58.4	+ 1.0	46.3	+ 2.8	28.7	− 1.9	55.8	+ 2.2
Unionville	32.4	+ 8.9	30.4	+ 3.7	37.4	− 1.5	55.4	+ 4.4	70.8	+ 8.7	80.7	+ 9.4	87.0	+10.5	80.4	+ 5.6	60.4[g]	− 6.7	57.8[b]	+ 2.6	43.7[a]	+ 3.4	23.7	− 3.9	55.0	+ 3.8
Warrenton	37.0	+ 7.8	31.4	+ 0.5	40.7	− 1.8	56.2	+ 1.4	69.4	+ 4.5	80.3	+ 6.9	87.2	+ 9.4	80.2	+ 3.7	65.0	− 4.0	61.0	+ 5.0	49.5	+ 6.3	31.5	− 0.9	57.4	+ 3.2
Keokuk, Iowa	33.0	+ 8.1	27.5	− 0.8	36.7	− 2.2	54.1	+ 1.8	70.0	+ 6.2	81.4	+ 8.9	84.8	+ 7.9	77.8	+ 2.8	64.4	− 3.1	59.1	+ 3.7	46.8	+ 5.7	27.0	− 2.6	55.2	+ 3.0
Division means	**34.8**	**+ 7.0**	**30.2**	**− 0.4**	**39.0**	**− 3.1**	**55.6**	**+ 1.7**	**69.4**	**+ 5.6**	**81.0**	**+ 8.2**	**86.8**	**+ 9.6**	**79.6**	**+ 3.8**	**64.7**	**− 3.6**	**60.1**	**+ 3.6**	**47.8**	**+ 4.7**	**29.6**	**− 2.1**	**56.6**	**+ 3.8**
Southeast Lowlands																										
Campbell	40.3	.....	35.0	.....	45.9	.....	59.0	.....	69.4	.....	79.4	.....	83.8	.....	80.5	.....	67.9	.....	61.8	.....	50.0	.....	34.6	.....	59.0	.....
Caruthersville	43.1	+ 4.0	38.2	− 2.1	48.4	− 3.0	62.9	+ 2.7	72.3	+ 2.5	81.5	+ 3.1	85.3	+ 4.0	82.2	+ 1.9	71.0	− 3.5	65.1	+ 2.9	54.1	+ 3.7	39.8	− 1.1	62.0	+ 1.3
Doniphan	41.0	+ 5.2	34.9	− 4.4	46.4	− 2.6	59.7	+ 1.2	68.0	+ 1.5	80.0	+ 5.0	85.4	+ 6.8	82.0	+ 4.4	67.5	− 3.7	61.8	+ 3.3	50.8	+ 3.5	36.0	− 1.8	59.5	+ 1.5
Jackson	39.6	+ 5.8	34.0	− 2.5	45.3	− 1.9	59.4	+ 2.3	70.2	+ 4.6	80.8	+ 6.7	85.9	+ 8.3	80.6	+ 4.5	67.8	− 2.3	61.2	+ 3.3	50.2	+ 3.6	34.8	− 1.8	59.2	+ 2.6
Marble Hill	40.2	+ 5.6	34.2	− 2.4	44.6	− 3.0	58.4	+ 1.2	68.4	+ 2 8	79.6	+ 5.6	85.6	+ 7.8	80.4	+ 3.4	68.0	− 2.7	61.4	+ 3.2	51.3	+ 6.1	35.7	− 1.0	59.0	+ 2.2
Poplar Bluff	37.7	+ 1.7	33.0	− 5.1	43.6	− 5.0	57.1	− 2.4	69.2	+ 1.7	79.8	+ 4.4	83.8	+ 4.6	80.6	+ 2.6	68.2	− 3.5	63.8	+ 3.7	51.7	+ 4.0	35.6	− 2.2	58.7	+ 0.4
Sikeston	42.6	+ 5.6	36.6	− 0.6	46 8	− 1.8	60.4	+ 2.3	70.6	+ 2.1	81.2	+ 6.9	85.2	+ 6.6	80.9	+ 3.3	69.5	− 1.6	63.8	+ 4.5	52.6	+ 5.4	37.0	− 0.7	60.6	+ 2.7
Cairo, Ill	40.9	+ 6.0	34.5	− 4.0	44.4	− 2.8	59.4	+ 1.3	70.9	+ 2.5	80.4	+ 4.1	83.5	+ 3.9	79.0	+ 1.2	68.6	− 2.9	63.7	+ 3.3	52.6	+ 5.3	37.6	− 0.2	59.6	+ 1.5
Division means	**40.7**	**+ 4.8**	**35.0**	**− 3.0**	**45.7**	**− 2.9**	**59.5**	**+ 1.2**	**69.9**	**+ 3.5**	**80.3**	**+ 5.1**	**84.8**	**+ 6.0**	**80.8**	**+ 3.0**	**68.6**	**− 2.9**	**62.8**	**+ 3.5**	**51.7**	**+ 4.5**	**36.4**	**− 1.3**	**59.7**	**+ 1.7**
Ozark Plateau																										
Arcadia	35.9	+ 4.0	30.3	− 3.8	40.2	− 4.4	54.8	− 0.5	65.4	+ 1.3	76.2	+ 4.4	83.0	+ 7.2	77.6	+ 3.3	64.9	− 2.7	59.2	+ 3.2	48.4	+ 4.5	32.0	− 2.3	55.7	+ 1.2
Birchtree(near)	39.6	+ 5.1	34.8	− 1.5	44.0	− 3.3	57.5	+ 0.4	67.2	+ 2.2	77.7	+ 5.0	84.6	+ 8.0	79.0[a]	+ 2.9	65.8	− 4.0	62.2	+ 3.8	50.9	+ 4.3	35.0	− 1.4	58.2	+ 1.8
Crystal City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.6[a]	.....	85.5[a]	.....	79.2	.....	66.4	.....	59.6	.....	48.8	.....	32.2	.....	.....	.....
Dean	39.2	+ 3.3	38.4	+ 2.7	44.8	− 4.0	58.7	+ 2.0	67.9	+ 2.2	80.6	+ 7.9	85.7	+ 8.4	84.0	+ 6.3	66.6	− 4.4	61.6	+ 2.9	49.1	− 0.2	35.0	− 2.5	59.3	+ 2.0
Eldon	35.1	+ 4.0	31.6	− 1.5	39.8	− 3.8	54.1[a]	− 1.3	68.4[a]	+ 4.2	80.5[a]	+ 7.5	87.6	+10.4	80.0	+ 3.6	66.6	− 2.8	61.4	+ 4.0	48.6[b]	+ 3.8	31.5	− 2.8	57.1	+ 2.1
Farmington	38.3	+ 5.7	32.2	− 4.7	42.4	− 4.1	56.6	− 0.3	67.0	+ 3.3	80.2	+ 7.4	87.9	+11.6	78.8	+ 3.4	66.0	− 3.6	59.2	+ 2.4	48.9	+ 4.1	33.4	− 3.3	57.6	+ 1.8
Garber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.6[e]	.....	67.2	.....	61.8	.....	51.4	.....	37.0	.....	.....	.....
Goodland	37.8	+ 5.2	31.8	− 2.5	42.4	− 2.6	56.8	+ 1.8	65.8	+ 1.8	75.8	+ 3.9	81.7	+ 6.1	77.8	+ 3.3	65.4	− 2.4	59.4	+ 3.5	48.7	+ 4.0	33.1	− 1.7	56.4	+ 1.7
Greenville	38.4	+ 3.4	32.9	− 2.9	43.7	− 4.0	56.6	0.0	65.8	− 0.1	77.0	+ 3.4	82.7	+ 5.3	78.4	+ 1.7	65.5	− 5.3	59.5	+ 1.9	49.0	+ 3.6	34.0	− 2.2	57.0	+ 0.4
Koshkonong	41.4	+ 4.9	36.8	− 2.3	46.4	− 3.0	60.0[a]	+ 1.5	69.8	+ 3.2	81.3	+ 6.9	87.4[b]	+ 8.6	82.0	+ 4.1	68.0[b]	− 3.4	63.3	+ 3.7	51.6	+ 2.6	36.5	− 1.9	60.4	+ 2.1
Lebanon	35.6	+ 3.1	32.5	− 1.9	40.1	− 4.9	56.0	+ 0.5	67.7	+ 2.8	81.2	+ 8.5	87.2	+10.3	81.2	+ 5.1	65.6	− 3.8	61.7	+ 4.0	48.4	+ 2.8	32.0	− 2.8	57.4	+ 2.0
Lockwood	38.2	+ 4.9	36.1	− 0.9	44.5	− 2.8	57.6	+ 1.1	69.0	+ 4.6	82.0	+ 8.4	86.8	+ 9.2	83.6	+ 6.4	66.4	− 4.5	62.6	+ 3.9	51.2	+ 4.2	35.6	− 0.5	59.5	+ 2.8
Mountain Grove(near)	38.1	+ 5.3	34.0	− 1.1	42.9	− 2.5	56.4	+ 1.5	67.6	+ 3.8	78.8	+ 7.0	85.8	+ 9.4	79.4	+ 3.9	64.6	− 4.3	61.5[a]	+ 3.9	49.6	+ 3.7	33.4	− 1.3	57.7	+ 2.4
Neosho	40.8	+ 5.7	38.6	+ 1.0	45.4	− 2.7	58.9	+ 0.6	67.4	+ 1.4	79.8	+ 6.0	84.5	+ 7.0	83.2	+ 6.1	68.0	− 2.5	62.4	+ 3.2	50.6	+ 3.3	35.6	− 1.5	59.6	+ 2.3
Rolla	38.0	+ 6.1	33.0	− 3.3	42.8	− 2.7	57.5	+ 1.6	68.2	+ 3.7	78.4	+ 5.4	85.6	+ 7.9	80.0	+ 3.8	66.0	− 2.7	61.5	+ 5.0	50.3	+ 5.8	33.6	− 1.0	57.9	+ 2.4
Salem	37.4	+ 4.8	32.4[a]	− 3.4	42.4	− 4.0	56.1	+ 0.1	66.4	+ 1.9	77.7	+ 5.3	85.2	+ 8.4	80.4	+ 4.5	65.8	− 3.4	60.6[a]	+ 3.0	49.3	+ 3.2	33.2	− 2.2	57.2	+ 1.5
Seligman	38.3[j]	+ 3.2	38.2[a]	+ 0.7	45.0	− 1.6	58.4[b]	+ 1.8	67.8[c]	+ 3.3	79.0	+ 6.6	85.4[a]	+ 8.7	83.4[a]	+ 7.2	66.3[a]	− 3.3	62.8[a]	+ 3.8	50.7[b]	+ 3.4	36.8[a]	− 0.5	59.3	+ 2.8
Seymour(near)	37.4	+ 3.4	33.7	− 1.3	42.1	− 3.3	54.8	− 0.9	65.8	+ 2.1	76.7	+ 5.0	83.6	+ 8.1	79.0	+ 4.0	64.0	− 4.8	60.2	+ 2.8	49.4	+ 3.5	33.4	− 2.0	56.7	+ 1.4
Springfield	37.8	+ 4.3	35.1	− 0.1	42.2	− 3.0	56.8	+ 0.8	68.2	+ 3.7	79.4	+ 6.9	85.4	+ 8.6	80.8	+ 5.1	65.8	− 3.1	63.3	+ 5.1	49.8	+ 4.1	34.0	− 2.2	58.2	+ 2.5
Versailles	37.4	.....	33.8	.....	41.8	.....	57.2	.....	69.6	.....	81.0	.....	87.6	.....	81.6	.....	66.3	.....	63.3	.....	50.7	.....	32.7	.....	58.6	.....
Division means	**38.0**	**+ 4.5**	**34.2**	**− 1.6**	**42.9**	**− 3.3**	**56.9**	**+ 0.6**	**67.5**	**+ 2.7**	**79.2**	**+ 6.2**	**85.4**	**+ 8.4**	**80.5**	**+ 4.4**	**66.1**	**− 3.6**	**61.4**	**+ 3.5**	**49.8**	**+ 3.5**	**34.0**	**− 1.9**	**58.0**	**+ 2.0**
Southwest Plain																										
Appleton City	37.2	+ 5.9	35.2	+ 1.3	42.2	− 2.9	57.4	+ 1.3	68.2	+ 3.2	81.2	+ 6.8	87.0	+ 8.8	83.6	+ 5.8	66.8	− 3.6	62.4	+ 3.5	49.4	+ 3.4	33.2	− 1.4	58.6	+ 2.7
Clinton	36.8	+ 5.1	34.1	+ 0.5	40.7	− 4.3	57.2	+ 0.9	69.0	+ 3.5	81.4	+ 7.6	87.4	+ 9.1	83.6	+ 6.0	66.4	− 4.4	61.8	+ 0.3	49.0	+ 2.0	32.2	− 2.5	58.3	+ 2.0
Harrisonville	33.0	+ 5.7	31.4	+ 0.7	38.6	− 2.7	54.2	+ 0.3	68.2	+ 4.4	80.8	+ 7.7	86.6	+ 8.9	82.3	+ 6.4	64.2	− 4.3	60.9	+ 4.8	46.4	+ 3.9	28.6	− 2.7	56.3	+ 2.8
Lamar	37.1	+ 5.0	35.8	+ 0.5	42.4	− 3.6	56.2	− 0.4	68.0	+ 2.4	81.0	+ 6.8	86.4	+ 8.0	83.6	+ 5.9	65.8	− 5.0	63.0	+ 4.1	49.3	+ 3.0	33.7	− 1.5	58.5	+ 2.1
Lamonte	35.9	+ 7.0	33.1	− 0.1	42.0	− 2.0	56.4	+ 1.2	67.8	+ 3.2	80.8	+ 6.8	88.2	+ 9.1	82.2	+ 5.1	66.2	− 4.0	62.0	+ 4.0	47.9	+ 3.5	29.0	− 4.9	57.6	+ 2.4
Marshall	36.0	+ 8.1	34.0	+ 3.1	41.0	− 2.0	57.3	+ 2.5	69.8	+ 5.6	82.7	+ 9.5	89.4	+11.9	82.4	+ 6.4	66.0	− 2.8	61.6	+ 5.0	48.2	+ 3.0	30.8	− 1.1	58.3	+ 4.1
Nevada	37.8	+ 5.9	36.2	+ 2.3	43.0	− 1.9	57.4	+ 1.7	67.9	+ 3.4	81.6	+ 8.1	86.4	+ 6.8	84.2	+ 7.1	66.7	− 2.8	62.8	+ 5.2	49.7	+ 4.9	34.2	− 1.1	59.0	+ 3.3
Warrensburg	35.0	+ 6.3	34.0	+ 1.5	40.5	− 3.5	56.2	+ 0.1	70.0	+ 5.0	81.8	+ 7.9	88.2	+ 9.4	83.7	+ 6.6	67.5	− 2.7	63.2	+ 5.2	49.2	+ 4.2	32.0	− 1.4	58.4	+ 3.2
Warsaw	37.8	+ 4.9	34.4	− 1.2	43.3	− 3.7	57.5	+ 0.8	69.4	+ 3.9	83.0	+ 9.2	88.8	+10.5	84.8	+ 7.2	67.9	− 2.6	63.5	+ 4.5	50.8	+ 3.6	34.6	− 1.1	59.6	+ 3.0
Division means	**36.8**	**+ 6.0**	**34.2**	**+ 1.0**	**41.5**	**− 3.0**	**56.6**	**+ 0.9**	**68.7**	**+ 3.8**	**81.6**	**+ 7.8**	**87.6**	**+ 9.2**	**83.4**	**+ 6.3**	**66.4**	**− 3.6**	**62.4**	**+ 4.1**	**48.9**	**+ 3.5**	**32.0**	**− 2.0**	**58.3**	**+ 2.8**
Northwest Plateau																										
Bethany	32.2	+ 7.4	30.0	+ 2.5	38.9	− 1.4	54.4	+ 2.9	68.6	+ 6.1	80.1	+ 8.1	85.9	+ 9.6	79.5	+ 4.5	63.7	− 3.4	59.7	+ 4.9	45.2	+ 2.4	27.4	− 2.7	55.5	+ 3.4
Chillicothe	31.8	+ 5.0	28.4	− 3.6	37.0	− 4.1	53.8	+ 0.7	69.2	+ 4.0	81.2	+ 8.3	87.4	+ 8.5	80.3	+ 4.6	63.2	− 5.4	58.6	+ 1.8	46.2	+ 4.5	27.4	− 5.5	55.4	+ 1.6
Conception	31.0	+ 6.3	29.5	+ 1.3	38.9	− 0.9	55.8	+ 3.6	68.4	+ 6.3	78.7	+ 7.2	85.4	+ 8.8	79.4	+ 4.7	63.2	− 4.0	59.0	+ 3.6	43.6	+ 2.2	26.2	− 3.0	54.9	+ 3.0
Edgerton	34.4[d]	+ 7.5	31.2[c]	− 3.1	41.4[b]	− 1.8	56.5[b]	+ 2.7	68.3[a]	+ 5.3	80.0	+ 8.1	86.0	+ 9 9	81.9[a]	+ 6.8	64.6	− 3.3	61.1[a]	+ 4.8	46.7[b]	+ 4.9	29.4[a]	− 1.0	56.8	+ 3.4
Grant City	30.9	+ 6.1	29.0	+ 0.4	37.6	− 3.7	53.6	+ 1.4	68.5	+ 6.5	78.1	+ 7.3	84.2	+ 8.0	78.4	+ 3.5	62.9	− 4.1	58.0	+ 2.9	43.8	+ 1.9	26.6	− 1.4	54.3	+ 2.4
Kansas City	35.4	+ 7.2	33.4	+ 2.2	41.8	− 0.9	57.7	+ 2.9	71.0	+ 6.2	83.2	+ 9.6	88.4	+10.3	83.0	+ 6.4	65.8	− 3.1	63.0	+ 5.3	48.0	+ 4.3	31.1	− 1.4	58.5	+ 4.1
Kidder	30.8	+ 4.8	27.8	− 0.6	35.9	− 4.9	53.6	+ 1.4	69.4	+ 6.8	80.4	+ 8.6	86.8	+10.2	80.2	+ 4.8	64.0	− 3.3	58.4	+ 2.6	44.0	+ 2.2	26.1	− 3.1	54.8	+ 2.5
Lexington	34.2	+ 6.4	32.1	+ 1.1	38.7	− 4.7	55.2	+ 0.6	69.6	+ 5.2	81.6	+ 8.7	88.4	+11.0	82.6	+ 6.4	64.8	− 4.0	61.2	+ 3.7	47.2	+ 3.0	29.8	− 2.2	57.1	+ 2.9
Maryville	32.2	+ 9.3	31.2	+ 5.4	39.8	+ 1.9	55.6	+ 4.8	71.8	+10.5	80.4	+10.6	85.4	+ 9.7	79.9	+ 6.1	63.8	− 1.8	59.4	+ 5.9	44.0	+ 4.6	26.2	− 0.6	55.8	+ 5.5
Oregon	34.6	+10.5	33.2	+ 4.4	41.7	+ 2.1	57.3	+ 4.6	71.8	+ 8.6	82.2	+10.0	87.9	+12.3	81.4	+ 6.2	64.8	− 2.3	62.6	+ 7.5	46.0	+ 5.5	29.0	+ 0.3	57.7	+ 5.8
St. Joseph	34.0	+ 6.4	32.3	0.0	40.6	− 1.6	56.8	+ 2.5	70.8	+ 6.8	81.6	+ 7.5	87.3	+ 8.4	81.0	+ 4.3	63.5	− 5.7	61.9	+ 5.3	46.8	+ 3.4	29.0	− 1.8	57.1	+ 3.0
Tarkio	29.6	+ 6.7	30.0	+ 1.0	38.1	− 2.0	54.6	+ 2.4	70.7	+ 8.1	79.8	+ 8.0	84.8	+ 8.0	79.3	+ 4.1	62.2	− 4.1	59.6	+ 4.8	43.5	+ 3.4	25.2	− 1.2	54.8	+ 3.3
Trenton	32.8	+ 6.5	30.8	+ 1.4	39.9	− 1.2	55.8	+ 3.1	70.0	+ 6.5	81.4	+ 9.2	87.2	+10.4	79.6	+ 4.4	64.7	− 2.5	59.6	+ 3.7	45.1	+ 2.9	27.9	− 1.7	56.2	+ 3.6
Division means	**32.6**	**+ 6.9**	**30.7**	**+ 1.0**	**39.3**	**− 1.8**	**55.4**	**+ 2.6**	**69.9**	**+ 6.7**	**80.7**	**+ 8.6**	**86.5**	**+ 9.6**	**80.5**	**+ 5.1**	**63.9**	**− 3.6**	**60.2**	**+ 4.4**	**45.4**	**+ 3.5**	**27.8**	**− 1.9**	**56.1**	**+ 3.4**
State means	**36.1**	**+ 5.2**	**32.5**	**− 0.5**	**41.2**	**− 2.4**	**56.5**	**+ 1.2**	**69.0**	**+ 4.6**	**80.4**	**+ 6.8**	**86.2**	**+ 8.4**	**80.6**	**+ 4.4**	**65.6**	**− 3.6**	**61.1**	**+ 3.7**	**48.5**	**+ 4.0**	**31.6**	**− 2.5**	**57.4**	**+ 2.4**

¶ Estimated

Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days, etc.

Monthly and Annual Precipitation for the Year 1934, with Departures from Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Boonville	0.87	−0.94	0.95	−1.27	1.76	−1.38	1.15	−2.86	1.25	−3.84	1.61	−3.99	0.88	−2.85	2.80	−1.06	7.93	+3.22	2.04	−1.08	4.19	+1.87	1.10	−0.78	26.53	−14.96
Bowling Green	1.24	.....	1.38	.....	1.98	.....	1.23	.....	0.44	.....	3.30	.....	0.67	.....	3.25	.....	5.42	.....	2.14	.....	4.13	.....	1.81	.....	26.99	.....
Brunswick	1.04	−0.54	0.95	−0.84	1.65	−0.86	1.90	−1.65	2.94	−1.79	3.24	−2.25	0.93	−3.42	1.84	−2.00	13.32	+8.83	1.28	−1.64	5.67	+3.63	0.94	−0.71	35.70	−3.24
Canton	0.87	.....	1.04	.....	2.58	.....	1.96	.....	1.84	.....	3.26	.....	0.30	.....	2.10	.....	6.37	.....	3.43	.....	5.19	.....	0.89	.....	29.83	.....
Clifton Hill	1.41	−0.17	1.68	+0.25	1.63	−1.01	2.81	−1.65	1.91	−2.63	2.75	−2.14	0.39	−3.01	5.41	+1.40	9.20	+4.75	2.00	−0.56	5.42	+3.28	1.64	+0.01	36.25	−0.88
Columbia	0.93	−0.99	1.06	−0.98	2.91	−0.03	1.28	−2.49	1.35	−3.11	3.56	−1.20	0.67	−2.82	4.94	+1.34	8.31	+3.96	2.57	−0.04	4.40	+2.20	1.19	−0.67	33.17	−4.83
Downing	0.75	−0.68	0.69	−0.63	1.07	−1.26	2.11	−1.05	1.74	−1.99	2.68	−2.78	1.02	−3.47	2.30	−1.42	7.64	+2.04	2.39	−0.46	4.46	+2.60	0.38	−1.12	27.23	−10.82
Edina	0.49	.....	0.81	.....	1.15	.....	3.14	.....	1.81	.....	2.54	.....	0.68	.....	2.64	.....	10.52	.....	2.88	.....	5.44	.....	0.44	.....	32.54	.....
Elsberry	1.68	.....	1.00	.....	2.77	.....	1.37	.....	0.30	.....	1.65	.....	0.27	.....	3.72	.....	5.50	.....	2.16	.....	3.08	.....	2.30	.....	25.80	.....
Ewing	0.50	.....	1.15	.....	1.65	.....	2.03	.....	1.18	.....	1.52	.....	0.15	.....	2.42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Farber	0.75	.....	0.67	.....	1.33	.....	1.10	.....	1.44	.....	4.82	.....	0.82	.....	5.23	.....	5.20	.....	1.46	.....	4.23	.....	1.26	.....	28.31	.....
Fayette	0.94	−0.92	1.00	−0.80	1.89	−0.91	1.56	−2.06	1.93	−2.62	3.02	−1.77	0.80	−2.80	3.66	+0.40	7.66	+2.91	2.15	−0.53	*4.92	+2.79	0.75	−0.93	30.28	−7.24
Fulton	1.43	−0.80	1.40	−0.36	2.89	−0.13	1.03	−3.15	1.06	−3.76	3.15	−1.52	0.94	−2.91	5.08	+1.61	7.88	+3.59	1.45	−1.64	4.48	+2.12	1.64	−0.39	32.43	−7.34
Gorin	0.63	−0.85	0.75	−0.69	1.14	−1.28	3.67	−0.16	1.53	−2.74	2.07	−2.22	0.36	−3.55	2.01	−1.11	8.80	+4.14	3.11	+0.31	6.06	+4 07	0.71	−0.95	30.84	−5.03
Hannibal	0.89	−0.83	0.90	−0.96	2.05	−0.55	1.70	−1.49	1.95	−2.40	4.15	+0.25	0.09	−3.00	2.89	−0.45	6.28	+2.31	2.05	−0.34	5.65	+3.59	1.19	−0.35	29.79	−4.22
Hermann	1.07	−1.02	1.08	−1.02	2.85	−0.21	2.55	−1.33	0.42	−3.95	4.41	−0.21	2.13	−1.51	6.57	+3.37	8.47	+4.49	3.16	+0.22	3.87	+1.10	1.60	−0.25	38.18	−0.32
Jefferson City	1.72	−0.41	1.18	−0.74	2.56	−0.54	1.57	−2.28	1.08	−3.44	3.06	−1.21	1.79	−1.66	6.25	+3.00	9.55	+6.02	3.41	+0.62	3.22	+0.85	2.89	+0.95	38.28	+1.16
Kahoka	0.90	.....	0.80	.....	0.99	.....	3.14	.....	1.62	.....	3.42	.....	0.92	.....	1.36	.....	11.09	.....	2.04	.....	6.84	.....	0.59	.....	33.71	.....
Kirksville	0.39	−1.06	1.07	−0.63	0.72	−2.00	3.03	−0.56	3.09	−1.67	1.77	−2.94	0.62	−3.45	4.76	+1.25	8.98	+4.52	3.20	+0.22	6.63	+4.72	0.21	−1.40	34.47	−3.00
La Belle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.59	.....	3.20	.....	7.06	.....	0.93	.....	32.38	.....
Linneus	0.79	.....	1.12	.....	1.17	.....	2.66	.....	3.26	.....	2.28	.....	0.43	.....	4.22	.....	8.34	.....	0.65	.....	6.16	.....	0.81	.....	31.89	.....
Louisiana	1.40	−0.57	0.49	−1.79	1.87	−1.23	3.05	−0.39	0.35	−4.13	2.35	−1.84	0.05	−3.19	3.66	−0.16	5.33	+1.25	1.74	−1.15	5.42	+3.00	1.55	−0.21	27.26	−10.41
Lucerne	0.44	−0.54	0.34	−1.12	0.61	−1.22	1.53	−2.41	2.61	−1.76	2.85	−3.69	0.47	−2.65	1.95	−1.45	5.28	−0.60	2.68	−0.82	5.83	+3.97	0.27	−1.05	24.86	−13.34
Macon	0.78	−0.79	0.72	−1.10	1.84	−0.78	2.54	−0.82	1.84	−2.56	1.34	−3.55	0.26	−3.11	3.40	−0.14	9.14	+4.84	1.63	−1.37	5.94	+3.84	0.68	−0.86	30.11	−6.40
Madison	.....	.....	.....	.....	.....	.....	2.60	.....	2.10	.....	2.18	.....	1.09	.....	4.50	.....	8.59	.....	2.43	.....	4.54	.....	.....	.....	.....	.....
Memphis	0.52	.....	0.70	.....	1.20	.....	2.38	.....	1.53	.....	2.77	.....	0.80	.....	2.03	.....	9.14	.....	1.63	.....	5.29	.....	0.52	.....	28.51	.....
Mexico	1.41	−0.60	1.92	−0.18	2.70	−0.13	1.94	−1.72	1.11	−3.58	4.63	−0.45	1.23	−2.37	6.76	+3.52	7.22	+2.62	1.37	−1.30	5.42	+3.04	1.45	−0.55	37.16	−1.70
Milan	1.04	−0.07	1.55	+0.14	0.99	−1.40	3.09	−0.83	1.93	−1.10	2.43	−4.42	0.26	−2.66	4.04	+0.24	7.85	+2.67	2.55	−1.26	6.08	+3.50	1.35	−0.06	33.16	−5.25
Monroe City	1.51	−0.52	1.05	−0.44	2.14	−0.58	2.36	−1.35	1.34	−2.27	3.47	−1.60	1.33	−2.40	3.52	−1.05	6.49	+2.48	1.85	−0.83	6.56	+4.43	0.64	−1.03	32.26	−5.16
New London	1.74	.....	1.22	.....	2.71	.....	1.28	.....	2.40	.....	1.97	.....	0.34	.....	2.93	.....	6.68	.....	1.89	.....	4.57	.....	2.02	.....	29.75	.....
Palmyra	0.76	−1.48	0.89	−1.06	1.77	−1.26	1.54	−2.08	1.79	−2.92	2.21	−2.24	0.00	−3.33	1.95	−1.55	6.99	+2.93	2.09	−0.15	5.88	+3.57	1.13	−0.54	27.00	−10.11
Paris	0.78	.....	0.98	.....	2.07	.....	1.57	.....	1.53	.....	2.96	.....	0.76	.....	5.96	.....	9.18	.....	1.66	.....	6.02	.....	1.25	.....	34.72	.....
Perry	0.75	.....	1.00	.....	1.58	.....	1.15	.....	1.15	.....	3.30	.....	1.38	.....	3.59	.....	5.63	.....	1.28	.....	4.78	.....	1.07	.....	26.66	.....
Philadelphia	0.56	.....	1.06	.....	1.36	.....	1.46	.....	¶1.63	.....	2.42	.....	0.73	.....	3.17	.....	7.48	.....	2.62	.....	6.11	.....	1.08	.....	29.68	.....
St. Charles	1.10	−1.09	1.33	−1.16	3.49	+0.45	2.20	−1.45	0.22	−4.08	4.11	−0.01	1.15	−1.97	4.95	+1.47	7.42	+4.11	2.83	+0.11	3.40	+0.88	2.01	+0.13	34.21	−2.61
St. Louis	1.72	−0.62	1.26	−1.30	2.96	−0.42	2.40	−1.41	0.54	−3.80	3.25	−0.57	1.22	−1.76	3.14	+0.15	5.86	+2 40	2.23	−0.49	2.66	−0.17	1.95	−0.26	29.19	−8.25
St. Louis University	1.59	−0.92	1.34	−0.60	2.25	−1.13	2.29	−1.85	0.60	−3.61	2.18	−1.49	0.96	−1.51	3.18	−1.07	5.22	+0.98	1.84	−1.51	2.51	−0.11	1.73	−0.75	25.69	−13.57
Shelbina	0.73	−0.86	0.97	−0.96	2.18	−0.64	2.36	−1.22	1.36	−3.29	1.96	−3.05	0.81	−3.07	4.14	+1.12	8.71	+4.63	2.20	−0.70	5.10	+2.91	1.22	−0.41	31.74	−5.54
Shelbyville	0.66	.....	1.07	.....	1.79	.....	2.49	.....	1.53	.....	2.30	.....	0.15	.....	3.55	.....	8.95	.....	2.26	.....	3.84	.....	1.05	.....	29.64	.....
Steffenville	0.73	−1.32	1.15	−0.64	3.05	+0.09	2.80	−0.89	1.58	−3.04	1.73	−2.75	0.48	−3.79	3.23	−0.48	10.30	+5.93	2.35	−0.09	8.70	+6.59	1.01	−0.62	37.11	−1.01
Troy	1.21	.....	0.90	.....	2.70	.....	1.97	.....	0.25	.....	2.71	.....	0.82	.....	4.41	.....	5.90	.....	2.33	.....	4.16	.....	1.62	.....	28.98	.....
Union	1.64	−0.23	1.41	+0.08	3.42	0.00	3.35	−1.33	0.78	−3.99	4.43	−0.01	2.13	−0.52	6.50	+1.94	9.65	+5.64	2.98	−0.82	3.90	+0.84	2.28	−0.08	42.47	+1.52
Unionville	0.80	−0.96	0.90	−0.87	0.95	−1.47	1.87	−1.85	2.87	−1.61	3.33	−1.76	1.08	−2.98	2.63	−1.44	¶6.91	+1.98	2.16	−0.67	5.99	+4.03	0.05	−1.57	29.54	−9.17
Valley Park	2.04	+0.32	1.45	+0.14	3.25	−0 13	3.13	−1.52	0.58	−4.17	1.13	−2.61	1.84	−0.22	5.67	+2.03	7.38	+3.97	2.75	−0.85	3.48	+0.79	2.32	−0.13	35.02	−2.38
Warrenton	1.68	−0.62	1.45	−0.60	3.68	+0.34	1.58	−2.58	0.56	−4.08	2.77	−1.45	1.28	−1.98	5.23	+0.83	7.06	+3.04	3.27	+0.27	4.43	+1.74	2.11	−0.03	35.10	−5.12
West Ely	0.99	.....	1.37	.....	2.09	.....	1.28	.....	1.13	.....	2.35	.....	1.41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winfield	1.11	.....	1.68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk, Iowa	0.81	−0.75	0.91	−0.64	1.77	−0.61	2.64	−0.35	1.34	−2.59	3.01	−1.12	0.95	−2.46	2.66	−0.54	6.40	+2.56	1.93	−0.33	4.86	+2.92	0.91	−0.54	28.19	−4.45
Division means	**1.04**	**−0.77**	**1.08**	**−0.72**	**2.03**	**−0.70**	**2.13**	**−1.54**	**1.45**	**−3.03**	**2.79**	**−1.88**	**0.82**	**−2.57**	**3.78**	**+0.37**	**7.82**	**+3.52**	**2.25**	**−0.58**	**5.03**	**+2.71**	**1.24**	**−0.52**	**31.46**	**−5.71**
Southeast Lowlands																										
Bragg City	.....	.....	.....	.....	7.78	.....	2.41	.....	1.50	.....	3.78	.....	1.13	.....	5.98	.....	5.67	.....	1.44	.....	9.80	.....	3.46	.....	.....	.....
Campbell	2.34	.....	2.31	.....	7.65	.....	2.22	.....	1.97	.....	2.75	.....	1.40	.....	8.57	.....	5.60	.....	1.01	.....	8.21	.....	4.12	.....	48.15	.....
Cape Girardeau	1.51	−2.44	1.47	−0.86	3.19	−0.43	2.65	−1.41	1.82	−2.46	1.22	−3.15	1.78	−1.05	4.00	+0.21	8.23	+4.82	2.94	−0.25	7.64	+3.69	2.26	−1.13	38.71	−4.46
Caruthersville	1.84	−3.00	2.05	−1.57	7.33	+2.82	2.18	−2.27	4.64	+0.12	5.95	+1.93	2.31	−1.08	9.35	+5.97	5.10	+1.96	0.78	−2.32	8.94	+4.98	3.24	−1.04	53.71	+6.50
Dexter	2.73	−2.56	1.81	−1.00	5.25	+2.10	1.71	−3.25	1.27	−3.69	4.32	−0.24	3.37	−0.08	6.07	+1.76	4.98	+0.22	1.24	−3.20	7.12	+3.21	3.64	+0.30	43.51	−6.38
Doniphan	2.37	−2.03	1.73	−1.32	4.91	+0.80	2.44	−2.94	0.93	−3.50	2.12	−2.47	2.41	−1.70	8.48	+4.20	4.18	+0.46	1.36	−1.76	4.48	+0.95	3.07	−0.50	38.48	−9.81
Fisk	2.45	.....	0.66	.....	4.12	.....	2.97	.....	1.45	.....	3.45	.....	0.58	.....	6.69	.....	5.26	.....	0.91	.....	5.74	.....	1.94	.....	36.22	.....
Jackson	1.82	−1.96	1.24	−1.60	3.76	−0.54	4.17	−0.37	0.92	−3.52	3.49	−1.23	1.46	−2.02	4 37	+0.76	7.89	+4.11	3.07	−0.17	7.99	+4.56	2.74	−0.48	42.92	−2.46
Marble Hill	2.11	−1.56	1.32	−1.93	2.54	−1.87	3.35	−1.37	0.36	−4.23	5.38	+0.67	0.74	−3.66	5.82	+2.22	5.48	+1.74	3.55	+0.63	5.47	+1.84	1.69	−1.82	37.81	−9.34
Morehouse	1.98	−2.87	2.01	−0.93	4.70	+0.14	2.30	−2.78	1.33	−3.49	3.06	−1.97	1.45	−1.57	4.85	+0.87	5.21	+0.45	2.51	−1.01	9.20	+5.13	3.89	+0.12	42.49	−7.91
New Madrid	2.04	−3.32	2.88	−0.92	6.88	+1.61	2.13	−2.47	2.16	−2.48	2.67	−1.81	2.32	−1.71	5.04	+1.24	7.47	+3.84	2.12	−1.26	9.43	+5.40	3.63	−0.72	48.77	−2.60
Parma	1.97	−1.76	3.15	+0.43	6.65	+0.76	1.65	−2.94	2.24	−2.46	3.39	−0.50	2.25	−1.45	9.65	+5.50	5.88	+0.80	1.33	−2.09	9.20	+4.70	3.28	−1.49	50.64	−0.50
Poplar Bluff	2.43	−1.79	2.05	−0.86	5.05	+0.49	2.65	−2.05	0.51	−4.55	4.87	+0.20	0.14	−3.34	6.05	+1.68	4.07	+0.28	2.35	−0.79	5.99	+2.37	3.71	−0.23	39.87	−8.59
Sikeston	1.63	−2.81	1.28	−1.78	4.29	−0.14	2.87	−1.61	1.13	−3.23	1.98	−2.25	1.76	−2.61	4.43	+0.57	5.45	+2.12	3.76	+0.94	10.04	+6.80	3.65	−0.20	42.27	−4.70
Cairo, Ill	1.28	−2.48	2.01	−1.12	3 86	+0.11	1.69	−2.03	1.59	−2.12	0.92	−2.91	3.41	+0.34	2.70	−0.32	6.02	+3.13	2.68	−0.08	8.45	+4.77	3.30	−0.10	37.91	−2.81
Division means	**2.04**	**−2.38**	**1.86**	**−1.12**	**5.20**	**+0.49**	**2.49**	**−2.12**	**1.59**	**−2.97**	**3.29**	**−1.14**	**1.77**	**−1.66**	**6.14**	**+2.06**	**5.77**	**+1.99**	**2.07**	**−0.95**	**7.85**	**+8.99**	**3.17**	**−0.61**	**43.24**	**−4.42**
Ozark Plateau																										
Arcadia	1.69	−1.35	1.51	−1.43	2.61	−1.19	3.52	−1.16	2.13	−2.57	2.74	−1.95	0.63	−3.51	7.10	+3.28	7.87	+4.13	3.02	−0.10	5.09	+1.47	2.17	−0.80	40.08	−5.18
Birchtree (near)	1.39	−1.80	2.02	−0.46	2.92	−1.23	2.65	−2.15	1.17	−3.20	3.45	−1.13	1.48	−2.38	6.18	+1.60	7.74	+4.11	1.60	−1.39	3.52	+0.39	3.00	+0.25	37.12	−7.39
Buffalo	0.96	.....	1.56	.....	1.94	.....	4.02	.....	1.23	.....	2.22	.....	1.83	.....	0.88	.....	10.78	.....	1.92	.....	6.74	.....	1.45	.....	35.53	.....
Caplinger Mills	1.16	.....	1.48	.....	2.13	.....	3.12	.....	1.77	.....	2.47	.....	0.30	.....	0.32	.....	8.21	.....	3.66	.....	4 90	.....	1.25	.....	30.77	.....
Crystal City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.16	.....	1.32	.....	4.33	.....	7.46	.....	1.40	.....	3.32	.....	1.70	.....	.....	.....
Dean	1.68	−0.66	1.35	−0.43	1.73	−1.79	2.95	−1.65	2.75	−3.08	2.00	−4.04	0.21	−3.98	3.91	−0.25	9.97	+6.04	3.58	−0.23	7.74	+4.40	2.31	+0.04	40.18	−5.63
Eldon	1.09	−0.54	1.77	−0.03	2.45	−0.64	1.35	−3.21	0.83	−3.84	3.35	−1.27	1.46	−2.08	3.72	−0.10	5.86	+1.77	4.20	+0.94	4.91	+2.42	1.36	−0.72	32.35	−7.30
Farmington	0.75	−1.77	1.34	−1.62	2.20	−1.21	3.44	−0.80	0.50	−4.95	0.23	−4.42	0.29	−3.15	3.42	−0.15	15.09	+11.72	1.03	−1.91	4.05	+0.30	3.27	+0.51	35.61	−7.45
Fredericktown	2.01	−1.43	1.48	−1.12	2.24	−1.54	3.76	−1.23	1.63	−2.01	1.15	−4.04	1.09	−2.73	4.45	+0.39	7.68	+3.35	2.95	−1.46	5.28	+2.10	2.09	−0.67	35.81	−10.39
Galena	0.42	−1.87	0.79	−1.08	2.47	−0.72	3.27	−0.84	2.12	−3.04	1.60	−3.12	0.92	−3.05	2.63	−1.48	4.97	+0.65	0.84	−2.25	5.85	+2.58	1 48	−1.05	27.36	−15.27
Garber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.42	.....	6.99	.....	2.61	.....	4.16	.....	1.67	.....	.....	.....
Goodland	1.59	−1.09	1.67	−0.65	2.55	−1.58	4.00	−1.00	2.89	−1.95	2.81	−1.45	0.79	−3.09	7.15	+3.17	8.20	+4.38	3.49	+0.10	4.72	+1.80	2.05	−0.50	41.91	−1.86
Greenville	1.68	−1.38	0.36	−2.64	3.93	−0.57	2.76	−2.23	1.44	−2.75	2.64	−2.14	3.52	−0.25	10.47	+7.12	6.18	+3.04	2.74	−0.13	5.09	+1.41	2.30	−0.73	43.11	−1.25
Hailey	2.15	.....	1.25	.....	1.88	.....	3.33	.....	3.03	.....	4.15	.....	1.01	.....	4.47	.....	6.71	.....	1.66	.....	7.32	.....	1.09	.....	38.05	.....
Koshkonong	1.87	−1.79	2.03	−0.72	3.68	−0.25	2.97	−2.30	2.92	−1.65	1.25	−3.46	0.29	−3.38	4.96	+0.62	4.95	+1.27	1.43	−1.76	3.45	+0.18	2.71	−0.70	32.51	−13.97
Lakeside	1.14	.....	1.74	.....	3.19	.....	2.71	.....	2.25	.....	3.35	.....	1.30	.....	2.66	.....	7.43	.....	3.43	.....	4.89	.....	2.47	.....	36.56	.....
Lebanon	1.14	−1.39	2.27	−0.02	2.57	−0.97	4.01	−0.35	2.45	−3.00	1.35	−3.90	0.61	−3.36	3.18	−0.70	5.00	+0.75	1.98	−1.35	5.01	+2.39	2.57	+0.09	32.14	−11.81
Leeper	1.66	−2.65	1.78	−0.58	3.41	+0.11	3.01	−2.62	1.26	−3.72	2.87	−3.42	3.25	−0.48	5.75	+1.82	5.45	+2.46	2.29	−1.58	4.32	+0.79	2.39	−0.80	37.44	−10.67
Lockwood	1.58	−0.16	1.62	−0.15	2.10	−0.73	4.70	+0.39	2.71	−2.25	3.92	−1.42	1.02	−3.69	3.16	−1.20	8.82	+4.26	5.17	+1.65	6.18	+3.73	2.13	+0.07	43.11	+0 50
Mountain Grove	1.97	−0.85	1.27	−0.95	3.37	−0.75	2.71	−2.25	2.86	−1.97	1.71	−3.07	0.38	−3.45	4.24	−0.08	6.20	+1.96	2.29	−0.96	3.62	+0.86	1.94	−0.54	32.56	−12.05
Neosho	1.62	−0.88	1.39	−0.85	1.78	−1.70	1.64	−2.80	2.30	−3.56	1.69	−4.12	0.54	−3.77	1.90	−2.24	7.10	+2.71	1.92	−1.56	7.18	+4.02	1.38	−1.11	30.44	−15.86
Owensville	1.35	−0.52	2.47	+0.92	3.06	−0.52	2.16	−1.58	1.42	−4.05	3.65	−1.64	0.82	−1.96	5.38	+2.02	8.19	+4.30	2.71	−0.87	3.49	+0.63	2.43	+0.19	37.13	−3.08
Rolla	1.49	−0.95	1.55	−0.60	3.13	−0.59	3.46	−1.16	2.44	−2.55	3.38	−0.88	0.50	−3.38	8 11	+4.03	11.17	+7.26	3.62	+0.57	3.72	+1.20	2.70	+0.54	45.27	+3.49
St. Thomas (near)	1.59	.....	1.63	.....	2.51	.....	1.81	.....	1.39	.....	4.16	.....	2.57	.....	6.70	.....	8.00	.....	3.66	.....	3.73	.....	1.91	.....	39.56	.....
Salem	1.43	−1.36	1.59	−0.68	3.19	−0.43	4.08	−0.55	3.20	−1.50	2.00	−2.70	0.23	−3.13	4.36	−0.12	10.09	+6.01	2.37	−1.36	3.00	+0.38	2.42	+0.04	37.96	−5.40
Seligman	2.09	−0.79	1.28	−0.61	3.08	−0.49	3.07	−1.27	2.72	−2.92	3.29	−1.06	0.55	−3.76	3.03	−1.01	7.85	+3.48	2.80	−0.55	7.51	+4.64	1.37	−1.13	38.59	−5.47
Seymour (near)	2.07	−0.48	1.60	−0.57	2.40	−1.47	4.57	+0.28	1.14	−4.11	4.16	−1.24	0.43	−3.81	4.72	+0.76	7.12	+2.65	2.91	−0.39	3.81	+1.14	2.01	−0 30	36.94	−7.54
Springfield	1.42	−0.92	1.38	−0.97	2.76	−0.63	3.77	−0.09	2.07	−3.12	2.65	−2.03	0.89	−3.32	2.60	−1.49	6.50	+2.98	1.30	−1.75	5.70	+2.91	1.54	−0.77	32.58	−9.20

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Monthly and Annual Precipitation for the Year 1934, with Departures from Normal—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Ozark Plateau—concluded																										
Stover	1.13	−0.65	0.86	−0.63	1.49	−1.25	1.69	−2.65	0.92	−4.67	1.90	−3.55	0.88	−2.22	2.37	−1.30	7.50	+3.61	5.51	+1.20	5.85	+3.08	1.74	−0.16	31.84	−9.19
Versailles	1.14	.....	1.78	.....	2.40	.....	1.63	.....	1.39	.....	3.01	.....	0.54	.....	3.94	.....	9.66	.....	5.43	.....	7.03	.....	2.03	.....	39.98	.....
Williamsville	1.98	−2.22	1.69	−0.86	3.64	+0.11	3.14	−2.15	0.73	−3.63	2.49	−4.11	2.33	−1.03	6.12	+0.67	4.59	+0.84	2.42	−1.20	4.27	+0.62	2.59	−1.23	35.99	−14.19
Willow Springs(near)	2.01	−1.42	1.47	−1.17	3.11	−1.87	2.24	−2.56	1.84	−3.14	2.17	−2.59	0.28	−3.94	3.96	−0.02	8.05	+3.81	2.20	−0.87	3.41	−0.10	2.57	−0.26	33.31	−14.13
Division means	**1.51**	**−1.18**	**1.53**	**−0.74**	**2.66**	**−0.93**	**3.05**	**−1.50**	**1.92**	**−3.05**	**2.58**	**−2.61**	**1.04**	**−2.87**	**4.39**	**+0.64**	**7.73**	**+3.65**	**2.75**	**−0.72**	**4.96**	**+1.80**	**2.07**	**−0.41**	**36.19**	**−7.92**
Southwest Plain																										
Appleton City	0.93	−0.91	1.08	−0.70	1.56	−1.62	1.70	−2.71	2.59	−2.59	1.95	−3.30	1.93	−2.58	0.07	−3.61	5.18	+1.06	4.31	+1.74	5.35	+3.11	1.29	−0.37	27.94	−12.48
Clinton	1.30	−0.69	1.62	−0.35	2.02	−1.09	1.49	−2.82	2.96	−2.37	3.20	−1.82	5.22	+1.39	0.83	−2.54	5.89	+1.83	2.90	−0.15	7.70	+5.63	1.96	+0.09	37.09	−2.89
Concordia	1.04	−0.40	0.80	−0.87	1.71	−0.54	1.75	−1.57	4.39	+0.17	4.50	−0.79	0.66	−3.24	4.03	+1.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrisonville	1.02	−0.53	0.87	−0.99	1.56	−1.12	1.77	−1.77	4.36	−0.17	1.89	−2.74	2.14	−1.62	1.26	−2.79	7.06	+2.48	2.08	−0.75	7.13	+5.06	1.37	−0.32	32.51	−5.26
Joplin	1.77	−0.33	1.67	−0.48	1.49	−1.38	2.24	−2.27	1.24	−3.93	1.26	−4.38	1.55	−2.80	2.22	−2.00	8.80	+5.17	1.47	−2.02	7.04	+4.47	1.20	−0.74	31.95	−10.69
Lamar	0.97	−0.79	1.22	−0.87	1.39	−1.61	3.31	−1.17	1.39	−3.98	5.30	+0.05	0.64	−3.54	1.85	−2.38	7.99	+3.47	4.93	+1.77	5.69	+3.36	0.99	−0.99	35.67	−6.68
Lamonte	1.42	−0.56	1.17	−0.72	3.10	+0.20	3.75	−0.16	4.33	−0.62	2.97	−1.86	1.33	−2.62	3.01	−0.72	6.60	+1.98	2.94	+0.26	6.69	+4.53	1.79	+0.04	39.10	−0.25
Marshall	1.23	−0.48	0.91	−0.83	1.88	−0.91	3.05	−0.79	3.11	−1.74	1.99	−2.64	1.19	−2.65	4.17	+0.53	11.33	+6.19	1.18	−1.68	6.26	+4.00	2.00	+0.32	38.30	−0.68
Nevada	0.83	−1.20	1.75	−0.02	1.61	−1.34	2.03	−2.17	2.94	−2.37	1.83	−3.69	1.77	−2.17	0.15	−3.49	8.28	+3.98	3 97	+0.98	6.01	+3.98	1.11	−0.72	32.28	−8.23
Warrensburg	1.40	−0.37	0.61	−1.42	0.82	−1.85	2.15	−1.20	4.11	−0.43	2.21	−2.82	0.89	−2.96	1.05	−2.44	8.64	+4.85	3.77	+1.05	5.76	+3.76	2.48	+0.72	33.89	−3.11
Warsaw	1.17	−1.11	1.42	−0.91	1.40	−2.18	2.16	−2.42	1.47	−3.65	1.29	−4.09	1.38	−2.71	1.87	−2.42	5 45	+0.73	3.43	−0.04	5.98	+3.39	2.17	−0.11	29.19	−15.52
Waverly	1.13	−0.40	0.59	−0.78	1.24	−1.65	2.07	−2.01	3.54	−1.14	3.57	−1.95	0.27	−3.35	3.58	−0.19	11.27	+5.96	1.95	−1.24	5.91	+3.54	1.69	+0.23	36.81	−2.98
Division means	**1.18**	**−0.65**	**1.14**	**−0.74**	**1.65**	**−1.26**	**2.29**	**−1.76**	**2.91**	**−2.09**	**2.66**	**−2.50**	**1.58**	**−2.40**	**2.01**	**−1.73**	**7.86**	**+3.43**	**2.99**	**−0.01**	**6.32**	**+4.08**	**1.64**	**−0.17**	**34.23**	**−5.80**
Northwest Plateau																										
Bethany	0.57	−0.69	0.50	−0.95	0.05	−2.25	2.36	−0.91	1.32	−3.11	2.60	−2.22	0.43	−3.80	4.55	+0.60	7.86	+3.70	2.57	+0.12	7.31	+5.48	0.23	−1.02	30.35	−5.05
Chillicothe	0.83	−0.79	1.48	−0.38	0.49	−1.99	2.08	−2.21	2.87	−1.11	2.51	−3.33	0.95	−3.21	2.20	−2.26	9.42	+3.74	1.51	−2.22	6.76	+4.42	0.42	−1.04	31.52	−10.29
Conception	0.37	−0.54	0.60	−0.59	0.06	−1.66	1.98	−0.87	2.97	−1.40	3.26	−1.68	0.85	−3.48	1.50	−2.20	4.93	+0.81	2.52	−0.18	7.11	+5.64	0.34	−0.60	26.49	−6.75
Edgerton	0.87	−0.19	0.57	−0.79	0.58	−1.59	2.65	−0.80	2.85	−1.44	4.81	+0.31	0.58	−3.30	1.47	−1.75	6.15	+2.35	1.85	−0.80	4.31	+2.78	0.37	−0.84	27.06	−6.06
Gallatin	0.68	−0.48	0.73	−0.83	0.48	−1.73	1.75	−2.04	2.33	−2.42	3.25	−2.60	0.88	−3.20	2.92	−0.95	7.64	+3.21	1.43	−1.59	8.31	+6.40	1.47	+0.02	31.87	−6.21
Grant City	0.54	−0.38	0.61	−0.52	0.17	−1.88	1.51	−1.51	2.25	−2.01	4.18	−0.73	0.48	−4.35	1.55	−2.19	4.62	+0.36	2.87	+0.05	7.48	+5.86	0.15	−0.92	26.41	−8.22
Kansas City	0.49	−0.70	0.81	−0.94	0.65	−1.88	2.40	−0.74	3.14	−1.51	1.71	−3.28	2.26	−1.87	1.44	−2.65	6.44	+1.88	1.88	−1.04	5.40	+3.57	0.53	−0.80	27.15	−9.96
Kidder	0.75	−0.84	0.76	−0.75	0.58	−1.61	1.84	−1.34	3.19	−1.48	3.52	−1.48	1.71	−2.21	2.30	−1.57	5.82	+1.25	1.66	−1.25	7.13	+5.22	0.57	−0.69	29.83	−6.75
King City	0.63	−0.65	0.92	−0.41	0.29	−1.62	2.39	−0.88	1.91	−2.54	2.59	−2.83	1.73	−2.12	2.78	−0.93	5.65	+1.03	3.70	+0.86	7.02	+5.28	0.19	−0.88	29.80	−5.73
Lexington	0.88	−0.74	1.29	−0.69	1.65	−0.89	2.23	−1.49	4.28	−0.75	3.79	−1.33	1.97	−2.71	1.29	−2.16	9.39	+4.65	3.42	+0.44	7.11	+5.04	1.22	−0.56	38.52	−1.19
Maryville	0.85	−0.17	1.14	−0.25	0.30	−1.54	0.67	−2.38	3.55	−1.44	4.00	−1.09	0.76	−4.37	1.42	−2.54	5.00	+0.50	3.05	+0.24	6.74	+5.11	0.17	−0.83	27.65	−8.76
Oregon	0.53	−0.81	1.07	−0.53	0.27	−1.81	1.27	−2.05	1.67	−3.01	2.24	−2.77	0.55	−3.71	1.86	−2.15	7.43	+3.53	1.63	−1.02	5.91	+4.18	0.53	−0.84	24.96	−10.99
St. Joseph	0.40	−0.50	0.88	−0.49	0.43	−1.87	3.36	+0.16	2.31	−1.72	3.96	−1.11	1.05	−2.06	5.84	+2.27	7.05	+2.11	1.66	−1.07	5.22	+3.26	0.27	−0.87	32.46	−1.89
Tarkio	0.96	+0.22	0.80	−0.29	0.52	−1.20	0.65	−2.50	2.94	−1.35	3.01	−2.09	1.95	−1.79	1.41	−2.64	6.79	+2.95	4.26	+1.66	4.77	+3.29	0.46	−0.42	28.52	−4.16
Trenton	0.56	−0.79	0.68	−0.85	0.46	−1.96	2.63	−0.84	3.19	−1.62	3.56	−1.44	0.85	−3.21	4.41	+0.72	6.10	+1.57	1.07	−1.85	7.52	+5.64	0.61	−0.78	31.64	−5.41
Division means	**0.66**	**−0.53**	**0.86**	**−0.62**	**0.47**	**−1.70**	**1.98**	**−1.36**	**2.72**	**−1.79**	**3.27**	**−1.84**	**1.13**	**−3.03**	**2.46**	**−1.36**	**6.69**	**+2.24**	**2.34**	**−0.51**	**6.54**	**+4.74**	**0.50**	**−0.74**	**29.62**	**−6.50**
State means	**1.24**	**−0.98**	**1.27**	**−0.74**	**2.36**	**−0.78**	**2.41**	**−1.48**	**1.89**	**−2.84**	**2.85**	**−1.90**	**1.11**	**−2.67**	**3.90**	**−0.04**	**7.39**	**+3.25**	**2.45**	**−0.40**	**5.68**	**+3.12**	**1.66**	**−0.41**	**34.21**	**−5.87**

* Estimated ¶ Partially estimated † Indicates plus

Continued from page 62

below at Elsberry, 25° below at Bethany, 13° below at Kansas City, 22° below at Farmington, and 20° below at Goodland. Precipitation was light, making the fifth month of deficient moisture, the five months receiving only 67 per cent of normal.

MARCH.—The month averaged considerably colder than normal. There was a persistent tendency to subnormal temperatures. Vegetation, at the end of the month, was somewhat backward, but wheat and other winter grains were in good condition where moisture was sufficient. Farm work was well up, as a rule. Precipitation was again light, except in the southeastern counties, and especially deficient in the Northwest Plateau counties. For the six months, ending with March, precipitation for the State as a whole averaged only 69 per cent of normal. Rivers and streams were very low. At St. Louis the average stage of the river for March was the lowest March average of record (1861-1934).

APRIL.—It was mostly very mild the first ten days, but temperatures were almost continuously subnormal from about the 12th to the 28th, although no seriously damaging frosts occurred. Rainfall was decidedly less than normal and subsoil moisture had become very deficient. For the eleven months, June 1933 to April 1934, inclusive, the rainfall for the State averaged only 71 per cent of normal, and for the period, January to April, inclusive, it was only 65 per cent of normal. Corn planting was well advanced at the end of April. Wheat, oats, alfalfa, pastures, and garden truck were making but slow growth, due to dry, cool weather. Rivers were lower than ever before recorded in April.

MAY.—High temperatures and drought characterized most of the month. The average rainfall for the State was only 40 per cent of normal. By the end of the month the drought had become quite severe for so early in the season. Duststorms on the 9th, 10th, and 11th (which came from States to the westward) were the most severe of record in some localities. While the month as a whole was very warm, a remarkable cool spell occurred from the 24th to 27th, and frost on the 25th caused much damage in some lowlands of eastern Missouri, especially St. Charles and St. Louis counties. This was followed by extremely high temperatures at the end of the month, with well above 100° at several stations on the 30th.

JUNE.—It was the warmest June of record for the State as a whole, and the excess of temperature was greatest in the northwestern counties. The rainfall was much less than normal, but by no means the least of record for June. But the drought became very severe because of the continued light precipitation over the preceding eight months. The extreme heat and the lack of moisture together made it a very hard month on crops. The heat was persistent throughout the month. Oats were mostly a failure; wheat deteriorated rapidly just before maturity; corn began to suffer severely by the last week of the month.

JULY.—Extremely high temperatures continued. It was the hottest July of record, averaging 86.2°, or 0.8° higher than the previous hottest month, viz., July 1901. The highest temperature on any day was 117° at Louisiana, Pike County, on the 18th, and this is 1° higher than ever before recorded in Missouri. Temperatures were more severe in the northern and western portions of the State than in the southeastern portion. Rainfall was also greater in the southeastern counties. The

average rainfall for the State was the second lightest amount for July of record. July 1934 surpassed July 1901 in both heat and drought, and the destruction of crops was accordingly greater. Such heavy deterioration in the corn crop in one month was never known before in Missouri. It was almost ruined except in parts of the southeastern quarter and in some favored spots in lowlands of other sections. Rivers were much lower than ever before known in July. Water supplies on farms and in villages were exhausted in many places, causing much loss and distress.

AUGUST.—Extreme heat and drought continued into August, and the spell was not finally broken until about the 16th, although it began to weaken about the 11th. Long-standing records of August high temperatures were broken during the first ten days. But the second half of the month was in marked contrast, being decidedly cooler and wetter than normal, except that drought continued in some northeastern and southwestern areas. The rains were too late to help corn much, but forage crops, gardens, and pastures were benefited, and farmers were enabled to sow wheat, rye, and barley for pasturage. The rains also furnished, at least temporarily, a supply of water for use on farms and in villages.

SEPTEMBER.—Cool weather and bountiful rains characterized the month. The rainfall averaged 7.39 inches for the State, which is the third largest September rainfall of record in Missouri. It was the first month having more than normal rainfall since September a year ago. Soil moisture was restored to a depth of a foot or more in most places, but the lower subsoil was still abnormally dry. Supplies of water for domestic use and for stock were restored. Meadows, forage crops, gardens and grains sown for early pasturage made excellent progress.

OCTOBER.—Abundant sunshine and mild temperatures were the outstanding features of the month. Precipitation was less than normal. Conditions were favorable for outdoor work. Fall crops did well and thrived later than usual. Some reports indicated the finest fall vegetables and forage crops in the last several years. Wheat, rye, barley, and grasses made good progress. The first killing frosts occurred about the 27-30th.

NOVEMBER.—The month was unusually mild, with fair weather prevailing the first half and a wet period covering most of the second half. These conditions were advantageous. The copious rains restored some of the severe loss of subsoil moisture sustained during the summer drought. Water supplies for towns and farms were enhanced and made secure for a time at least. The river at St. Louis rose to normal stage and above for the first time in the last sixteen months. Wheat, rye, barley, and recently sown alfalfa were in good to excellent condition. A remarkably heavy snowstorm occurred in western and central sections on the 29-30th.

DECEMBER.—Temperatures were below normal during most of the month, but no severe cold occurred. Precipitation was less than normal except at a few scattered stations. In the upper northwestern counties it was very light. For immediate needs the moisture situation was satisfactory in all sections. Snowfall averaged more than normal, decidedly so at most stations in a belt extending from west to east across the central third of the State. Wheat, rye, and barley were in good to excellent condition. River stages in the St. Louis district were generally above normal.

KILLING FROSTS, 1934

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
Northeast Plain			*Ozark Plateau (continued)*		
Brunswick	April 25*	Oct. 28	Goodland	April 29*	Oct. 15*
Clifton Hill	April 25*	Oct. 28	Greenville	April 29*	Oct. 28
Columbia	April 25	Oct. 28	Koshkonong	Mar. 28*	Nov. 1*
Downing	April 25	Oct. 28	Lebanon	April 25*	Oct. 28
Elsberry	May 25*	Oct. 28*	Lockwood	Mar. 31*	Oct. 28
Fayette	April 28*	Oct. 28*	Mountain Grove	April 25*	Oct. 28
Fulton	April 28	Oct. 28*	Neosho	Mar. 31*	Oct. 28
Hannibal	April 21*	Oct. 28	Rolla	Mar. 31*	Oct. 28
Jefferson City	April 1*	Oct. 28	Salem	April 25	Oct. 28
Kirksville	April 25*	Oct. 28	Seligman	Mar. 31*	Oct. 28*
Louisiana	May 25*	Oct. 28*	Seymour(near)	April 25	Oct. 28
Macon	April 26*	Oct. 28	Springfield	Mar. 31	Oct. 28
Mexico	April 25*	Oct. 28	Versailles	April 25	Oct. 28
St. Charles	April 25	Oct. 28			
St. Louis	Mar. 28	Nov. 1	*Southwest Plain*		
St. Louis Univ.	April 28*	Nov. 14	Appleton City	Mar. 31*	Oct. 28
Steffenville	April 25*	Oct. 28	Clinton	Mar. 31*	Oct. 28
Unionville	April 27*	Oct. 28	Harrisonville	April 25*	Oct. 28
Warrenton	April 25*	Oct. 28	Lamar	April 1*	Oct. 28
Keokuk, Iowa	April 21*	Oct. 28	Lamonte	April 25*	Oct. 28
			Marshall	April 22*	Oct. 28
Southeast Lowlands			Nevada	Mar. 31*	Nov. 1
Campbell	Mar. 29*	Oct. 28	Warrensburg	April 13	Oct. 28
Caruthersville	Mar. 28	Nov. 12	Warsaw	April 25*	Oct. 28
Doniphan	Mar. 29*	Oct. 28			
Jackson	April 25	Oct. 28	*Northwest Plateau*		
Marble Hill	April 28	Oct. 28	Bethany	April 25*	Oct. 28
Poplar Bluff	Mar. 29*	Oct. 28*	Chillicothe	April 25*	Oct. 28*
Sikeston	Mar. 29*	Oct. 28*	Conception	April 25*	Oct. 28
Cairo, Ill.	Mar. 18	Nov. 12	Edgerton	April 25	Oct. 28
			Grant City	April 21	Oct. 28
Ozark Plateau			Kansas City	Mar. 31	Oct. 28
Arcadia	April 28*	Oct. 28*	Kidder	April 25*	Oct. 28
Birchtree(near)	Mar. 30*	Oct. 28*	Lexington	April 1*	Oct. 28
Crystal City		Oct. 28	Maryville	April 25*	Oct. 28
Dean	April 13	Oct. 28	Oregon	April 21*	Oct. 28
Eldon	April 25*	Oct. 28*	St. Joseph	Mar. 31*	Oct. 28
Farmington	April 25*	Oct. 28	Tarkio	April 24	Oct. 28
Garber		Oct. 28	Trenton	April 25*	Oct. 28*

* Occurrence of killing frost not recorded, dates given are last in spring and first in fall of temperature 32° or lower.

WBO, St. Louis, 2-13-35—1170.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

19 **MISSOURI SECTION**
ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX JANUARY 1935 No. 1

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

Temperatures ranged much above normal during the first nineteen days, excepting two or three days of slightly subnormal readings; but from the 20th to the 24th it was quite cold, with minimum readings on the 21st around zero to 5° below at many stations and as low as 12° below in the northwestern corner of the State. In the Southeast Lowlands zero was not reached, the lowest in that division being 3° above zero. Moderate to rather mild temperatures prevailed the last five days of the month. For the State as a whole, the deficiency in temperature during December was nearly balanced by the excess in January, so that the first two months of winter averaged nearly normal.

Hours of bright sunshine averaged considerably less than normal. Dense fog was more frequent than usual, having occurred during parts of six days between the 7th and 20th, interrupting airplane and automobile traffic seriously at times.

January precipitation averaged slightly more than normal for the State, but it was unevenly distributed, with deficiencies at most stations in the northwestern counties and excesses over most of the southern half of the State. The moisture situation at the end of January was satisfactory, and in decided contrast with the situation one year ago. For the six months, August 1934 to January 1935, inclusive, the State rainfall averaged 23.50 inches, or 132 per cent of normal, the excess being due largely to the unusually copious rains of the second half of August, of September, and of November. For the same six months a year ago the rainfall was only 14.87 inches, or 84 per cent of normal.

Snowfall was very light in January. An unusually heavy fall of sleet occurred on the 20th-21st, principally in the eastern portions, which did not entirely disappear until about the end of the month.

Winter grains and pastures were mostly dormant and brown. Wheat was reported generally in good condition.

River stages were generally lower than normal for January, but not extremely low at any time.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 33.0°, or 2.1° above normal. The highest monthly mean was 41.3° at Caruthersville, and the lowest monthly mean was 23.1° at Unionville. The highest temperature recorded was 71° at Garber on the 16th, and the lowest was 12° below zero at Conception on the 21st. The greatest daily range was 49° at Jackson on the 21st.

PRECIPITATION

The average precipitation for the State, 119 stations reporting, was 2.42 inches, or 0.20 inch more than normal. The greatest local monthly amount was 7.00 inches at Bragg City, and the least local monthly amount was 0.50 inch at Edgerton. The greatest amount in any twenty-four hours was 2.56 inches at Hailey on the 7-8th. The average number of days with 0.01 inch or more of precipitation was 7. The snowfall for the State averaged 0.5 inch, or 3.8 inches less than normal. The greatest monthly snowfall recorded was 2.0 inches at Brunswick, Edina, Lamar, Marshall, and Waverly.

MISCELLANEOUS PHENOMENA

Fog.—Dense, 6th, 7th, 8th, 9th, 10th, 15th, 16th, 19th, 20th, 28th, 29th, 30th, 31st.

Glaze.—19th, 21st, 31st.

Halos.—Solar, 5th, 12th, 14th, 18th, 24th, 25th, 28th; lunar, 11th, 13th, 14th, 18th, 21st, 22d, 23d.

Sleet.—8th, 15th, 16th, 18th, 20th, 21st, 31st.

Smoke.—Dense, 11th, 31st.

Thunderstorms.—Local on 7th, 12th, 16th.

Windstorms.—No damaging winds reported.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.20	30.74	24	29.33	16	8.7	30	w.	16	82	73	72	35
Kansas City.....	30.18	30.76	21	29.27	16	10.2	35	w.	16	82	68	76	42
St. Joseph.....	30.18	30.77	23	29.24	16	9.0	34	nw.	16	84	69	75	46
St. Louis.....	30.19	30.75	24	29.41	16	12.1	32	w.	16	78	68	70	44
Springfield.....	30.17	30.66	24	29.47	16	10.6	28	se.	12	87	74	70	41
Cairo, Ill.....	30.20	30.71	24	29.59	16	10.0	25	n.	23	77	67	68	58
Keokuk, Iowa..	30.22	30.82	24	29.32	16	8.7	30	w.	16	81	65	72	40

COMPARATIVE DATA FOR JANUARY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	21.5	− 9.4	74	−32	1.91	−0.31	3.34	0.60	....	6	..	..	..
1889....	31.8	+ 0.9	69	− 2	2.36	+0.14	4.05	1.00	....	6	..	..	..
1890....	33.8	+ 2.9	81	−19	4.25	+2.03	10.50	0.85	....	9	..	..	..
1891....	34.1	+ 3.2	74	− 1	1.52	−0.70	3.27	0.10	4.3	6	..	..	..
1892....	24.0	− 6.9	67	−31	1.80	−0.42	3.79	0.55	....	4	14	8	9
1893....	22.5	− 8.4	66	−14	0.45	−1.77	1.75	0.00	2.4	3	9	11	11
1894....	31.4	+ 0.5	77	−35	2.21	−0.01	5.36	0.20	2.7	5	13	9	9
1895....	24.7	− 6.2	78	−22	1.49	−0.73	5.82	0.17	9.4	5	14	8	9
1896....	32.9	+ 2.0	71	− 9	1.17	−1.05	3.97	0.27	3.1	4	10	7	14
1897....	28.4	− 2.5	72	−16	4.90	+2.68	10.37	1.05	4.0	8	12	7	12
1898....	34.3	+ 3.4	75	−10	3.98	+1.76	7.31	1.98	8.4	9	11	8	12
1899....	30.2	− 0.7	70	−21	1.55	−0.67	12.61	0.01	4.0	6	12	8	11
1900....	34.5	+ 3.6	77	− 9	1.22	−1.00	5.21	T.	0.2	4	14	7	10
1901....	35.0	+ 4.1	72	−11	1.30	−0.92	3.57	0.22	0.8	4	17	7	7
1902....	30.1	− 0.8	72	−17	1.23	−0.99	6.31	0.28	6.9	5	16	7	8
1903....	31 4	+ 0.5	73	−11	1.36	−0.86	3.45	0.06	5.0	6	13	6	12
1904....	27.0	− 3.9	66	−23	2.85	+0.63	5.29	0.77	7.4	8	14	6	11
1905....	22.3	− 8.6	72	−19	1.79	−0.43	4.28	0.10	6.8	8	14	6	11
1906....	35.6	+ 4.7	77	− 8	3.64	+1.42	7.88	0.60	9.2	6	14	5	12
1907....	34.3	+ 3.4	79	− 5	5.16	+2.88	9.45	1.23	2.8	12	7	6	18
1908....	34.4	+ 3.5	68	−10	1.51	−0.71	4.30	0.00	3.6	5	19	5	7
1909....	33.7	+ 2.8	83	−20	2.17	−0.05	5.24	0.42	6.5	7	6	7	18
1910....	32.3	+ 1.4	78	−24	1.83	−0.39	3.98	0.37	3.5	5	13	6	12
1911....	34.6	+ 3.7	78	−19	1.20	−1.02	3.70	0.00	0.7	5	8	7	16
1912....	20.0	−10.9	70	−36	1.06	−1.16	3.97	T.	6.5	4	14	7	10
1913....	33.1	+ 2.2	74	−12	3.67	+1.45	15.65	0.36	2.6	8	13	6	12
1914....	38.1	+ 7.2	78	− 1	1.42	−0.80	3.47	0.05	1.0	4	12	7	12
1915....	29.1	− 1.8	76	−24	2.92	+0.70	5.81	1.48	5.4	8	12	5	14
1916....	31.6	+ 0.7	72	−24	7.36	+5.14	14.12	1.37	3.4	12	9	4	18
1917....	32.9	+ 2.0	76	−10	1.52	−0.70	5.54	0.20	2.3	5	15	7	9
1918....	16.4	−14.5	67	−24	1.68	−0.54	7.18	0.22	16.6	7	12	7	12
1919....	34.0	+ 3.1	70	−23	0.40	−1.82	4.47	0.00	1.4	2	20	5	6
1920....	28.6	− 2.3	72	− 5	1.57	−0.65	7.46	0.10	5.7	5	15	5	11
1921....	37.1	+ 6.2	74	− 1	1.88	−0.34	4.06	0.51	5.4	6	10	7	14
1922....	29.5	− 1.4	66	− 6	1.21	−1.01	6.15	0.32	3.9	5	14	5	12
1923....	39.2	+ 8.3	75	3	2.72	+0.50	8.56	0.10	0.6	6	12	7	12
1924....	24.9	− 6.0	68	−25	1.54	−0.68	4.44	0.23	5.7	7	14	5	12
1925....	29.7	− 1.2	65	−15	1.00	−1.22	3.31	0.03	4.7	4	15	7	9
1926....	32.7	+ 1.8	70	−20	1.90	−0.32	5.55	0.41	4.2	6	11	7	13
1927....	30.8	− 0.1	73	−24	3.05	+0.83	9.99	0.22	3.6	6	13	6	12
1928....	33.3	+ 2.4	77	−18	0.87	−1.35	2.75	T.	0.5	3	16	7	8
1929....	25.1	− 5.8	72	−13	3.47	+1.25	8.64	0.70	6.8	8	11	6	14
1930....	20.8	−10.1	73	−31	4.51	+2.29	13.58	0.71	13.0	10	12	5	14
1931....	36.0	+ 5.1	76	− 5	0.69	−1.53	2.12	0.07	2.0	4	16	6	9
1932....	36.4	+ 5.5	73	− 7	3.32	+1.10	9.92	0.29	1.0	9	10	7	14
1933....	41.4	+10.5	72	8	2.43	+0.21	7.87	0.32	0.5	6	14	8	9
1934....	36.1	+ 5.2	71	− 6	1.24	−0.98	2.73	0.37	1.5	5	13	6	12
1935....	33.0	+ 2.1	71	−12	2.42	+0.20	7.00	0.50	0.5	7	12	6	13
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	30.9	.....	83	−36	2.22	.....	15.65	0.00	4.3	6	13	6	12

Climatological Data for January 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	32.2	+ 5.5	65	16	− 5	21	37	2.26	+0.68	0.98	2.0	8	12	3	16	nw.	O. K. Benecke
Clifton Hill	Randolph	731	36	30.9	+ 2.8	64	16	− 6	21	38	1.23	−0.35	0.48	1.0	5	13	2	16	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	32.3	+ 3.1	67	16	− 3	21	34	1.74	−0.18	0.98	1.3	8	7	6	18	n.	U. S. Weather Bureau
Downing	Schuyler	876	14	26.7	+ 1.3	55	6	− 9	21†	30	1.41	−0.02	0.71	0.7	8	12	5	14	s.	James Taylor
Elsberry	Lincoln	449	4	32.4	.....	64	17	− 3	24	36	2.63	.....	1.34	0	7	8	12	11	n.	Ray E. Mills
Fayette	Howard	680	55	30.0	+ 3.0	65	16	− 4	21†	38	1.78	−0.08	1.08	1.0	4	6	10	15	s.	Harry P. Mason
Fulton	Callaway	818	47	30.5	+ 1.0	66	16	− 4	21†	44	1.96	−0.27	1.15	1.5	6	10	4	17	s.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	....	..	..	1.29	−0.19	0.71	1.5	5	14	5	12	nw.	W. L. Harker
Hannibal	Marion	759	43	29.8[b]	+ 2.7	57	17	− 8	24	35	1.73	+0.01	1.11	0.8	6	9	7	15	se.	Hannibal Water Dept.
Jefferson City	Cole	557	45	32.3	+ 2.5	70	16	− 1	21†	44	2.43	+0.30	0.96	0	8	7	11	13	e.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	28.0[b]	+ 3.2	53	..	− 9	21	39	1.62	+0.17	0.62	1.5	7	9[b]	5[b]	15[b]	ne.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	....	..	..	1.65	.....	0.48	1.0	6	13	3	15	e.	J. Robert Hall
Louisiana	Pike	469	41	29.8	+ 1.7	59	6	1	22	34	1.82	−0.15	1.30	0.2	5	15	3	13	w.	Stark Bro's Nurseries
Macon	Macon	875	36	27.6	+ 0.1	61	16	− 7	21†	44	1.62	+0.05	0.85	0.1	6	15	5	11	w.	W. C. Brown
Mexico	Audrain	800	46	29.6	+ 1.6	63	16	− 5	24	46	2.17	+0.16	1.20	0.2	8	18	2	11	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	....	..	..	1.69	−0.34	1.09	0.8	5	5	9	17	s.	J. S. Conway
St. Charles	St. Charles	520	47	32.1	+ 1.1	64	16	− 1	24	42	1.93	−0.26	0.91	1.6	7	9	15	7	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	34.1	+ 3.0	65	16	1	24	36	2.76	+0.42	0.96	T.	9	12	4	15	s.	**Section Center**
St. Louis University	St. Louis City	578	23	34.0	+ 3.8	65	16	2	22†	36	2.01	−0.50	0.90	T.	9	13	4	14	s.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	....	..	..	1.45	−0.14	0.98	0	5	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	28.8	+ 1.4	55	16	− 7	21	34	1 55	−0.50	0.95	T.	5	11	6	14	e.	Frank Hall
Unionville	Putnam	1,062	42	23.1	− 0.4	53	6	−10	21†	40	1.34	−0.42	0.58	0.2	5	14	0	17	sw.	John H. Schick
Warrenton	Warren	816	53	33.8	+ 4.6	64	16†	− 3	24	37	2.80	+0.50	1.67	0.5	7	12	4	15	nw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	27.8	+ 2.9	55	6	− 8	24	31	1.81	+0.25	1.10	2.3	10	10	2	19	sw	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**30.3**	**+ 2.4**	**70**	**16**	**−10**	**21†**	**46**	**1.75**	**0.00**	**1.67**	**0.8**	**7**	**11**	**6**	**14**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	814	9	37.2	.....	65	16	5	24	42	5.60	.....	1.85	0	9	16	6	9	n.	Jeff. King
Caruthersville	Pemiscot	265	39	41.3	+ 2.2	67	16†	9	24	46	4.44	−0.40	1.75	T.	6	13	7	11	.....	Sam Smith
Doniphan	Ripley	344	31	39.6	+ 3.8	67	17	5	22	47	3.80	−0.60	1.13	T.	8	13	6	12	nw.	W. W. Martin
Jackson	Cape Girardeau	428	44	37.8	+ 4.0	64	17	3	24	49	3.68	−0.10	1.00	1.0	5	10	4	17	n.	John G. Putz
Marble Hill	Bollinger	470	40	38.8	+ 4.2	69	17	3	24	47	4.22	+0.55	1.04	T.	6	17	5	9	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	....	..	..	4.46	−0.39	1.49	0	7	18	2	11	n.	John A. Spence
Poplar Bluff	Butler	329	30	39.0	+ 3.0	65	16†	5	24	36	4.70	+0.48	1.76	0	7	18	3	10	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	39.6	+ 2.6	65	8†	7	22†	46	4.83	+0.39	1.70	0	7	14	7	10	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	63	38.6	+ 3.7	67	16	6	24	28	4.74	+0.98	1.49	0.1	8	9	6	16	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**39.0**	**+ 3.4**	**69**	**17**	**3**	**24**	**49**	**4.93**	**+0.42**	**2.30**	**0.1**	**7**	**14**	**5**	**12**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	54	34.6	+ 2.7	63	16	0	22†	40	3.14	+0.10	0.80	0	7	18	4	9	n.	Arcadia College
Birchtree (near)	Shannon	1,000	40	36.4	+ 1.9	64	16	0	22	37	4.06	+0.87	1.60	0	6	17	4	10	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	....	..	..	1.97	.....	1.05	0	5	8	3	20	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	....	..	..	2.29	.....	0.85	1.0	6	5	15	11	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	33.2[d]	.....	66	16	0	24	38	2.84	.....	1.05	0	7	9[b]	5[b]	15[b]	s.	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	31	37.2[a]	+ 1.3	69	16	− 4	21	38	2.58	+0.24	0.87	0.5	7	12	5	14	se.	H. E. Dean
Eldon	Miller	934	40	34.0‡	+ 2.9	68	16	....	..	..	1.54‡	−0.09	0.51	0	5‡	6[b]	11[b]	6[b]	s.	E. H. Shepherd
Farmington	St. Francois	918	24	36.2	+ 3.6	62	9†	− 2	22	43	2.01	−0.51	0.63	T.	5	14	8	9	sw.	H. O. Miller
Garber	Taney	950	0	38.6	.....	71	16	− 1	21	41	2.64	.....	1.06	T.	7	15	4	12	e.	William H. Durham
Goodland	Iron	1,000	42	36.6	+ 4.0	63	16†	0	22†	43	2.72	+0.04	0.72	1.5	7	14	8	9	n.	F. M. Adams
Greenville	Wayne	381	26	37.2	+ 2.2	66	17	2	24	46	4.35	+1.29	0.94	0	7	14	7	10	se.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	....	..	..	3.78	+0.86	2.56	1.5	6	9	12	10	ne.	A. W. Madison
Koshkonong	Oregon	958	34	38.6	+ 2.1	66	16	0	22	43	4.96	+1.30	1.04	0	7	14	4	13	e.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	32.8[a]	+ 0.3	61	9	− 2	21†	46	1.85	−0.68	0.65	0	6	11[a]	6[a]	13[a]	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	36.7	+ 3.4	69	16	− 3	21	32	2.59	+0.85	0.68	1.0	8	13	9	9	se.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	36.0	+ 3.2	65	16	− 1	21	41	2.46	−0.36	0.82	1.5	8	12	10	9	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	38.2	+ 3.1	69	16	− 3	21	43	2.47	−0.03	0.87	0.5	7	19	6	6	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	36.2	+ 4.3	65	16	− 1	21	34	2.40	−0.04	0.80	0.5	6	10	2	19	se.	F. H. Lane
Salem	Dent	1,173	31	35.7	+ 3.1	65	17	− 1	21†	35	2.32	−0.47	0.73	0	7	10	10	11	n.	E. E. Martin
Seligman	Barry	1,542	34	39.6	+ 4.5	68	16	− 3	21	33	2.25	−0.63	0.76	T.	6	15[a]	8[a]	7[a]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	36.1	+ 2.1	65	16	− 2	21	36	2.18	−0.37	0.76	T.	6	9	11	11	se.	A. L. Hailey
Springfield	Greene	1,324	47	35.4	+ 1.9	68	16	− 4	21	43	2.43	+0.09	1.18	0.2	7	8	7	16	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	35.2	.....	69	16	− 4	21	39	2.86	−0.05	1.16	T.	8	8	7	16	se.	I. M. Wilson
Division means	**and extremes**	.....	..	**36.2**	**+ 2.7**	**71**	**16**	**− 4**	**21**	**46**	**2.81**	**+0.15**	**2.56**	**0.4**	**7**	**12**	**7**	**12**	**se.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	33.8	+ 2.5	65	16	− 4	21	27	2.51	+0.67	1.04	T.	8	8	11	12	se.	W. G. Bigelow
Clinton	Henry	765	42	32.5	+ 0.8	67	16	− 3	21	34	2.71	+0.72	1.02	1.0	9	7	7	17	sw.	A. E. Derwent, M. D.
Concordia	Lafayette	....	20	....	.....	..	..	....	..	..	2.80	+1.36	1.50	0	5	11	4	16	n.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	29.8	+ 2.5	67	16	− 8	21†	47	1.58	+0.03	0.69	T.	4	9	4	18	sw.	John H. Patterson
Lamar	Barton	980	47	34.9	+ 2.8	70	16	− 2	21†	35	2.73	+0.97	1.07	2.0	7	15	5	11	nw.	Jesse A. Mann
Lamonte	Pettis	867	34	31.6	+ 2.7	65	16	− 5	21	35	3.08	+1.10	1.70	0.7	7	2	12	17	nw.	J. E. Wheeler
Marshall	Saline	779	48	31.8	+ 3.9	66	16†	− 5	21	40	2.77	+1.06	1.65	2.0	6	12	12	7	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	35.0	+ 3.1	69	16	− 4	21	30	2.12	+0.09	0.84	0	8	12	4	15	s.	George A. Kaupp
Warrensburg	Johnson	878	48	33.0	+ 4.3	67	16	− 6	21	36	2.52	+0.75	1.12	T.	7	10	4	17	ne.	E. A. Markey
Warsaw	Benton	687	34	36.2	+ 3.3	70	16	− 3	21	36	3.10	+0.82	1.25	1.5	9	7	7	17	sw.	Everett Martin
Division means	**and extremes**	.....	..	**33.2**	**+ 2.9**	**70**	**16**	**− 8**	**21†**	**47**	**2.52**	**+0.69**	**1.70**	**0.7**	**7**	**9**	**7**	**15**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	28.0	+ 3.2	53	6	− 9	21	34	1.16	−0.10	0.36	T.	5	14	2	15	nw.	A. S. Cumming
Chillicothe	Livingston	779	26	27.4	+ 0.6	61	16	− 7	21†	47	1.56	+0.03	0.70	0	5	12	6	13	se.	Wm. J. Olenhouse
Conception	Nodaway	980	46	26.7	+ 2.0	45	2†	−12	21	33	0.82	−0.09	0.24	T.	5	11	5	15	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	29.3[d]	+ 2.4	64	16	− 8	21	36	0.50	−0.56	0.20	0.1	4	15	1	15	se.	Fred L. Stiff
Grant City	Worth	1,134	31	27.2	+ 2.4	52	6	−11	21	34	0.75	−0.17	0.38	T.	5	9	8	14	sw.	Howard Rybolt
Kansas City	Jackson	963	46	32.4	+ 4.2	67	16	− 6	21	29	1.13	−0.06	0.60	0.1	7	9	7	15	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	26.3	+ 0.3	60	16	−10	21†	45	1.07	−0.52	0.43	0.5	6	9	7	15	s.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	....	..	..	1.03	−0.29	0.35	0.5	8	12	2	17	s.	John M. Martin
Lexington	Lafayette	688	50	30.2	+ 2.4	66	16	− 6	22	45	1.72	+0.10	0.66	0.5	9	12	8	11	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	27.0	+ 4.1	54	6	−11	21	35	0.62	−0.40	0.30	0.5	6	11	4	16	nw.	R. B. Montgomery
Oregon	Holt	1,048	79	29.9	+ 5.8	62	16	−10	21	37	0.85	−0.49	0.30	0.5	8	13	6	12	se.	Mina Wright
St. Joseph	Buchanan	987	25	30.2	+ 2.4	63	16	− 9	21	34	0.72	−0.16	0.26	T.	5	12	5	14	se.	U. S. Weather Bureau
Tarkio	Atchison	916	32	26.6	+ 3.7	55	6	−10	21	42	1.18	+0.44	0.67	T.	4	10	8	13	nw.	Albert Volker
Trenton	Grundy	822	39	28.2	+ 1.9	54	6	− 8	21	28	1.10	−0.25	0.37	T.	7	10	6	15	n	W. H. Estes
Division means	**and extremes**	.....	..	**28.4**	**+ 2.7**	**67**	**16**	**−12**	**21**	**47**	**1.02**	**−0.18**	**0.70**	**0.2**	**6**	**11**	**6**	**14**	**se.**	
State means	**and extremes**	.....	..	**33.0**	**+ 2.1**	**71**	**16**	**−12**	**21**	**49**	**2.42**	**+0.20**	**2.56**	**0.5**	**7**	**12**	**6**	**13**	**se.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for January 1935

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri								1.12				.02				.22	.02		.28	.01	.14											1.81
Bowling Green	Mississippi								1.07				.04				**	.39		.14		.25											1.89
Brunswick	Grand								.98				.07	.26			.05	.13		.49	.03	.25											2.26
Canton	Mississippi								1.29					.03	.03		.17	.18		.04		.17											1.91
Clifton Hill	Chariton							.48					.11			T.	.25			.30	T.	.09											1.23
Columbia***	Missouri							.93	.05	T.			.03			.20	.10		.19	.08	.16	T.								T.		T.	1.74
Downing	Mississippi	T.						.03	.68				.06	.10			.22			.25	.03	.04					T.					T.	1.41
Edina	do	T.						T.	.51	T.			T.	T.			T.	.19		.20	T.	.20										T	1.10
Elsberry	do								1.34	T.			.02				.39	.07		.50	.10	.21											2.63
Farber	do								.48				.05				.14	.08		.13		.10											0.98
Fayette	Missouri								1.08				T.			T.	.10			.40		.20											1.78
Fulton	do								1.15	T.							.18	.03		.22	.05	.33											1.96
Gorin	Mississippi	T.							.71					.14		T.	.13			.16	T.	.15					T.						1.29
Hannibal	do							T.	1.11	.01			.03	T.			.27		T.	.06	T.	.25											1.73
Hermann	Missouri								1.08	.04			.02				.32	.02		.02	.14	.06											1.70
Jefferson City	do								.96	.03			.05				.40	.22		.33	.10	.34											2.43
Kahoka	Mississippi								.62							.30			.35		.20	.10											1.57
Kirksville	do							.28	.54	.03				**			**			.62	.15										T		1.62
LaBelle	do								1.10					.05			.15	.10		.12		.25											1.77
Linneus	Grand	T.							.43				.12	.21			T.	.14		.48	T.	.27											1.65
Louisiana	Mississippi							**	1.30				.05				.37				.10												1.82
Lucerne	Grand								.43	.01			.09	.15			.16			.25	T.												1.09
Macon	Chariton								.85					.09			T.	.17		.28	.02	.21											1.62
Madison	Mississippi								1.20	.03			.07				.04	.19		.11	.17	.13											1.94
Memphis	do								.60				T	T.			T.	.35		.08	T.	.20										T.	1.23
Mexico	do								1.15	.05			.10				.28	.05		.14	.15	.25											2.17
Milan	Grand								.45	.08			.05			.15	.36	.08		.22	.12	.09											1.60
Monroe City	Mississippi							T.	1.09			.06					.26			.13		.15										T.	1.69
New London	do						T.		.95	.09								.34				.12											1.50
Palmyra	do								1.21				.05					.12		.14		.30											1.82
Paris	do								.92				.07				.03	.18		.12	.04	.13											1.49
Perry	do							T.	1.10	T.						.05	T.			.28	T.	.13											1.56
Philadelphia	do								1.00									.27				.37											1.64
St. Charles	Missouri								.91	.03			.02				.03			.65	.18	.11								T.			1.93
St. Louis***	Mississippi							.94	.02	T.	T.		.02			.22	.40		.54	.08	.45	.09		T.		T.	T.						2.76
St. Louis University*	do							.82	.08				.02			.12	.39		33	.07	.12	.06					T.	T					2.01
Shelbina	do								.98				.06	.02			.27			.12													1.45
Shelbyville	do								.68								.20			.15													1.03
Steffenville	do								.95	.05			.05			T.	.30			.20	T	T.											1.55
Troy	do								1.06	.03			.01				.26	.10		.43	.05	.14											2.08
Union	Meramec								.83	.80							.20	.11		.21	.02	.15			T.								2.32
Unionville	Chariton								.58					.22				.19	.29	.06													1.34
Valley Park	Meramec							T.	.69			T.	T.				.37	.15		.51	.05	.44											2.21
Warrenton	Mississippi	T.							1.67	.02			T.			T	.60		.03	.33	.11	.04											2.80
Keokuk, Ia.***	do							.99	.11	T.			.05			.01	.22		.08	.06	.22	.06			T.	.01	T.						1.81
Southeast Lowlands																																	
Bragg City	St. Francis							.20	1.50								.60		.26	1.60	1.32	1.52	T.										7.00
Campbell	do	.05						.02	.48							.50	.13		.85	1.85	1.25	.47											5.60
Cape Girardeau	Mississippi								.61	.05						.04	.65			.83	.88	.93											4.02
Caruthersville	do								.65								.47	.02		1.30	1.75	.25											4.44
Dexter	St. Francis								.70								**	.73		1.67	.86	1.12	.03										5.11
Doniphan	Black							.05	.42							.86	.06		.69	.31	1.13	.28											3.80
Fisk	St. Francis								.63	T.	.23					T.	1.10			.90	.62	.50											3.98
Jackson	Mississippi								.84							1.00				.90	.62	.32											3.68
Marble Hill	do								.46							.75	.22			1.00	.75	1.04											4.22
Morehouse	do	T.						T.	.94							.65	.18		.24	1.49	.77	.19											4.46
New Madrid	do	.42						.04	.50	.13						.02	.70	.05	.01	1.85	1.12	1.68	.05										6.57
Parma	St. Francis	.45							.85	.07						.05	.72			2.30	1.14	1.18											6.76
Poplar Bluff	Black	.20							.50	T.							.47			1.76	.85	.80											4.70
Sikeston	Mississippi								.68							.60	.29		.16	1.70	.75	.65											4.83
Cairo, Ill.***	do							.14	.45	T.	T.	T.				.71	.06		.91	.94	1.30	.23		T.		T.						4.74
Ozark Plateau																																	
Arcadia	St. Francis								.64	T.						.09	.68	.11		.80	.17	.65											3.14
Birchtree (near)	Black							.10	.85							.74			.45		1.60	.32											4.06
Buffalo	Osage								1.05							.16	.09			.48		.19											1.97
Caplinger Mills*	do							.85	T							.18	T.		.53	.03	.05			T.				T.			.65	2.29
Crystal City	Mississippi								1.05							.03	.68	.08		.35	.03	.62											2.84
Dean	Neosho							.87	.12							.22			.52	.65	.08	.12											2.58
Eldon	Missouri								.48								.33			.51	.04	.18											‡1.54
Farmington	St. Francis							T.	.43							.40	.30		T	.63	.25	T.											2.01
Fredericktown	do								.49	T.						.10	.74	.05		.89	.32	.60											3.19
Galena	White								1.57							.19	.26			.52		.73											3.27
Garber	do							1.06	.08							.42	T		.42	.27	.35	.04		T.									2.64
Goodland	Black							.05	.35							.72	.42			.63	.15	.40											2.72
Greenville	St. Francis								.51							.90	.10		.72	.57	.94	.61											4.35
Hailey	White							1.52	1.04							.31			.43		.33		.15										3.78
Koshkonong	Black							.18	.80							1.04			.65	.80	.89	.60											4.96
Lakeside	Osage								.81	.01						.07	.62	.06		.66	.06	.11											2.40
Lebanon	do								.65								.24	.26		.51	.11	T.	.08	T.									1.85
Leeper	Black								.49	.02						.13	.64	.04		1.32	.64	.76											4.04
Lockwood	Osage							.68	T.	.12						.60	.03		.30	.31	**	.55		T.									2.59
Mountain Grove	White							.72	.10	.01						.64	T.		.52	.11	.18	.18											2.46
Neosho	Neosho							.83	.03							.28	T.		.40	.47	.42	.04	T.										2.47
Owensville	Gasconade								.35		.10						.85		.45			.15											1.90
Rolla	Meramec								.65	.05						.25	.80			.51		.14											2.40
St. Thomas (near)	Osage								.85								.45			.50		.03											1.83
Salem	Meramec							.22	.37							.73	.14		T.	.44	.12	.30											2.32
Seligman	Neosho							.76		.05						.28			.33	.23	.60			T.									2.25
Seymour(near)	White							.13	.63							.64			.05	.49		.24											2.18
Springfield***	do							.95	.24	T.					T.	.62	T.		.35	.01	.24	T.		T.								.02	2.43
Stover	Missouri								1.24								.66	.05	.50	.08		.21											2.74
Versailles	Osage							.63	.53				T.			.58	.33		.02	.54	.05	.18											2.86
Williamsville	Black								.31								.75	.03		1.58	.90	.69											4.26
Willow Sprgs. (near)	White								.60	.31						.52	.56			1.04	.14	.34											3.51
Southwest Plain																																	
Appleton City	Osage							1.04	.07	T.			T.				.29	.19		.14	.36	.38	.04								T.		2.51
Clinton	do							1.00	.02								.24	.22		.25	.50	**	.38									.10	2.71
Concordia	Missouri								1.50								**	**		**	1.30												2.80
Harrisonville	Osage								.69								.30	.05		.54		T.											1.58

Continued on next page

Daily Precipitation for January 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho	....	....	....	....	....	....	.84	.05	....	....	....	....	....	.02	.39	....	....	.51	.05	.42	....	....	....	....	....	....	....	....	....	....	.06	2.34
Lamar ‖‖	Neosho	....	....	....	....	....	....	....	1.02	.05	....	....	....	....	....	.32	.15	....	....	.70	.05	.44	....	....	....	....	....	....	....	....	....	....	2.73
Lamonte	Missouri	....	....	....	....	....	....	1.55	.15	....	....	....	....	....	....	.40	.20	....	....	.25	.38	.15	....	....	....	....	....	....	....	....	....	T.	3.08
Marshall	do	....	....	....	....	....	....	.80	.85	....	....	....	.07	....	....	T.	.24	....	....	.51	.30	....	....	....	....	....	....	....	....	....	....	....	2.77
Nevada	Osage	....	....	....	....	....	....	.84	.62	....	....	....	....	....	....	.27	.05	....	.33	.25	.18	....	....	....	....	....	....	....	....	....	....	.18	2.12
Warrensburg	Missouri	....	....	....	....	....	....	1.12	.70	....	....	....	....	....	....	.25	.23	....	.16	.03	.03	....	....	....	....	....	....	....	T.	T.	T.	T.	2.52
Warsaw	Osage	....	....	....	....	....	....	1.25	.22	.02	....	....	....	....	....	.32	.21	....	.06	.57	.25	.20	....	....	....	....	....	....	....	....	....	....	3.10
Waverly ‖‖	Missouri	....	....	....	....	....	....	....	.86	....	....	....	....	....	....	....	.20	.11	....	.58	.02	.22	....	....	....	....	....	....	....	....	....	....	....	1.99
Northwest Plateau																																
Bethany	Grand	....	....	....	....	....	....	.10	.26	....	....	....	.35	....	....	T.	.10	....	T.	.35	T.	....	....	....	....	....	....	....	....	....	....	....	1.16
Chillicothe ‖‖	do	....	....	....	....	....	....	....	.38	....	....	....	.14	.33	....	....	.01	T.	....	.70	T.	T.	....	....	....	....	....	....	....	....	....	....	1.56
Conception	Missouri	....	....	....	....	....	....	T.	.23	....	....	....	.24	....	....	T.	.06	....	T.	.24	T.	.05	....	T.	....	....	....	....	....	T.	....	....	0.82
Edgerton	do	....	....	....	....	....	....	.15	T.	....	....	....	.12	T.	....	T	.03	....	.20	T.	T.	T.	....	....	....	....	....	....	....	....	....	T.	0.50
Gallatin ‖‖	Grand	....	....	....	....	....	....	....	.20	.05	....	....	.20	....	....	....	.08	....	....	.50	T.	T.	....	....	....	....	....	....	....	....	....	....	1.03
Grant City	do	....	....	....	....	....	....	....	.10	....	....	....	.14	.08	....	T.	.05	....	....	.38	T.	....	....	....	....	....	....	....	....	....	T.	T	0.75
Kansas City***	Missouri	....	....	....	....	....	....	.60	T.	T.	....	.01	.04	....	....	.15	.04	....	.28	.01	T.	....	....	T.	....	....	....	....	....	....	T.	T.	1.13
Kidder ‖‖	Grand	....	....	....	....	....	....	T	.22	T	....	....	.15	.10	....	....	T.	.12	....	.43	.05	....	....	....	....	....	....	....	....	....	....	....	1.07
King City	Missouri	....	....	....	....	....	....	.03	.32	.02	....	....	.28	....	....	T.	.08	....	.02	.25	.03	....	....	T.	....	....	....	....	....	T.	T.	T.	1.03
Lexington ‖‖	do	....	....	....	....	....	....	....	.61	.04	....	....	.06	.03	....	....	.15	.07	....	.66	.05	.05	....	....	....	....	....	....	....	....	....	....	1.72
Maryville	do	....	....	....	....	....	....	.01	T.	....	....	....	.30	.03	....	T.	.07	....	....	.19	.02	....	....	....	....	....	....	....	....	....	....	T.	0.62
Oregon	do	....	....	....	....	....	....	.16	.10	T	....	....	.12	.04	....	....	.05	....	.03	.30	.05	....	....	T.	....	....	....	....	....	....	....	....	0.85
St. Joseph***	do	....	....	....	....	....	....	.22	T.	T.	T.	T.	.08	....	....	T.	.16	....	.18	.08	T.	....	....	T.	....	....	T.	....	....	T.	T.	T.	0.72
Tarkio	do	....	....	....	....	....	....	....	....	....	....	....	.18	.08	....	....	.25	....	.67	T.	....	....	....	....	....	....	....	....	....	....	....	....	1.18
Trenton	Grand	....	....	....	....	....	....	.14	.21	T.	....	....	.14	.16	....	T.	.05	....	....	.37	.03	....	....	....	....	....	....	....	T.	....	....	T.	1.10
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. |||||| Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for January 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	****	.085	.124	****	****	.184	.035	.020	.020	.052	.036	.039	.126	.066	.016	....	.074	.035	.040	.005	****	****	****	****	****	****	****	****	****	****	††††	0.903
	Mean temperature	31	41	40	29	37	46	50	52	51	42	40	43	41	34	34	52	36	38	44	33	2	14	10	15	25	30	30	30	26	34	38	34.5
	Wind movement	128	73	131	99	84	93	67	62	54	55	81	58	140	91	81	82	120	69	83	69	222	67	69	78	92	67	75	67	68	72	29	2,626

**** Daily evaporation included in next measurement; ice cover on tank. †††† −.054.
Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.

Daily Temperatures for January 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	38	54	47	37	51	57	54	54	51	50	47	49	53	32	32	65	54	38	45	38	11	25	21	15	41	42	31	43	38	31	33	41.2
	Minimum	15	31	22	12	30	31	39	43	38	33	28	35	30	19	29	28	25	30	33	6	−5	1	3	−2	15	25	17	24	27	27	28	23.1
Columbia	Maximum	35	56	44	37	56	57	56	54	49	39	48	52	52	36	37	67	40	42	47	38	4	23	18	19	40	35	32	36	29	32	38	40.3
	Minimum	18	34	17	14	32	40	47	44	39	31	28	38	25	20	31	33	28	31	38	4	−3	2	1	−2	19	23	19	26	27	26	24	24.3
Fayette§§	Maximum	35	51	36	35	53	53	54	50	47	36	46	52	37	33	37	65	40	40	45	32	5	23	9	23	41	31	30	39	29	33	34	37.9
	Minimum	16	16	32	14	16	31	32	45	40	34	27	29	36	19	19	32	26	27	34	25	−4	−4	5	−3	3	22	18	19	26	27	26	22.1
Hannibal	Maximum	34	52	50	34	52	55	53	52	44	44	44	48	49	28	30	50	57	36	43	42	8	22	18	15	37	..	..	37	34	30	31	[b]38.9
	Minimum	11	28	15	9	26	38	39	41	35	32	29	33	26	14	24	27	25	25	25	8	−5	−2	−1	−8	15	25	13	22	27	26	23	20.8
Jefferson City §§	Maximum	38	57	38	39	55	59	58	55	56	40	51	54	41	40	39	70	42	44	48	33	2	25	11	24	44	32	33	35	30	35	48	41.2
	Minimum	19	15	28	14	14	32	40	51	43	38	29	30	39	22	23	33	29	28	33	33	−1	−1	2	−1	0	14	21	21	25	27	26	23.4
Kirksville	Maximum	40	48	43	36	50	50	50	46	41	41	45	46	44	26	..	..	53	40	39	39	2	22	19	11	38	36	41	42	41	30	30	[b]37.6
	Minimum	9	28	17	6	27	33	35	38	31	29	26	30	25	12	..	..	24	23	25	0	−9	−5	−4	−8	6	21	22	20	23	24	26	[b]18.4
Louisiana	Maximum	33	53	42	32	52	59	57	58	42	38	40	42	43	31	36	40	37	38	40	38	5	20	10	15	40	38	30	30	33	36	40	37.0
	Minimum	10	28	22	10	26	38	38	40	36	34	29	28	30	16	27	28	27	24	35	4	2	1	8	4	14	28	14	21	25	28	21	22.5
Macon§§	Maximum	37	48	26	40	54	56	54	45	43	36	47	47	34	30	33	61	38	37	43	19	8	24	9	23	40	28	30	41	28	30	30	36.1
	Minimum	11	14	23	9	17	34	37	41	34	31	27	30	31	15	16	25	23	26	28	19	−7	−7	−1	−7	−4	23	12	17	25	25	26	19.1
Mexico §§	Maximum	36	52	40	35	53	60	60	54	48	38	48	51	43	37	34	63	40	38	46	29	4	23	10	23	42	31	29	36	29	32	41	38.9
	Minimum	15	22	34	10	12	31	40	40	38	33	27	28	35	17	17	27	25	26	26	26	−4	−4	1	−5	−4	20	14	14	25	24	21	20.4
St. Louis	Maximum	37	58	45	33	52	56	54	60	50	47	49	50	54	32	40	65	44	45	48	48	12	22	18	19	39	38	29	43	35	41	52	42.4
	Minimum	18	30	18	15	27	43	47	47	43	35	32	38	29	22	32	33	31	31	38	12	3	2	4	1	19	26	18	22	27	25	31	25.8
Unionville §§	Maximum	36	48	21	33	48	53	49	42	40	43	44	41	32	25	30	49	35	37	38	10	3	2	−2	19	22	21	25	24	32	29	30	30.9
	Minimum	8	8	18	6	8	32	33	37	32	28	27	27	30	10	11	18	19	20	23	8	−10	−10	−3	−8	−5	18	9	9	22	23	25	15.3
Warrenton	Maximum	36	57	50	34	53	56	57	56	51	48	48	50	51	34	37	64	64	39	45	45	26	25	20	15	42	38	30	39	35	42	55	43.3
	Minimum	16	27	22	12	23	37	45	50	40	35	28	35	33	18	29	29	27	29	36	26	−2	0	5	−3	15	27	17	20	23	26	25	24.2
Southeast Lowlands																																	
Campbell	Maximum	46	43	43	47	46	55	55	56	56	52	50	50	50	37	40	65	64	46	51	57	54	25	26	24	32	40	39	39	35	32	36	44.9
	Minimum	29	26	29	18	20	35	47	53	48	42	30	35	33	27	34	36	36	40	40	49	12	6	17	5	16	27	28	28	18	24	24	29.4
Caruthersville	Maximum	52	49	52	47	56	59	56	61	60	53	53	54	62	51	41	67	67	49	58	58	59	24	25	23	36	47	45	44	45	43	50	49.9
	Minimum	32	28	32	35	27	42	37	52	47	42	35	38	47	30	37	37	40	42	43	51	13	10	20	9	19	30	30	22	31	28	28	32.7
Doniphan	Maximum	44	55	55	39	54	52	55	61	60	55	54	54	52	44	44	66	67	50	53	59	57	31	29	20	40	55	46	48	48	49	58	50.1
	Minimum	26	21	26	16	17	39	49	53	45	39	28	38	40	27	35	39	38	40	41	50	10	5	19	6	18	25	27	16	22	23	21	29.0
Jackson	Maximum	47	50	48	36	50	52	54	61	58	52	48	54	53	48	42	62	64	48	50	59	56	22	22	19	39	43	37	42	39	45	51	46.8
	Minimum	24	27	30	17	20	40	47	52	48	44	28	34	41	32	26	37	35	36	40	49	7	5	15	3	17	26	26	18	27	22	22	28.9
Poplar Bluff	Maximum	44	52	58	45	54	56	56	63	56	57	55	55	57	50	40	65	65	50	55	58	40	29	28	21	39	53	32	45	49	48	56	49.4
	Minimum	29	24	26	16	18	34	49	53	48	40	29	37	40	27	35	39	36	41	43	40	10	6	14	5	18	26	23	16	24	24	22	28.6
Sikeston	Maximum	48	51	51	43	55	55	55	65	63	55	53	55	57	53	40	64	65	64	52	56	56	25	25	21	35	46	42	43	43	43	51	49.4
	Minimum	29	27	28	17	23	40	52	54	47	48	31	37	42	27	34	37	36	32	41	49	10	7	7	4	18	27	30	20	23	25	26	29.9
Cairo, Ill	Maximum	40	50	50	36	55	55	58	63	55	54	48	54	57	38	39	67	64	47	57	58	33	25	22	21	35	47	33	42	42	43	53	46.5
	Minimum	27	30	24	18	30	44	50	53	50	42	34	39	34	28	35	39	40	40	42	33	9	9	9	6	19	30	25	22	31	27	31	30.6
Ozark Plateau																																	
Arcadia §§	Maximum	41	55	49	48	53	55	54	58	61	47	49	52	51	38	39	63	51	43	54	55	7	27	20	20	40	45	34	49	40	48	59	45.3
	Minimum	23	22	29	13	13	22	44	48	37	38	27	27	36	24	25	33	32	32	35	40	5	0	0	1	2	17	23	17	22	24	23	24.0
Birchtree	Maximum	44	50	49	44	51	54	57	54	51	51	56	58	52	44	43	64	60	44	51	56	36	27	26	20	28	51	44	45	40	41	59	46.8
	Minimum	22	22	23	14	26	34	45	49	45	34	26	34	39	24	31	36	34	36	38	36	2	0	11	2	12	24	25	18	17	24	22	26.1
Crystal City §§	Maximum	38	58	45	35	..	57	57	63	56	44	49	..	56	36	40	66	47	44	..	58	8	28	16	22	40	..	36	46	32	42	53	[d]43.2
	Minimum	20	20	31	14	15	..	27	50	44	37	28	32	..	23	30	34	31	32	33	..	4	2	6	0	2	21	..	19	23	24	22	[d]23.1
Eldon§§	Maximum	39	56	40	40	57	60	57	55	58	58	52	55	47	50	42	68	..	..	..	..	..	..	..	..	45	37	35	40	39	42	52	[b]48.9
	Minimum	20	19	35	13	13	31	39	51	40	40	30	30	42	25	25	39	32	..	..	..	..	..	..	..	27	21	21	21	26	26	[b]29.0
Farmington	Maximum	43	52	48	35	45	55	54	58	62	55	48	55	50	39	38	62	60	42	53	55	45	21	20	18	39	36	39	41	44	44	55	45.5
	Minimum	20	25	20	12	23	42	48	48	45	37	28	37	35	30	28	35	35	35	38	45	2	−2	12	−1	10	24	20	18	26	19	37	26.8
Garber	Maximum	46	58	49	41	58	60	55	54	69	58	53	61	58	43	42	71	69	47	49	49	31	27	25	25	54	61	49	52	50	47	60	50.7
	Minimum	22	23	24	12	19	22	42	42	46	37	29	39	36	25	35	37	29	40	41	30	−1	0	17	10	13	31	28	17	30	26	23	26.6
Koshkonong	Maximum	46	55	50	38	54	56	52	54	56	55	52	57	52	45	43	66	64	46	50	55	48	28	25	28	43	58	48	49	45	42	58	49.0
	Minimum	24	26	28	11	23	39	48	39	47	40	30	37	41	35	29	33	30	40	40	47	5	0	16	4	14	30	25	19	28	18	28	28.2
Lebanon §§	Maximum	40	55	43	41	48	58	55	52	61	45	51	54	40	49	40	55	..	45	50	40	10	26	14	26	44	39	35	39	30	40	58	[a]42.8
	Minimum	18	20	33	14	15	30	30	49	44	37	27	29	36	23	25	24	25	..	39	35	−2	−2	−2	−2	24	21	20	24	26	27	[a]22.8
Mountain Grove	Maximum	41	55	47	38	50	54	52	52	58	47	52	54	52	43	37	65	49	41	49	54	40	29	22	19	46	54	34	45	42	45	57	45.9
	Minimum	19	28	29	14	24	38	46	47	42	39	26	37	37	22	31	30	29	37	40	29	−1	−1	8	2	15	27	22	21	29	26	29	26.2
Neosho	Maximum	39	51	51	48	51	60	59	56	64	58	52	57	56	45	45	69	68	51	54	54	18	25	25	30	48	48	43	42	46	58	53	49.0
	Minimum	21	30	30	20	29	33	34	41	43	36	30	42	36	26	36	42	25	41	41	16	−3	2	13	9	19	29	25	25	27	27	27	27.5
Rolla	Maximum	41	55	52	37	54	55	55	53	58	54	43	52	53	35	38	65	64	44	49	48	28	23	22	20	45	42	39	41	36	35	54	44.8
	Minimum	19	32	27	14	28	40	49	51	44	41	28	37	35	24	33	35	30	34	39	27	−1	1	11	0	18	31	22	23	27	26	26	27.5
Springfield	Maximum	38	53	42	39	54	57	54	54	62	44	49	55	53	40	40	68	47	43	51	48	5	22	18	21	45	48	29	43	37	48	52	43.7
	Minimum	21	30	21	17	30	41	50	44	42	34	31	41	28	24	34	39	32	40	42	5	−3	0	6	5	19	28	23	25	28	26	33	27.0
Southwest Plain																																	
Appleton City	Maximum	35	45	45	36	47	54	55	55	49	49	49	54	54	35	40	65	53	48	48	34	8	25	22	22	38	38	30	34	34	31	35	40.7
	Minimum	20	32	27	17	33	35	47	47	44	38	30	43	34	24	34	39	28	35	34	7	−4	5	8	4	20	29	22	27	26	26	25	27.0
Clinton	Maximum	36	45	45	34	45	56	54	53	48	47	48	52	52	33	38	67	56	42	42	32	8	23	22	21	41	38	30	32	33	32	38	40.1
	Minimum	20	32	25	17	30	32	40	40	40	37	28	32	32	23	33	33	26	32	32	8	−3	0	8	3	20	29	21	25	26	26	25	24.9
Harrisonville§§	Maximum	37	50	33	38	52	54	55	47	49	44	51	52	38	34	49	67	45	43	45	21	8	28	13	23	48	29	45	40	30	31	39	39.9
	Minimum	14	14	28	14	15	32	36	44	39	31	26	28	30	19	20	28	23	23	23	18	−8	−8	3	−1	1	21	15	18	19	23	23	19.7
Lamar§§	Maximum	40	53	41	46	55	63	56	50	58	48	53	56	39	42	56	70	46	47	53	34	7	26	16	29	41	39	36	35	32	38	45	43.5
	Minimum	22	22	32	20	20	36	38	48	45	42	30	32	38	27	27	38	28	28	41	29	−2	−2	5	8	9	27	24	24	25	27	27	26.3
Lamonte	Maximum	36	34	34	45	50	57	58	52	54	48	51	53	52	48	36	65	58	57	47	28	6	25	20	20	40	36	36	34	30	31	36	41.2
	Minimum	16	15	16	15	15	25	43	41	41	29	28	37	20	21	31	32	32	30	28	5	−5	2	2	0	20	25	19	26	25	26	26	22.1
Marshall	Maximum	33	50	47	38	54	53	56	53	48	47	50	50	49	30	33	66	66	41	46	38	4	26	24	15	41	39	30	38	37	30	33	40.8
	Minimum	15	30	25	13	31	34	40	43	40	33	29	38	22	19	30	30	26	31	31	4	−5	−3	4	−3	15	25	17	18	26	26	27	22.9
Nevada	Maximum	49	51	46	41	55	62	58	54	56	48	51	55	55	35	39	69	46	46	51	33	8	25	23	25	42	39	32	37	35	34	42	43.0
	Minimum	20	33	29	18	33	38	52	46	43	38	30	40	32	25	34	39	26	34	32	7	−4	4	9	6	21	28	21	27	25	27	26	27.1
Warrensburg	Maximum	37	48	46	39	53	56	59	53	48	47	51	52	54	32	35	67	59	41	46	31	8	25	21	18	41	37	34	36	34	31	36	41.1
	Minimum	31	32	24	15	33	36	45	43	42	33	30	38	29	22	28	31	27	32	31	4	−6	3	5	0	18	26	20	25	26	26	27	25.0
Warsaw	Maximum	39	57	52	42	57	62	57	55	58	53	52	56	56	35	40	70	63	46	50	50	14	27	24	23	43	40	35	36	35	36	42	45.3
	Minimum	19	32	29	15	34	35	47	47	44	39	27	40	34	24	34	38	29	35	41	14	−3	2	10	2	20	30	22	25	22	27	23	27.0
Northwest Plateau																																	
Chillicothe §§	Maximum	37	49	25	38	51	56	50	45	44	41	47	48	34	30	33	61	40	39	41	12	7	28	10	23	48	27	25	46	31	31	32	36.4
	Minimum	12	11	24	10	12	32	33	41	34	30	27	28	28	16	17	23	23	23	29	12	−7	−7	1	−3	1	21	13	14	24	25	26	18.5
Grant City	Maximum	42	49	44	35	46	52	44	44	41	44	42	43	41	25	34	67	45	42	46	37	35	35	15	5	30	28	15	42	42	27	38	36.2
	Minimum	8	30	15	8	29	30	35	36	34	27	25	33	21	12	18	25	19	26	13	−2	−11	1	2	−3	12	19	10	22	21	24	28	18.3
Kansas City	Maximum	40	50	43	40	51	54	55	49	49	39	52	54	45	34	33	67	45	46	46	19	7	32	21	24	52	38	34	44	32	35	36	40.8
	Minimum	18	35	18	17	37	35	46	40	34	30	29	42	23	20	28	33	26	31	19	−1	−6	5	5	4	23	23	18	28	26	27	30	24.0
Kidder §§	Maximum	38	49	26	38	50	55	48	42	44	38	45	47	30	28	33	60	38	39	38	11	5	29	7	23	45	27	30	44	27	30	32	35.4
	Minimum	11	11	24	10	11	31	32	37	35	27	27	28	26	14	15	21	22	22	28	9	−10	−10	0	−2	0	21	11	11	23	23	24	17.2
Lexington§§	Maximum	37	50	34	40	51	56	56	45	44	38	52	52	38	32	36	66	44	42	44	18	9	28	14	25	48	27	34	44	29	31	33	38.6
	Minimum	15	16	34	14	16	34	34	45	40	33	29	30	31	20	20	29	25	25	33	17	−5	−6	4	0	3	24	17	16	27	26	26	21.7
Maryville	Maximum	43	50	38	35	49	54	46	43	38	40	43	44	40	25	27	53	36	34	37	11	5	30	25	16	46	39	29	43	35	30	30	35.9
	Minimum	8	29	16	10	29	29	34	34	32	26	26	35	20	12	19	25	19	27	11	−4	−11	0	−5	−1	14	19	9	21	22	25	28	18.0
Oregon	Maximum	47	53	44	40	54	57	50	45	41	46	50	50	48	29	29	62	42	37	42	12	10	33	30	19	50	46	33	47	38	31	33	40.3
	Minimum	10	31	15	11	32	34	41	34	32	26	27	36	21	13	20	26	21	28	10	−3	−10	2	−3	3	15	21	11	23	24	24	28	19.5
St. Joseph	Maximum	46	53	41	38	52	56	52	46	44	43	49	50	40	28	30	63	42	42	43	12	8	33	12	22	50	34	32	46	34	34	33	39.0
	Minimum	14	34	15	13	36	37	44	37	30	28	29	38	19	16	23	29	23	31	12	−6	−9	3	0	3	22	21	14	25	25	26	30	21.4
Trenton	Maximum	39	50	38	35	49	54	48	48	44	38	40	44	44	28	26	58	38	38	34	23	4	27	23	13	41	36	29	47	43	30	32	36.5
	Minimum	11	27	17	10	28	31	35	38	34	30	27	34	26	15	21	26	20	26	28	2	−8	1	0	−2	18	23	13	21	23	26	27	19.9

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 2-20-35—945.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX FEBRUARY 1935 No. 2

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GENERAL SUMMARY

February was unusually mild, with temperatures ranging above normal almost constantly until the coming of the brief moderately cold spell on the 25-27th. It was much less mild than February in 1930, 1931, and 1932, but considerably milder than February in 1933 and 1934. It was one of the very few Februaries in the last 48 years without subzero temperature in Missouri. The lowest this month was zero, and that occurred at only one station, viz., Maryville. On the other hand, there was only one day, the 21st, with extremely high temperature.

Precipitation was light to moderate, and less than normal in all parts of the State, except slightly above at a few scattered stations. No snowfall of consequence occurred except in the northwestern quarter of the State. The moisture situation, however, continued satisfactory, the total precipitation for the last seven months having been decidedly more than normal, for the State as a whole.

On the 24th considerable damage was done to telephone lines in Holt and Nodaway counties by ice glaze. On the same date high winds occurred in various parts of the State, principally the southwestern counties, but without serious damage, except in the vicinity of Joplin, where a tornado occurred (see special article).

Farm work was mostly at a standstill during February. By the last of the month, wheat, rye, barley, and grasses were greening considerably and were generally in good condition. The outlook for fruit was considered satisfactory.

Rivers and their tributaries maintained fairly good stages, and the water supply in general was much better than a year ago, although the principal rivers averaged somewhat below normal.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 37.4°, or 4.3° above normal. The highest monthly mean was 44.2° at Caruthersville, and the lowest monthly mean was 31.2° at Unionville. The highest temperature recorded was 80° at St. Louis University, Crystal City, and Lebanon, all on the 21st, and the lowest was zero at Maryville on the 26th. The greatest daily range was 55° at Goodland on the 21st.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 1.55 inches, or 0.45 inch less than normal. The greatest local monthly amount was 3.10 inches at Louisiana, and the least local monthly amount was 0.77 inch at St. Thomas. The greatest amount in any twenty-four hours was 1.50 inches at Louisiana on the 13th. The average number of days with 0.01 inch or more of precipitation was 5. The snowfall for the State averaged 0.2 inch, or 4.9 inches less than normal. The greatest monthly snowfall recorded was 4.0 inches at Maryville.

MISCELLANEOUS PHENOMENA

Fog.—Dense, 1st, 2d, 4th, 8th, 9th, 13th, 14th.
Glaze.—7th, 8th, 9th, 24th.
Halos.—Solar, 4th, 12th, 18th, 21st, 23d, 26th, 28th; lunar, 10th, 12th, 18th, 19th.
Sleet.—7th, 8th, 16th, 22d, 24th, 25th.
Smoke.—Dense, 8th, 12th.
Thunderstorms.—24th, 25th.
Dust.—23d.
Windstorms.—18th, 24th (tornado near Joplin, see special article).

(Continued on page 9)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.12	30.68	1	29.49	14	9.5	27	sw.	25	80	68	70	37
Kansas City.....	30.13	30.69	1	29.44	14	10.7	34	nw.	25	81	66	71	51
St. Joseph.....	30.13	30.68	1	29.45	14	9.0	32	nw.	19	82	67	72	57
St. Louis.....	30.11	30.60	1	29.50	14	12.7	43	sw.	24	80	65	67	38
Springfield.....	30.12	30.62	1	29.58	14	11.4	32	sw.	21	86	71	70	46
Cairo, Ill.....	30.12	30.57	1	29.66	14	10.8	30	sw	21	78	63	62	52
Keokuk, Iowa..	30.14	30.65	1	29.50	14	8.7	26	nw.	18	82	69	75	33

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	33.0	− 0.1	73	−17	2.04	+0.04	3.16	0.61	....	7	..	..	..
1889....	29.3	− 3.8	73	− 9	2.57	+0.57	5.97	0.54	....	7	..	..	..
1890....	35.5	+ 2.4	81	− 8	2.24	+0.24	7.00	0.30	....	7	..	..	..
1891....	32.7	− 0.4	78	−13	2.28	+0.28	4.26	1.02	2.4	6	..	..	..
1892....	37.7	+ 4.6	71	2	4.15	+2.15	8.83	1.00	....	9	7	6	16
1893....	27.9	− 5.2	65	−20	1.98	−0.02	5.36	0.20	4.6	6	10	7	11
1894....	30.8	− 2.3	72	−12	2.52	+0.52	7.72	0.65	11.2	6	10	8	10
1895....	23.6	− 9.5	77	−26	0.55	−1.45	1.80	T.	3.3	5	10	10	8
1896....	35.6	+ 2.5	81	−10	1.61	−0.39	4.00	0.22	4.1	5	12	8	9
1897....	34.8	+ 1.7	74	−15	2.30	+0.30	7.88	0.54	8.2	7	7	7	14
1898....	35.4	+ 2.3	78	− 9	1.62	−0.38	3.53	0.21	0.8	5	13	6	9
1899....	20.4	−12.7	72	−32	2.17	+0.17	6.84	0.71	5.3	6	12	8	8
1900....	26.2	− 6.9	70	−16	3.92	+1.92	7.13	1.10	16.6	10	10	6	12
1901....	28.1	− 5.0	76	−19	1.63	−0.37	5.04	0.50	7.6	6	13	7	8
1902....	24.0	− 9.1	72	−17	1.50	−0.50	3.17	0.14	5.5	5	11	8	9
1903....	29.8	− 3.3	74	−25	2.92	+0.92	7.31	0.58	5.8	7	11	6	11
1904....	30.0	− 3.1	82	−18	0.91	−1.09	3.80	T.	1.5	5	11	8	10
1905....	21.5	−11.6	69	−40	1.64	−0.36	3.16	0.47	13.2	8	11	6	11
1906....	33.7	+ 0.6	73	−13	2.28	+0.28	4.40	0.85	4.8	7	15	6	7
1907....	34.8	+ 1.7	77	−15	1.65	−0.35	5.37	0.05	4.5	6	12	5	11
1908....	35.6	+ 2.5	78	− 7	4.32	+2.32	9.35	0.73	4.1	9	13	6	10
1909....	38.8	+ 5.7	71	− 4	3.38	+1.38	8.87	0.45	3.1	9	13	5	10
1910....	28.3	− 4.8	72	−24	1.98	−0.02	6.40	0.07	10.2	6	13	5	10
1911....	38.1	+ 5.0	87	0	3.64	+1.64	7.45	0.85	6.7	8	12	5	11
1912....	28.3	− 4.8	72	−12	2.45	+0.45	4.58	0.64	14.5	8	10	7	12
1913....	29.8	− 3.3	78	− 9	2.21	+0.21	4.78	0.55	8.5	7	12	5	11
1914....	28.3	− 4.8	75	−11	2.71	+0.71	5.23	0.80	14.0	7	12	6	10
1915....	39.4	+ 6.3	72	7	3.18	+1.18	4.94	0.85	4.1	8	9	5	14
1916....	31.4	− 1.7	78	−12	0.98	−1.02	3.00	0.21	5.0	5	13	6	10
1917....	30.5	− 2.6	83	−22	0.41	−1.59	2.76	T.	1.4	2	14	7	7
1918....	34.9	+ 1.8	85	−25	1.11	−0.89	2.15	0.00	0.6	4	15	6	7
1919....	35.3	+ 2.2	71	−10	1.98	−0.02	3.70	0.67	6.4	7	13	4	11
1920....	34.5	+ 1.4	78	− 5	0.57	−1.43	2.94	T.	1.2	4	11	6	12
1921....	40.1	+ 7.0	86	5	0.94	−1.06	5.52	0.02	1.8	4	14	6	8
1922....	35.4	+ 2.3	80	− 5	1.79	−0.21	4.28	0.84	1.9	5	14	6	8
1923....	30.2	− 2.9	75	− 9	1.37	−0.63	4.80	0.10	1.4	5	13	5	10
1924....	33.8	+ 0.7	79	− 5	1.84	−0.16	3.38	0.60	8.1	7	14	4	11
1925....	38.7	+ 5.6	78	1	1.85	−0.15	5.11	0.45	1.7	6	12	6	10
1926....	39.4	+ 6.3	76	− 4	2.08	+0.08	4.39	0.53	2.9	6	11	6	11
1927....	41.3	+ 8.2	78	1	1.08	−0.92	3.26	0.22	2.3	5	10	8	10
1928....	37.0	+ 3.9	73	− 2	2.28	+0.28	4.10	1.03	1.8	7	12	6	11
1929....	25.0	− 8.1	64	−23	1.92	−0.08	5.90	0.53	9.4	7	10	5	13
1930....	44.5	+11.4	89	− 5	1.71	−0.29	4.42	0.39	1.3	4	13	8	7
1931....	40.9	+ 7.8	75	5	2.40	+0.40	5.07	0.45	0.3	6	12	6	10
1932....	42.4	+ 9.3	83	− 3	1.41	−0.59	5.25	0.23	2.0	6	12	7	10
1933....	32.2	− 0.9	78	−22	1.35	−0.65	4.05	0.21	4.2	5	14	7	7
1934....	32.5	− 0.6	79	−26	1.27	−0.73	3.15	0.34	7.0	5	15	6	7
1935....	37.4	+ 4.3	80	0	1.55	−0.45	3.10	0.77	0.2	5	10	6	12
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	33.1	.....	89	−40	2.00	.....	9.35	0.00	5.1	6	12	6	10

Climatological Data for February 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	37.0	+ 7.2	74	21	10	27	42	1.50	−0.29	0.77	0.2	7	13	1	14	nw.	O. K. Benecke
Clifton Hill	Randolph	781	36	35.4	+ 5.2	71	21	10	26†	32	1.62	+0.19	0.70	0	6	9	4	15	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	36.8	+ 5.1	76	21	11	26	40	0.85	−1.19	0.36	T.	5	4	11	13	sw.	U. S. Weather Bureau
Downing	Schuyler	876	14	32.9[a]	+ 0.6	63	21	5	27	35	1.74	+0.42	0.82	0.6	8	7	7	14	s	James Taylor
Elsberry	Lincoln	449	4	36.7	.....	79	21	10	27	54	1.49	.....	0.57	T.	5	8	7	13	n.	Ray E. Mills
Fayette	Howard	680	55	38.3	+ 7.7	74	21	8	27	36	1.48	−0.32	0.91	T.	3	4	11	13	s.	Harry P. Mason
Fulton	Callaway	818	47	35.5	+ 2.4	78	21	10	27	49	1.89	+0.13	0.83	T.	9	10	4	14	n.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	1.88	+0.44	0.93	T.	6	7	9	12	nw.	W. L. Harker
Hannibal	Marion	759	43	34.0	+ 4.3	70	21	8	27	42	2.00	+0.14	0.80	T.	8	8	7	13	nw.	Hannibal Water Dept.
Jefferson City	Cole	557	45	36.4	+ 4.3	79	21	10	27	47	1.78	−0.14	1.01	T.	6	8	12	8	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	33.4	+ 6.3	64	21	6	26†	34	1.66	−0.04	0.72	T.	6	5	7	16	nw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	2.52	.....	1.45	T	4	11	2	15	w.	J. Robert Hall
Louisiana	Pike	469	41	35.2	+ 4.3	70	21	10	27	44	3.10	+0.82	1.50	T.	5	12	7	9	n	Stark Bro's Nurseries
Macon	Macon	875	36	33.4	+ 3.8	70	21	8	26	40	2.10	+0.28	1.15	0	5	10	5	13	w.	W. C. Brown
Mexico	Audrain	800	46	34.2	+ 4.1	77	21	9	27	46	1.72	−0.38	1.00	T.	4	10	3	15	nw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	1.66	+0.17	0.89	0	5	8	8	12	n.	J. S. Conway
St. Charles	St. Charles	520	47	37.1	+ 3.8	75	21	11	27	46	1.57	−0.92	0.68	T.	4	11	6	11	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	38.5	+ 3.7	79	21	13	27	46	1.27	−1.29	0.64	0.1	7	8	5	15	nw.	**Section Center**
St. Louis University	St. Louis City	578	23	38.8	+ 6.6	80	21	14	27	46	1.01	−0.93	0.46	0.1	7	8	4	16	w.	St Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	2.01	+0.08	1.05	0	5	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	34.4	+ 4.7	65	21	8	27	36	2.06	+0.27	0.70	T.	6	10	5	13	n.	Frank Hall
Unionville	Putnam	1,062	42	31.2	+ 4.5	59	21	5	26†	40	1.25	−0.52	0.63	0	4	9	4	15	sw.	John H. Schick
Warrenton	Warren	816	53	37.6	+ 6.7	78	21	9	27	48	2.21	+0.16	1.00	T.	6	6	6	16	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	33.2	+ 4.9	61	21	9	26	31	1.79	+0.24	0.87	1.0	8	4	6	18	sw.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**35.5**	**+ 4.7**	**80**	**21**	**5**	**26†**	**54**	**1.68**	**−0.16**	**1.50**	**0.1**	**6**	**8**	**6**	**14**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	40.8	.....	75	21	15	27	45	2.60	.....	1.29	0	5	10	8	10	s.	Jeff. King
Caruthersville	Pemiscot	265	39	44.2	+ 3.9	73	21	19	27	37	1.50	−2.12	0.75	T.	5	10	5	13	.....	Sam Smith
Doniphan	Ripley	344	31	41.8	+ 2.5	78	21	14	27	52	1.36	−1.69	0.78	0	2	11	5	12	n.	W. W. Martin
Jackson	Cape Girardeau	428	44	41.3	+ 4.8	72	21	14	27	42	1.35	−1.49	0.61	T.	4	8	9	11	n.	John G. Putz
Marble Hill	Bollinger	470	40	42.8	+ 6.2	74	21†	11	27	47	1.09	−2.16	0.77	T.	3	11	7	10	n.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	2.02	−0.92	1.07	T.	5	10	9	9	n.	John A. Spence
Poplar Bluff	Butler	339	30	42.4	+ 4.3	76	21	12	27	49	1.50	−1.41	0.78	0	4	15	3	10	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	42.6	+ 5.4	73	21	17	27	41	1.80	−1.26	0.94	0	5	10	7	11	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill.	356	63	41.8	+ 3.3	72	21	17	27	36	1.34	−1.79	0.65	T.	5	6	5	17	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**42.2**	**+ 4.3**	**78**	**21**	**11**	**27**	**52**	**1.76**	**−1.36**	**1.29**	**T.**	**4**	**10**	**7**	**11**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	54	38.0	+ 3.9	78	21	12	27†	53	1.02	−1.92	0.44	T.	6	17	4	7	w.	Arcadia College
Birchtree (near)	Shannon	1,000	40	41.4	+ 5.1	76	21	10	26†	46	1.46	−1.02	0.63	0	3	17	2	9	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	1.04	.....	0.33	0	4	12	5	11	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	1.50	.....	0.54	T.	4	5	14	9	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	38.2[c]	.....	80	21	12	27	53	1.29	.....	0.56	T.	6	8[a]	8[a]	11[a]	n.	Pittsburgh Plate Glass Co.
Dean †‡	McDonald	1,000	31	39.2[a]	+ 3.5	73	21	7	27	49	2.16	+0.38	0.52	0.2¶	5	11[a]	6[a]	10[a]	w.	H. E. Dean
Eldon	Miller	934	40	36.4[a]	+ 3.3	77	21	11	26†	46	1.20	−0.60	0.56	T.	6	7	10	11	s.	E. H. Shepherd
Farmington	St. Francois	918	24	39.2	+ 2.3	75	21	10	26	47	1.71	−1.25	1.01	T.	3	14	5	9	n.	H. O. Miller
Garber	Taney	950	0	42.0	.....	78	21	8	27	53	1.28	.....	0.56	T.	6	16	0	12	s.	William H. Durham
Goodland	Iron	1,000	42	40.0	+ 5.7	78	21	10	27	55	1.56	−0.76	0.81	T.	5	9	8	11	n.	F. M. Adams
Greenville	Wayne	381	26	40.3	+ 4.5	73	21	12	27	51	1.13	−1.87	0.70	T.	2	14	6	8	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	1.57	−0.23	0.52	T.	4	9	8	11	ne.	A. W. Madison
Koshkonong	Oregon	958	34	41.7	+ 2.6	76	21	13	27	41	1.83	−0.92	0.68	0	5	12	8	13	nw.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	37.2	+ 2.8	80	21	9	27	51	1.81	−0.48	0.94	T.	5	14	4	10	nw.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	40.5	+ 3.5	74	21	13	26	38	1.52	−0.25	0.52	T.	6	15	5	8	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	39.2	+ 4.1	75	21	10	27	39	1.35	−0.87	0.63	1.1	7	17	3	8	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	40.7	+ 3.1	75	21	9	27	42	1.61	−0.63	0.63	T.	8	16	5	7	nw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	39.2	+ 2.9	76	21	11	27	44	1.42	−0.73	0.75	T.	4	9	4	15	nw.	F. H. Lane
Salem	Dent	1,173	31	38.8	+ 3.0	76	21	11	27	46	1.43	−0.84	0.75	T.	2	11	5	12	n.	E. E. Martin
Seligman	Barry	1,542	34	41.2	+ 3.7	73	21	10	27	41	1.02	−0.87	0.42	0.1	5	14[a]	5[a]	8[a]	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	38.2	+ 3.2	71	21	10	26†	37	1.05	−1.12	0.59	T.	2	12	6	10	nw.	A. L. Hailey
Springfield	Greene	1,324	47	39.2	+ 4.0	73	21	10	26	31	0.99	−1.36	0.46	0.7	7	10	8	10	nw.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	38.2	.....	77	21	10	26	42	1.43	−0.14	0.68	T.	8	12	3	13	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**39.4**	**+ 3.6**	**80**	**21**	**7**	**27**	**55**	**1.37**	**−0.84**	**1.01**	**0.1**	**5**	**12**	**6**	**10**	**nw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	37.4	+ 3.5	67	21†	12	26†	40	1.48	−0.30	0.47	T.	6	7	10	11	nw.	W. G. Bigelow
Clinton	Henry	765	42	36.5	+ 2.9	70	21	10	26	35	1.67	−0.30	0.40	T.	6	9	8	11	sw.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	1.18	−0.49	0.54	T.	4	13	2	13	s.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	35.2	+ 4.5	75	21	10	26	44	1.90	+0.04	0.87	T.	6	11	3	14	nw.	John H. Patterson
Lamar	Barton	980	47	37.8	+ 2.5	72	21	13	26†	49	1.65	−0.44	0.65	T.	6	13	3	12	sw.	Jesse A. Mann
Lamonte	Pettis	867	34	....	.....	..	..	..	..	..	.....	.....	.....	.....	..	..	..	..	.....	J. E. Wheeler
Marshall	Saline	779	48	36.8	+ 5.9	73	21†	11	26†	44	1.83	+0.09	0.77	T.	6	10	4	14	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	39.0	+ 5.1	73	21	11	26†	35	1.34	−0.43	0.64	0	4	11	7	10	nw.	George A. Kaupp
Warrensburg	Johnson	878	48	37.3	+ 4.8	72	21	10	27	40	1.37	−0.66	0.48	T.	7	10	5	13	ne.	E. A. Markey
Warsaw	Benton	687	34	39.2	+ 3.6	77	21	10	27	42	1.22	−1.11	0.35	T.	6	5	8	15	nw.	Everett Martin
Division means	**and extremes**	.....	..	**37.4**	**+ 4.1**	**77**	**21**	**10**	**26†**	**49**	**1.53**	**−0.36**	**0.87**	**T.**	**6**	**10**	**6**	**12**	**nw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	34.0	+ 6.5	62	21	6	26	35	1.06	−0.39	0.41	T.	4	14	4	10	nw.	A. S. Cumming
Chillicothe	Livingston	779	26	34.0	+ 2.0	71	21	9	26†	41	1.44	−0.42	0.91	0	4	11	6	11	s.	Wm. J. Olenhouse
Conception	Nodaway	980	46	32.4	+ 4.2	51	21	3	26	29	1.15	−0.04	0.72	1.3	5	10	9	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	36.4	+ 2.1	69	21	8	26	35	1.53	+0.17	0.52	0.1	6	13	2	13	s.	Fred L. Stiff
Grant City	Worth	1,134	31	32.4	+ 3.8	54	21	4	26†	29	1.03	−0.10	0.57	0.5	4	2	16	10	sw.	Howard Rybolt
Kansas City	Jackson	963	46	36.8	+ 5.6	75	21	11	26	35	1.34	−0.41	0.58	0.2	6	8	7	13	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	32.4	+ 4.0	65	21	7	26	37	1.63	+0.12	0.87	T.	4	10	6	12	s.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	1.12	−0.21	0.57	T	6	13	4	11	s.	John M. Martin
Lexington	Lafayette	688	50	34.9	+ 3.9	75	21	10	26†	45	1.93	−0.05	0.87	T.	9	12	7	9	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	32.6	+ 6.8	57	21	0	26	34	1.27	−0.12	0.75	4.0	6	7	9	12	nw.	R. B. Montgomery
Oregon	Holt	1,048	79	35.6	+ 6.8	66	21	3	26	42	1.16	−0.44	0.67	2.0	7	12	6	10	nw.	Mina Wright
St. Joseph	Buchanan	967	25	35.2	+ 2.9	65	21	7	26	33	1.10	−0.25	0.52	T	4	12	5	11	n.	U. S. Weather Bureau
Tarkio	Atchison	916	32	32.9	+ 3.9	57	2	4	25	37	0.89	−0.20	0.28	2.5	5	12	6	10	sw.	Albert Volker
Trenton	Grundy	822	39	34.6	+ 5.2	60	21	8	26	31	1.77	+0.24	0.75	T.	7	6	10	12	n.	W. H. Estes
Division means	**and extremes**	.....	..	**34.2**	**+ 4.4**	**75**	**21**	**0**	**26**	**45**	**1.35**	**−0.14**	**1.01**	**0.8**	**6**	**10**	**7**	**11**	**s.**	
State means	**and extremes**	.....	..	**37.4**	**+ 4.3**	**80**	**21**	**0**	**26**	**55**	**1.55**	**−0.45**	**1.50**	**0.2**	**5**	**10**	**6**	**12**	**nw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated, ‡ Partially estimated.

Daily Precipitation for February 1935

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Northeast Plain																																	
Boonville	Missouri	.01							.20					.07	.28		T.							T.		.74	T.						1.30
Bowling Green	Mississippi								.34					.03	.36		.03									1.27							2.03
Brunswick	Grand							.02	.44						.15	.07	.03							.02		.77							1.50
Canton	Mississippi								.48						.04	.11	.06							.06		.91							1.66
Clifton Hill	Chariton							.20						.40	.06								.01		.70	.25							1.62
Columbia***	Missouri	T.						.21	.01					.36	T.	.01	T.	T.					T		.26	T.	T.						0.85
Downing	Mississippi							.29	.12					.13	.22	.08	T.			T.	T.		.08		.80	.02							1.74
Edina	....do								.38	T.					.04	.03	.02						T	.06		.70	T.						1.23
Elsberry	....do							T.	.33					.57			.04				T.		T.		.22	.33	T.						1.49
Farber	....do								.16						.33											.56							1.05
Fayette	Missouri							T.	.32					.25	T.	T.	T.								.91	T							1.48
Fulton	....do	.03							.22	.03				.35	.16		.04								.17	.83	.06						1.89
Gorin	Mississippi							T.	.56					.22	.08	.09	T.						T.		.51	.42							1.88
Hannibal	....do	T.						.26	.27	T.				.33	.03	.04	.02	T.					T.		.80	.25	T.						2.00
Hermann	Missouri								.26					.17	.30									T.		.70	T.	T.					1.43
Jefferson City	....do							.03	.20					.34	.17		.03	T.								1.01	T.						1.78
Kahoka	Mississippi								.20					.25	.25		.10							T.		.93							1.73
Kirksville	....do							.37	.26					.25	.02	.04							T.		.72	T.							1.66
LaBelle	....do								.42						.25	.15	.05							.03		.70							1.60
Linneus	Grand								.61	T.					.21	.25	T.							T.		1.45	T.						2.52
Louisiana	Mississippi							**	.20					1.50			T.						T.		**	1.40							3.10
Lucerne	Grand								.32						.10	.27							T.	T.		.51							1.20
Macon	Chariton	T.							.50						.28	.15	.02									1.15							2.10
Madison	Mississippi								.04					.12	.50											1.11	.01						1.78
Memphis	....do								.46	T.					.20	.15	T.			T.			T			.94							1.75
Mexico	....do		T.						.27					.25	.20	T.		T.						T.		1.00							1.72
Milan	Grand								.62	.13						.38	.19						T.	.10	.95	.12							2.49
Monroe City	Mississippi						T.	.41						.31	.03	.02						T.			.89							1.66
New London	....do	**	.04						.27		T.			.09	.17	.07	**	.12						.14		1.03							1.93
Palmyra	....do								.08	.06					.21	.08										.60							1.03
Paris	....do								.34						.21											.89	.02						1.46
Perry	....do							T.	.27					.07	.26		T.						T			.87							1.47
Philadelphia	....do								.54						.74											.94							2.22
St. Charles	Missouri								.32					.68	.27			T.								.30	T.						1.57
St. Louis**	Mississippi	T.						.15	.19	T.				.64		T.	T.	T		.01			T		.17	.10	.01	T.					1.27
St. Louis University*	....do							.08	.04					.46	T.		T.	T.		.02					.27	.13	.01						1.01
Shelbina	....do								.36						.54	.04	.02									1.05							2.01
Shelbyville	....do								.45						.35	.15										.92							1.87
Steffenville	....do							.25	.32					.35	.07	T	T.						T.		.70	.37							2.06
Troy	....do								.32					.08	.53											.65	.01						1.59
Union	Meramec								.25	T				.43	.17		.01									.30							1.16
Unionville	Chariton								.45					T		.12	.05									.63							1.25
Valley Park	Meramec								.34	T.				.18	.54		.02	T.	T.							.28		T.					1.34
Warrenton	Mississippi							T.	.35					.62	.02		.02	T.							.20	1.00	T.						2.21
Keokuk, Ia.***	....do	T.						.40	.10	T.				.17	.11	.04	T.			T.	T.		.10		.85	.02							1.79
Southeast Lowlands																																	
Bragg City	St. Francis								.43	.23	.43			.61													T.	T.					1.70
Campbell	....do								.15	1.29	.05			.94												.17							2.60
Cape Girardeau	Mississippi								.03	.53	.22			.45	.02			T.								.06	.06						1.37
Caruthersville	....do								.15	.10	.25			.75				T								.25	T.						1.50
Dexter	St. Francis										1.05			.73	.13			T.								.03	.02	T.					1.96
Doniphan	Black							T.	T.	.78				.58			T.									T.	T.						1.36
Fisk	St. Francis								.12	.88	.19			.25												.50							1.94
Jackson	Mississippi								.11	.61				.49			T.									.14	T.						1.35
Marble Hill	....do									.77				.25												.07	T.						1.09
Morehouse	....do								.04	1.07	T.			.76	.03		T.									.12	T.						2.02
New Madrid	....do								.13	.42	.65			.53	.15	.03		.02								.21	.18	T.					2.32
Parma	St. Francis								.10	1.12	.13			.93												.25							2.53
Poplar Bluff	Black								**	.78				.55													.17						1.50
Sikeston	Mississippi								.09	.94				.72	.02											.03							1.80
Cairo, Ill.***	....do							T	.04	.64			T.	.33	.10		T.	T.								.23	T.						1.34
Ozark Plateau																																	
Arcadia	St. Francis								.13	.15				.44	.03	T.	.07	T.								.20	T.	T.					1.02
Birchtree (near)	Black									.53			.63													.30							1.46
Buffalo	Osage	.29							.16					.26												.33							1.04
Caplinger Mills*	....do.	T						.52	.01					.43	T.	T.	T.								.54	T.							1.50
Crystal City	Mississippi								.18	.06				.44	.12		T.	.18								.31		T.					1.29
Dean	Neosho	T.						.45	.38	T.				.52			.36								T.	.45							2.16
Eldon	Missouri	.18							.15					.15	.16		T.								**	.56	T.						1.20
Farmington	St. Francis				T.				.83	.18				.70											T.		T.						1.71
Fredericktown	....do								.10	.29				.40	.10				T.							.10	T						0.99
Galena	White									.20				.46												.52							1.18
Garber	....do	.03						.12	.02	T				.52			.03								T	.56	T.						1.28
Goodland	Black								.15	.02				.81			.13									.45							1.56
Greenville	St. Francis							T.		.70				.43			T.	T.								T.							1.13
Hailey	White	.23						.42	T.	T				.52			T.									.40							1.57
Koshkonong	Black								.12	.68	.03			.64												.36							1.83
Lakeside	Osage	.02						.01	.21	.02				.29	.05		T.	.02								.34	T.	T.					1.05
Lebanon	....do	.22							.15					.42	.08		T.	T							.09	.94							1.81
Leeper	Black								.09	.49	T.			.52	T.			.02								.09	.03						1.24
Lockwood	Osage	.24						.52	.05					.32			.06								T.	.33							1.52
Mountain Grove	White						.03	.12		.02				.43			.11									.63	.01						1.35
Neosho	Neosho	.10						.63	.25	.02				.33			.06								.03	.19	T.						1.61
Owensville	Gasconade								.18					.47	.27			.17								.32							1.41
Rolla	Meramec		T.						.16	.02				.49			T.	T.								.75	T.						1.42
St. Thomas (near)	Osage								.20					.35	.06											.16	T.	T.					0.77
Salem	Meramec							T.						.75			T.									.68	T.						1.43
Seligman	Neosho							.18	T.					.42			.07	T.							.05	.30	T.						1.02
Seymour (near)	White							T.			T.			.46			T.	T.							T.	.59	T.						1.05
Springfield***	....do	T.						.06	.01	.02	T.			.33		T.	.10	T.					T.		.46	.01	T.						0.99
Stover	Missouri								.25	.04				.34												.42							1.05
Versailles	Osage	.01						.11	.19	.01				.41			.02								.21	.47							1.43
Williamsville	Black								.08	.55	.01			.52			.53	.04									.12						1.85
Willow Sprgs. (near)	White								.21	.03				.72			.06	T.								.91							1.93
Southwest Plain																																	
Appleton City	Osage	.03						.43	.09	T.				.38		T.	T.								.08	.47							1.48
Clinton	....do							.35	.20					.30	.20											.22	.40						1.67
Concordia	Missouri							**	.54						.18												.46	T.					1.18
Harrisonville	Osage.								.68					.16	.10		.05								.04	.87	T.						1.90

Continued on next page

Daily Precipitation for February 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho	....	....	....	....	....	....	.78	.03	....	....	....	....	.29	....	....	.07	....	....	....	....	....	....	....	.34	....	....	....	....	....	....	....	1.51
Lamar ‖‖	Neosho	.20	....	....	....	....	....	.05	.65	....	....	....	....	.25	.10	....	....	T.	....	....	....	....	....	....	....	.40	....	....	....	....	....	....	1.65
Lamonte	Missouri	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marshall	do	....	....	....	....	....	...	.50	.30	....	....	....	....	.19	.03	.04	....	....	....	....	....	....	T.	....	.77	T.	....	....	....	....	....	....	1.83
Nevada	Osage	....	....	....	....	....	....	.64	.07	....	....	....	....	.36	T.	....	....	....	....	....	....	....	....	....	T.	.27	....	....	....	....	....	....	1.34
Warrensburg	Missouri	T.	....	....	....	....	....	.48	.10	....	....	....	....	.23	.01	T.	....	.04	....	....	....	....	T.	....	.22	.29	....	....	....	....	....	....	1.37
Warsaw	Osage	.16	....	....	....	....	....	.15	.22	T	....	....	....	.35	....	....	T.	....	....	....	....	....	....	....	.07	.27	T.	....	....	....	....	....	1.22
Waverly ‖‖	Missouri	T.	....	....	....	....	....	.04	.40	....	....	....	....	....	.34	....	.15	....	....	....	....	....	....	....	....	.76	....	....	....	....	....	....	1.69
Northwest Plateau																																	
Bethany	Grand	....	....	....	....	....	....	.10	....	....	....	....	....	.35	.20	....	....	....	....	....	....	....	T.	....	.41	....	....	....	....	....	....	....	1.06
Chillicothe ‖‖	do	....	....	....	....	....	....	T.	.13	T.	....	....	....	....	.26	.14	....	....	....	....	....	....	T.	....	....	.91	....	....	....	....	....	....	1.44
Conception	Missouri	....	....	....	....	....	....	.24	T.	....	....	....	....	.07	.12	T.	T.	....	....	....	....	....	T.	....	.12	.60	....	....	....	....	....	....	1.15
Edgerton	do	....	....	....	....	....	....	.45	T.	....	....	....	....	.08	.20	.02	T	....	....	....	....	....	....	....	.52	.26	....	....	....	....	....	....	1.53
Gallatin ‖‖	Grand	....	....	....	....	....	....	....	.50	....	....	....	....	....	.22	.14	....	....	....	....	....	....	....	....	....	1.01	....	....	....	....	....	....	1.87
Grant City	do	....	....	....	....	....	....	.27	T.	....	....	....	....	.04	.15	T.	....	....	....	....	....	....	T.	....	.57	T.	....	....	....	....	....	....	1.03
Kansas City***	Missouri	T.	....	....	....	....	....	.47	T.	T	....	....	....	.07	.12	.10	T.	....	....	....	....	....	T.	....	.57	.01	....	....	....	....	....	....	1.34
Kidder ‖‖	Grand	....	....	....	....	....	....	T.	.47	T	....	....	....	....	.10	.19	....	....	....	....	....	....	T.	....	....	.87	....	....	....	....	....	....	1.63
King City	Missouri	....	....	....	....	....	....	.36	....	....	....	....	....	.03	.15	.01	....	....	....	....	....	....	T.	....	.42	.15	....	....	....	....	....	....	1.12
Lexington ‖‖	do	....	.02	....	....	....	....	.08	.58	....	....	....	....	.04	.10	.10	.10	....	....	....	....	....	....	T.	.04	.87	....	....	....	....	....	....	1.93
Maryville	do	....	....	....	....	....	....	.29	.03	T.	....	....	....	....	.12	.08	T.	....	....	....	....	....	T.	....	.50	.25	....	....	....	....	....	....	1.27
Oregon	do	....	....	....	....	....	....	.17	.03	....	....	....	....	.05	.10	.04	T.	....	....	....	....	....	T.	....	.67	.10	....	....	....	....	....	....	1.16
St. Joseph***	do	....	....	....	....	T.	....	.38	T.	T.	....	....	....	.06	.14	T.	T.	....	....	....	....	....	T.	....	.52	T.	....	....	....	....	....	....	1.10
Tarkio	do	....	....	....	....	....	....	.23	.03	....	....	....	....	.20	....	.23	....	....	....	....	....	....	....	....	.20	....	....	....	....	....	....	....	0.89
Trenton	Grand	....	....	....	....	....	....	.25	.20	....	....	....	....	.06	.30	.21	....	....	....	....	....	....	T.	....	.64	.11	....	....	....	....	....	....	1.77
.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. |||||| Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for February 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	
Lakeside (Osage Dam)	Evaporation	.061	.047	.071	.104	.062	.080	.048	.006	.017	.029	....	....	....	....	.186	.019	.035	.041	.103	.129	.098	.296	.042	.129	.062	****	****	¶	....	....	....	2.164
	Mean temperature	29	40	38	41	38	34	36	35	34	33	30	37	36	46	42	36	38	44	41	43	53	38	40	41	25	19	24	38	..	..	..	36.8
	Wind movement	68	102	78	103	51	97	85	59	57	72	45	50	47	46	206	113	119	67	94	80	79	170	84	116	136	156	105	78	..	..	..	2,563

**** Daily evaporation included in next measurement; ice cover on tank. ¶ Estimated .190.
Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from page 6

TORNADO, NEAR JOPLIN, MO.

On February 24, 1935, about 7 p. m., a tornado passed over the southern suburbs of Joplin, Mo. It came from the southwest, having struck the Baxter Springs, Kansas, area at 6.45 p. m., and passed northeastward of Joplin. The principal damage in Missouri was in Stapleton (southern suburb of Joplin) and Webb City, about five miles northeast of Joplin. The path of destructive wind was about 200 to 300 yards wide. The storm diminished after passing Joplin. No lives were lost, but about 30 people were injured in the vicinity of Joplin, and property loss in Missouri was estimated at $37,500.

ERRATA

January 1935, Sikeston, page 2, lowest temperature should be 4 on the 24th.
Lakeside evaporation for January 1935, page 4, daily data from the 21st to 31st, inclusive, should be blank; monthly amount should be 1.561.

Daily Temperatures for February 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	..	..	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	34	50	49	44	42	36	32	35	35	35	42	49	45	50	49	42	48	55	53	51	74	64	57	54	43	20	35	50	..	..	..	45.5
	Minimum ...	28	28	35	30	32	26	26	31	29	25	25	27	34	38	37	32	30	32	33	32	32	31	25	40	14	11	10	26	..	..	..	28.5
Columbia.	Maximum...	32	45	43	44	42	31	36	35	36	32	36	44	46	59	46	37	44	55	50	45	76	42	58	54	53	24	34	53	..	..	..	44.0
	Minimum ...	29	29	34	31	30	27	29	32	30	28	26	36	36	43	35	31	30	34	33	31	36	26	25	42	17	11	11	27	..	..	..	29.6
Fayette	Maximum...	34	42	43	43	41	33	34	34	34	35	36	47	43	56	49	38	47	55	51	48	74	68	59	53	52	24	36	55	..	..	..	45.1
	Minimum ...	28	31	35	36	32	29	30	32	32	33	29	30	39	38	38	32	32	35	37	32	38	34	32	48	19	12	8	32	..	..	..	31.5
Hannibal	Maximum...	31	45	42	36	39	31	31	32	31	34	36	44	40	57	49	36	40	53	47	40	70	52	52	50	42	22	30	48	..	..	..	41.4
	Minimum ...	24	28	28	29	29	21	24	30	29	24	30	26	34	32	35	30	27	32	32	31	28	27	23	38	11	9	8	23	..	..	..	26.5
Jefferson City §§	Maximum...	32	50	45	46	47	39	41	35	35	34	40	50	48	59	45	37	45	57	50	47	79	33	57	56	24	25	34	58	..	..	..	44.6
	Minimum ...	26	29	29	32	31	27	27	30	31	30	23	25	26	37	39	33	30	33	35	33	31	33	25	30	24	13	10	11	..	..	..	28.1
Kirksville.	Maximum...	30	53	53	37	37	30	30	30	32	33	38	48	40	46	46	35	44	49	48	41	64	49	53	52	40	21	32	47	..	..	..	41.4
	Minimum ...	25	27	23	28	29	21	20	27	26	23	29	26	30	33	30	29	28	31	31	29	30	26	23	38	12	6	6	24	..	..	..	25.4
Louisiana	Maximum...	35	48	43	40	40	32	33	35	33	40	40	45	40	58	45	36	40	58	52	40	70	53	50	43	43	20	30	48	..	..	..	42.5
	Minimum ...	30	29	30	29	28	24	27	30	28	30	28	22	32	32	35	33	29	32	32	33	26	30	23	40	19	13	10	26	..	..	..	27.9
Macon §§	Maximum...	30	46	40	37	38	28	31	30	34	37	38	47	41	52	47	35	44	53	48	44	70	48	55	43	20	23	35	49	..	..	..	40.8
	Minimum ...	27	23	30	29	29	24	23	26	28	24	26	26	31	33	36	32	28	31	31	30	30	29	23	32	13	8	9	17	..	..	..	26.0
Mexico §§	Maximum...	34	47	42	40	43	30	33	35	34	32	35	47	50	60	44	37	43	56	49	45	77	36	58	56	20	23	34	53	..	..	..	42.6
	Minimum ...	21	27	28	30	30	25	25	28	29	25	27	24	24	34	38	31	28	29	31	31	31	30	22	22	18	11	9	13	..	..	..	25.8
St. Louis	Maximum...	40	54	44	42	50	34	40	44	38	33	37	50	48	65	51	38	36	59	50	43	79	54	53	60	55	23	30	54	..	..	..	46.6
	Minimum ...	31	30	35	32	29	25	28	34	33	30	29	30	39	45	37	31	30	32	37	34	33	29	28	38	18	16	13	24	..	..	..	30.4
Unionville §§	Maximum...	30	57	39	39	34	28	29	30	33	33	40	44	38	44	37	33	44	48	47	37	59	44	51	45	17	23	33	48	..	..	..	38.7
	Minimum ...	25	26	27	27	27	19	19	24	24	24	28	25	26	33	34	31	27	29	31	28	29	26	24	27	9	5	5	8	..	..	..	23.8
Warrenton	Maximum...	42	51	48	43	46	33	38	38	36	35	36	48	42	63	53	40	38	58	48	46	78	72	55	58	55	21	31	52	..	..	..	46.6
	Minimum ...	30	28	37	30	32	25	25	33	31	28	23	24	35	39	39	31	28	30	33	31	30	29	23	39	19	13	9	23	..	..	..	28.5
Southeast Lowlands																																	
Campbell	Maximum...	51	55	55	46	57	47	52	54	54	42	34	49	52	59	60	47	40	57	50	56	75	66	50	62	57	30	29	52	..	..	..	51.4
	Minimum ...	28	28	27	27	32	30	30	30	35	30	28	28	44	46	40	34	29	28	34	34	30	37	25	32	25	20	15	22	..	..	..	30.3
Caruthersville	Maximum...	52	50	57	48	62	55	54	54	54	42	39	53	57	61	64	55	42	56	55	55	73	69	50	64	62	32	32	50	..	..	..	53 5
	Minimum ...	35	28	35	34	34	34	42	46	40	33	30	33	47	47	47	37	33	30	34	34	36	45	32	36	31	25	19	23	..	..	..	35.0
Doniphan	Maximum...	58	51	48	51	66	51	50	58	55	42	41	48	54	64	60	48	38	64	54	57	78	65	53	62	62	33	33	43	..	..	..	53.1
	Minimum ...	34	30	28	25	28	28	32	43	39	28	26	28	43	46	47	33	33	26	30	28	26	38	28	30	25	20	14	16	..	..	..	30.4
Jackson	Maximum...	46	53	50	50	59	48	49	52	52	51	38	54	52	65	59	53	38	51	54	54	72	68	51	61	59	26	43	50	..	..	..	52.1
	Minimum ...	32	30	31	30	30	30	27	42	35	27	28	25	41	46	45	35	30	35	20	31	30	34	25	35	25	20	14	21	..	..	..	30.5
Poplar Bluff	Maximum...	59	58	60	50	65	50	49	55	46	38	41	53	53	60	59	43	36	58	58	57	76	63	50	63	58	49	35	52	..	..	..	53.4
	Minimum ...	32	29	36	26	28	31	31	41	37	29	29	26	45	47	49	34	29	30	35	30	27	50	24	30	24	17	12	20	..	..	..	31.4
Sikeston	Maximum...	50	50	50	50	61	61	51	54	52	40	40	55	54	66	63	55	39	56	56	54	73	71	50	62	58	30	35	49	..	..	..	53.0
	Minimum ...	36	29	35	32	32	31	30	35	36	30	29	29	45	47	44	35	31	30	31	32	32	43	27	32	28	18	17	22	..	..	..	32.1
Cairo, Ill.	Maximum...	49	46	49	45	59	40	53	51	47	39	40	56	55	66	54	43	36	55	55	47	72	63	49	61	59	25	30	50	..	..	..	49.8
	Minimum ...	37	31	38	35	35	31	32	46	37	32	30	30	47	50	43	34	31	31	36	36	36	32	32	38	23	20	17	23	..	..	..	33.7
Ozark Plateau																																	
Arcadia §§	Maximum...	46	64	50	50	60	41	49	52	35	38	38	53	50	64	53	36	36	64	53	52	78	42	53	58	36	25	36	55	..	..	..	48.8
	Minimum ...	24	24	29	28	28	23	26	29	33	31	25	21	22	40	44	34	29	27	29	32	25	40	21	24	35	16	12	12	..	..	..	27.2
Birchtree	Maximum...	50	59	59	50	62	53	51	58	50	35	48	58	51	64	55	44	39	63	59	53	76	70	53	57	55	27	41	55	..	..	..	53.4
	Minimum ...	34	28	38	28	26	28	40	33	30	28	24	40	42	40	33	33	27	37	28	30	33	22	35	20	10	10	18	..	..	..	..	29.4
Crystal City §§	Maximum...	41	..	60	53	54	37	44	45	..	38	40	51	50	67	51	38	43	64	52	48	80	38	..	63	34	24	33	57	..	..	..	[c]48.2
	Minimum ...	25	31	..	26	26	27	27	30	33	..	27	22	28	39	41	36	29	30	31	33	27	37	22	..	34	18	12	15	..	..	..	[c]28.2
Eldon §§	Maximum...	35	50	46	48	47	39	42	35	33	33	42	50	46	65	42	36	47	58	52	48	77	35	59	51	25	26	37	..	..	..	..	[a]44.6
	Minimum ...	31	26	37	31	40	28	28	33	31	30	23	23	25	37	38	33	29	30	33	31	31	35	24	21	25	11	11	11	..	..	..	28.1
Farmington	Maximum...	47	58	47	49	49	42	47	45	42	38	42	48	48	62	55	48	42	50	54	44	75	68	51	55	40	35	38	52	..	..	..	49.0
	Minimum ...	37	35	28	27	35	25	28	38	35	28	28	36	37	42	41	38	26	29	32	28	28	32	21	20	20	10	15	25	..	..	..	29.4
Garber	Maximum...	56	60	57	53	60	42	45	49	45	47	46	50	53	58	56	46	45	64	56	56	78	71	61	60	59	29	38	64	..	..	..	53.6
	Minimum ...	35	31	33	31	42	32	34	44	34	32	23	27	41	31	40	32	30	25	39	30	41	38	18	36	21	13	8	11	..	..	..	30.4
Koshkonong	Maximum...	53	57	58	49	61	49	46	57	57	38	38	49	52	65	58	49	38	64	55	54	76	69	53	59	59	28	35	57	..	..	..	53.0
	Minimum..	28	30	37	30	31	28	30	40	34	30	24	32	37	42	47	31	30	28	37	22	35	35	24	37	22	16	13	21	..	..	..	30.4
Lebanon §§	Maximum...	31	52	51	48	53	39	47	42	50	39	41	53	50	60	45	39	41	59	49	51	80	43	59	68	22	28	35	59	..	..	..	47.6
	Minimum ...	30	26	27	29	27	27	26	34	30	29	23	23	27	38	36	32	27	29	34	29	29	35	25	25	22	10	9	10	..	..	..	26.7
Mountain Grove	Maximum...	46	58	53	50	57	44	51	47	44	42	43	50	50	63	50	35	39	60	49	53	75	60	53	55	50	28	34	57	..	..	..	49.9
	Minimum ...	32	27	34	28	32	26	40	31	27	26	22	26	39	40	37	30	27	30	34	29	36	30	22	35	18	11	10	23	..	..	..	28.6
Neosho	Maximum...	53	52	53	53	53	45	49	49	38	40	45	52	52	56	56	44	45	61	61	54	75	72	62	60	60	27	36	60	..	..	..	52.2
	Minimum ...	31	28	27	21	31	32	33	35	31	31	24	25	39	40	35	31	29	31	36	27	35	36	24	45	18	12	9	22	..	..	..	29.2
Rolla	Maximum...	51	53	48	46	51	40	46	44	38	36	38	51	51	63	55	41	38	59	51	45	76	71	54	60	56	23	32	56	..	..	..	49.0
	Minimum ...	31	29	33	30	36	26	21	37	32	29	24	24	39	42	39	31	29	29	33	31	32	33	24	49	14	14	11	25	..	..	..	29.5
Springfield	Maximum...	42	53	50	48	50	37	47	46	35	42	45	50	50	57	48	36	41	57	48	50	73	61	55	56	41	24	32	50	..	..	..	47.6
	Minimum ...	31	28	34	30	33	29	34	35	31	29	28	30	42	43	36	29	28	35	39	32	42	32	28	41	16	10	13	28	..	..	..	30.9
Southwest Plain																																	
Appleton City	Maximum...	35	41	42	40	40	37	36	36	34	34	40	49	47	47	47	39	44	51	51	48	67	67	53	57	57	23	32	53	..	..	..	44.5
	Minimum ...	30	29	37	31	34	29	30	32	31	27	26	28	37	40	34	33	30	34	35	31	39	35	28	42	17	12	12	29	..	..	..	30.4
Clinton	Maximum...	35	38	48	38	38	36	36	36	33	34	38	48	48	48	48	43	45	48	48	48	70	50	52	53	52	24	35	50	..	..	..	43.6
	Minimum ...	30	28	33	30	33	30	30	32	30	25	24	26	37	37	35	32	30	34	35	30	35	34	26	40	17	10	11	28	..	..	..	29.4
Harrisonville §§	Maximum...	32	56	50	52	39	32	32	33	34	34	45	49	44	48	40	35	50	61	50	50	75	37	56	47	24	26	38	58	..	..	..	43.8
	Minimum ...	25	25	25	24	30	25	24	29	28	23	25	26	28	35	36	34	29	30	34	30	31	34	28	33	14	10	13	16	..	..	..	26.6
Lamar §§	Maximum...	34	47	51	51	47	40	47	35	33	40	43	53	48	55	47	36	48	61	53	57	72	39	60	60	22	28	36	62	..	..	..	46.6
	Minimum ...	31	29	30	27	30	31	31	33	31	31	25	27	30	40	37	34	31	31	35	33	33	37	28	30	20	13	13	13	..	..	..	29.1
Lamonte	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marshall	Maximum...	32	48	47	47	42	36	32	32	33	33	40	43	42	52	48	37	45	55	50	50	73	73	57	55	50	23	35	53	..	..	..	45.1
	Minimum ...	28	28	32	30	28	26	27	30	29	25	24	27	35	40	36	31	30	30	34	30	29	31	30	43	14	11	11	28	..	..	..	28.5
Nevada	Maximum...	37	46	51	45	46	38	44	37	34	36	44	51	48	55	48	40	48	60	53	50	73	64	59	58	51	22	36	58	..	..	..	47.6
	Minimum ...	30	28	36	27	34	29	32	31	30	28	25	30	37	40	35	31	30	35	37	31	41	35	29	42	16	11	11	29	..	..	..	30.4
Warrensburg	Maximum...	33	49	48	42	40	35	33	33	32	34	45	50	44	51	47	36	47	57	51	51	72	67	55	54	54	26	35	53	..	..	..	45.5
	Minimum ...	29	28	35	30	33	28	28	31	29	25	25	26	33	40	36	33	28	35	34	31	34	32	28	40	14	11	10	29	..	..	..	29.1
Warsaw	Maximum...	39	47	47	47	44	37	43	42	34	37	41	52	49	56	50	41	47	59	52	51	77	71	58	58	58	26	36	59	..	..	..	48.6
	Minimum ...	31	29	33	31	30	29	30	32	31	25	20	26	38	39	38	33	30	34	38	32	35	34	25	44	17	11	10	28	..	..	..	29.8
Northwest Plateau																																	
Chillicothe §§	Maximum...	31	58	44	49	36	31	31	31	35	35	42	50	41	51	36	34	48	52	51	47	71	41	58	47	21[a]	24	37	51	..	..	..	42.2
	Minimum ...	27	27	27	30	30	25	24	26	27	23	27	26	26	35	36	33	29	32	31	29	31	29	26	29	12	9	9	10	..	..	..	25.9
Grant City	Maximum...	31	45	45	46	44	31	29	29	30	32	42	45	42	41	41	37	40	45	46	43	54	47	53	50	26	16	33	39	..	..	..	39.4
	Minimum ...	26	23	33	26	30	23	24	24	23	23	25	28	32	36	33	29	26	34	32	28	32	27	28	26	9	4	4	20	..	..	..	25.3
Kansas City	Maximum...	33	61	48	49	42	30	32	32	34	38	46	50	46	50	41	35	49	55	54	50	75	40	58	49	26	23	39	55	..	..	..	44.3
	Minimum ...	29	30	29	26	30	28	29	30	27	26	30	28	34	41	35	31	31	38	36	32	40	33	32	26	13	11	14	32	..	..	..	29.3
Kidder §§	Maximum...	31	56	44	48	36	28	33	29	33	36	44	47	41	47	37	34	45	50	48	43	65	39	54	41	19	21	36	47	..	..	..	40.4
	Minimum ...	25	25	25	28	28	23	23	25	25	23	25	25	26	32	34	31	26	26	31	28	28	28	26	28	11	7	8	10	..	..	..	24.3
Lexington §§	Maximum...	31	59	49	47	39	30	32	31	37	36	44	51	44	49	38	34	50	56	53	49	75	33	56	44	15	26	37	53	..	..	..	42.8
	Minimum ...	28	28	29	31	31	27	26	30	29	24	27	26	26	30	38	34	29	31	33	30	30	33	29	32	14	10	10	12	..	..	..	27.0
Maryville	Maximum...	32	55	44	49	41	30	29	28	32	41	46	48	40	43	40	35	43	48	49	43	57	47	54	47	24	20	35	43	..	..	..	40.8
	Minimum ...	26	25	33	23	30	24	25	23	22	23	25	27	32	35	32	29	25	32	30	27	32	28	26	24	8	0	1	20	..	..	..	24.5
Oregon	Maximum...	39	63	47	51	46	33	32	30	37	43	50	54	42	45	42	36	49	49	52	48	66	51	57	53	31	22	49	51	..	..	..	45.3
	Minimum ...	26	27	33	25	31	25	25	24	24	22	26	26	32	36	32	28	25	35	30	27	35	28	29	27	9	3	7	27	..	..	..	25.9
St. Joseph..	Maximum...	32	61	47	51	40	29	31	30	35	41	47	49	42	47	39	34	46	52	51	47	65	40	56	50	21	21	40	50	..	..	..	42.6
	Minimum ...	28	28	32	25	28	26	27	27	27	25	28	29	35	39	34	30	28	36	34	30	36	31	31	21	10	7	12	31	..	..	..	27.7
Trenton	Maximum...	34	56	45	44	41	33	31	30	33	35	40	44	44	45	40	42	45	46	49	48	60	54	52	48	33	21	37	46	..	..	..	42.0
	Minimum ...	28	25	36	29	33	24	25	26	26	24	27	26	33	36	36	30	28	34	32	30	32	29	26	33	11	8	10	24	..	..	..	27.2

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 3-22-35—945.

UNMS

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX MARCH 1935 No. 3

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GENERAL SUMMARY

March was unusually mild throughout the State, with the highest average temperature for any March since 1921. Temperatures during the middle days of the month were mostly like the normal mildness of mid-April. There was very little damage from frost, as hard freezing occurred only on a few dates prior to the 18th, and between the 18th and the 31st, when vegetation was advanced enough to be hurt by frost or freezing, there was no hard freezing, or killing frost.

Precipitation was very heavy in the southern third of the State, with several stations in the lower southeastern counties reporting the heaviest March rainfall of record. It was unusually wet in other southeastern counties as far north as St. Louis County. But the precipitation diminished rapidly towards the northwestern counties and became unusually light in Jackson, Clay, and the region to the northward thereof. There was the remarkable range in monthly precipitation from 14.61 inches at Sikeston to 0.29 inch at Edgerton. The southern third of the State had an average of about 9.00 inches, while the northwestern quarter averaged approximately 1.00 inch.

Vegetation was unusually advanced by the end of March. There had been practically no winter-killing of grains and fruits. Soft wheat was 8 inches high and beginning to joint. Seeding of oats had been delayed in much of the southern half of the State by wet ground, but in the northern half this work was nearly completed and some oats were up and growing nicely. Peaches, cherries, plums, and pears were in full bloom in most sections.

Large rivers maintained good stages, but mostly below the March normal. Strong floods occurred in smaller rivers of the southern half of the State (see special article).

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 50.4°, or 6.7° above normal. The highest monthly mean was 57.8° at Caruthersville, and the lowest monthly mean was 42.6° at Unionville. The highest temperature recorded was 87° at Jackson on the 23d, and the lowest was 8° at Maryville on the 7th, and at Downing on the 8th. The greatest daily range was 50° at Kirksville on the 16th, and at Tarkio on the 17th.

PRECIPITATION

The average precipitation for the State, 118 stations reporting, was 5.27 inches, or 2.09 inches more than normal. The greatest local monthly amount was 14.61 inches at Sikeston, and the least local monthly amount was 0.29 inch at Edgerton. The greatest amount in any twenty-four hours was 5.45 inches at Sikeston on the 30th-31st. The average number of days with 0.01 inch or more of precipitation was 9. The snowfall for the State averaged 0.7 inch, or 2.5 inches less than normal. The greatest monthly snowfall recorded was 5.0 inches at Warsaw.

MISCELLANEOUS PHENOMENA

Dust.—General and dense, 20th, 21st; less general and of varying density, 4th, 5th, 16th, 18th, 19th, 22d, 23d, 25th, 26th, 27th, 28th, 29th, 30th. (See special note).

Earthquake.—1st; several earth tremors were felt about 5 a. m. in the area north and west of Kansas City.

Fog.—Dense, 10th, 11th, 19th, 20th.

Floods.—11th to 16th. (See special article).

Frost.—Freezing temperatures occurred on several dates prior to the 18th; light to heavy frost occurred generally, except in the Southeast Lowlands, on the 28th and 31st.

Hail.—6th, 7th, 18th, 20th, 23d, 25th, 27th, 30th.

(Continued on page 14)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.96	30.49	8	29.46	4	10.5	34	sw.	15	77	60	59	43
Kansas City.....	29.94	30.48	17	29.35	4	12.5	39	sw	15	74	52	53	60
St. Joseph.....	29.93	30.48	17	29.29	4	10.8	41	nw.	25	73	51	53	64
St. Louis.....	29.97	30.49	8	29.53	4	14.6	51	s.	4	78	64	69	45
Springfield.....	29.96	30.42	17	29.51	4	12.6	32	sw.	15	79	58	63	46
Cairo, Ill.....	30.01	30.47	8	29.45	25	11.3	38	n.	11	80	68	69	53
Keokuk, Iowa..	29.98	30.56	8	29.45	4	9.7	27	sw.	15	77	63	66	47

COMPARATIVE DATA FOR MARCH

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	38.5	− 5.2	90	1	4.02	+0.84	7.67	1.76	....	10	..	..	..
1889....	44.3	+ 0.6	84	13	1.98	−1.20	5.92	0.09	....	5	..	..	..
1890....	37.3	− 6.4	79	−11	2.61	−0.57	14.20	0.77	5.7	8	..	..	..
1891....	36.6	− 7.1	78	−11	3.01	−0.17	5.88	1.00	7.1	10	..	..	..
1892....	38.9	− 4.8	87	5	3.11	−0.07	5.75	1.08	....	8	8	10	13
1893....	40.5	− 3.2	86	0	2.86	−0.32	5.10	1.10	3.2	7	11	10	10
1894....	47.7	+ 4.0	89	2	2.93	−0.25	7.97	0.39	0.2	6	15	9	7
1895....	42.4	− 1.3	98	0	2.14	−1.04	5.47	0.19	4.4	9	14	7	10
1896....	39.2	− 4.5	82	2	2.05	−1.13	8.70	0.52	5.2	8	11	9	11
1897....	44.2	+ 0.5	82	− 5	6.07	+2.89	15.23	1.51	1.0	12	9	9	13
1898....	44.7	+ 1.0	83	9	7.09	+3.91	15.48	1.63	0.6	11	11	7	13
1899....	37.4	− 6.3	78	− 8	2.93	−0.25	7.03	1.09	8.9	10	9	11	11
1900....	40.4	− 3.3	88	− 4	1.48	−1.70	3.41	0.40	0.2	6	15	9	7
1901....	42.7	− 1.0	85	− 1	3.74	+0.56	6.28	1.96	1.8	8	11	8	12
1902....	45.3	+ 1.6	85	1	3.49	+0.31	7.67	0.46	0.8	9	10	10	11
1903....	46.8	+ 3.1	81	9	3.35	+0.17	8.63	0.85	1.1	8	13	7	11
1904....	44.8	+ 1.1	87	8	4.14	+0.96	11.49	1.48	1.2	9	11	9	11
1905....	50.3	+ 6.6	88	10	2.99	−0.19	7.08	0.23	T.	8	11	8	12
1906....	34.6	− 9.1	75	− 5	3.93	+0.75	8.83	1.43	8.6	11	6	7	18
1907....	53.9	+10.2	95	16	2.82	−0.36	5.68	1.15	1.0	7	14	7	10
1908....	50.1	+ 6.4	89	14	2.58	−0.60	6.65	0.34	1.0	7	14	7	10
1909....	44.5	+ 0.8	81	9	3.07	−0.11	6.97	0.60	0.6	6	13	9	9
1910....	55.8	+12.1	96	15	0.66	−2.52	3.17	0.00	0.1	2	20	7	4
1911....	46.8	+ 3.1	91	5	1.85	−1.33	3.37	0.18	1.4	6	16	8	7
1912....	35.2	− 8.5	89	− 4	4.62	+1.44	7.83	0.99	16.5	11	12	6	13
1913....	40.6	− 3.1	84	−12	4.36	+1.18	8.83	1.52	5.0	9	12	8	11
1914....	43.2	− 0.5	87	− 2	2.75	−0.43	5.80	0.91	4.7	8	13	7	11
1915....	36.4	− 7.3	70	6	1.50	−1.68	3.67	0.35	7.9	6	7	8	16
1916....	47.0	+ 3.3	95	− 2	2.53	−0.65	5.45	0.17	3.1	7	14	8	9
1917....	45.2	+ 1.5	86	− 7	2.91	−0.27	6.22	0.76	1.5	7	15	7	9
1918....	50.9	+ 7.2	95	8	0.94	−2.24	3.80	T.	0.1	4	18	6	7
1919....	46.3	+ 2.6	90	− 2	2.40	−0.78	8.67	0.37	0.7	6	15	8	8
1920....	44.6	+ 0.9	86	− 6	5.01	+1.83	9.10	1.35	1.4	8	15	6	10
1921....	51.9	+ 8.2	90	11	4.69	+1.51	11.23	0.65	0.5	10	13	9	9
1922....	45.6	+ 1.9	80	3	6.46	+3.28	13.29	1.45	2.2	12	11	6	14
1923....	40.4	− 3.3	83	−11	4.12	+0.94	8.30	1.57	2.3	8	14	6	11
1924....	38.4	− 5.3	80	8	2.55	−0.63	5.58	1.14	9.4	8	8	8	15
1925....	47.7	+ 4.0	86	− 5	1.95	−1.23	5.16	0.10	0.8	5	17	8	6
1926....	39.6	− 4.1	83	8	2.89	−0.29	5.53	0.74	7.0	8	13	6	12
1927....	45.9	+ 2.2	80	0	5.87	+2.69	11.24	1.69	3.7	11	12	8	11
1928....	46.3	+ 2.6	89	10	1.54	−1.64	3.56	0.11	2.4	5	15	9	7
1929....	48.6	+ 4.9	97	11	3.30	+0.12	6.13	0.47	T.	8	12	8	11
1930....	43.2	− 0.5	80	6	1.37	−1.81	4.50	0.04	1.4	4	18	6	7
1931....	39.5	− 4.2	70	10	3.02	−0.16	6.03	1.23	8.8	8	11	7	13
1932....	38.3	− 5.4	81	− 2	1.89	−1.29	5.09	0.30	2.8	7	12	9	10
1933....	44.1	+ 0.4	87	5	3.53	+0.35	10.39	1.56	2.0	10	11	8	12
1934....	41.2	− 2.5	82	− 3	2.36	−0.82	7.78	0.05	4.9	7	13	8	10
1935....	50.4	+ 6.7	87	8	5.27	+2.09	14.61	0.29	0.7	9	10	10	11
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	43.7	.....	98	−12	3.18	.....	15.48	0.00	3.2	8	13	8	10

Climatological Data for March 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	50.8	+ 8.9	81	22	16	7	43	1.64	−0.87	0.54	0.2	7	17	2	12	s.	O. K. Benecke
Clifton Hill	Randolph	781	36	49.4	+ 7.2	79	20	18	7	42	2.10	−0.54	0.62	T.	9	10	9	12	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	50.1	+ 7.5	81	20	20	7	41	2.88	−0.06	0.83	1.6	9	5	10	16	sw.	U. S. Weather Bureau
Downing	Schuyler	876	14	45.9[a]	+ 4.3	77	22	8	8	38	3.04	+0.71	1.17	2.5	11	11	11	9	sw.	James Taylor
Elsberry	Lincoln	449	4	49.2	.....	84	20	20	12	35	4.72	.....	2.10	4.0	9	6	11	14	s.	Ray E. Mills
Fayette	Howard	680	55	49.8	+ 7.9	81	20†	20	6†	47	3.15	+0.35	1.25	T.	7	4	19	8	s.	Harry P. Mason
Fulton	Callaway	818	47	48.8	+ 4.7	83	20	19	7	47	3.23	+0.21	0.86	0.8	9	9	6	16	s.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	2.88	+0.46	0.71	3.5	8	15	7	9	se.	W. L. Harker
Hannibal	Marion	759	43	48.3	+ 7.3	83	20	18	8	38	3.20	+0.60	0.90	T.	12	7	7	17	sw.	Hannibal Water Dept.
Jefferson City	Cole	557	45	49.8	+ 6.2	83	20	22	7†	42	3.45	+0.35	0.97	2.5	9	7	12	12	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	46.6	+ 6.9	79	16	10	8	50	2.39	−0.33	0.90	3.0	4	10	13	8	nw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	1.50	.....	0.66	2.0	6	7	13	11	e.	J. Robert Hall
Louisiana	Pike	469	41	48.7	+ 5.2	82	20†	20	8	37	4.85	+1.75	1.55	T.	7	17	5	9	s.	Stark Bro's Nurseries
Macon	Macon	875	36	46.2	+ 4.0	80	20	11	8	42	2.18	−0.44	0.79	0.1	7	13	8	10	w.	W. C. Brown
Mexico	Audrain	800	46	47.2	+ 5.2	83	20†	20	7†	44	3.26	+0.43	0.90	T.	10	13	5	13	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	3.33	+0.61	0.92	0	9	6	14	11	n.	J. S. Conway
St. Charles	St. Charles	520	47	49.7	+ 5.2	83	20	23	8	41	6.05	+3.01	1.63	1.5	10	9	8	14	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	51.2	+ 7.1	81	20	23	8	37	6.43	+3.05	2.16	0	10	7	10	14	sw.	**Section Center**
St. Louis University	St. Louis City	578	23	51.3	+ 7.7	81	20†	23	8	35	6.31	+2.93	1.82	T.	10	10	4	17	s.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	2.79	−0.03	1.44	0	8	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	47.6	+ 5.4	77	22	18	8	36	3.48	+0.52	1.10	T.	8	13	10	8	w.	Frank Hall
Unionville	Putnam	1,062	42	42.6	+ 3.7	76	22	11	7†	42	1.44	−0.98	0.44	2.5	5	15	2	14	sw.	John H. Schick
Warrenton	Warren	816	53	50.4	+ 7.9	83	20	20	8	36	4.79	+1.45	1.01	3.0	12	5	13	13	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	45.7	+ 6.8	77	20	15	8	37	2.97	+0.59	0.83	1.6	10	6	8	17	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**48.5**	**+ 6.3**	**84**	**20**	**8**	**8**	**50**	**3.32**	**+0.60**	**2.16**	**1.2**	**9**	**10**	**9**	**12**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	54.0	.....	82	23	28	8	39	14.27	.....	4.57	0	14	12	10	9	s	Jeff. King
Caruthersville	Pemiscot	265	39	57.8	+ 6.4	84	23	31	7	34	10.66	+6.15	2.74	0	11	9	8	14	s.	Sam Smith
Doniphan	Ripley	344	31	55.3	+ 6.3	85	23	29	8†	30	14.17	+10.06	3.53	0	11	11	9	11	s.	W. W. Martin
Jackson	Cape Girardeau	428	44	54.4	+ 7.2	87	23	26	8	35	10.22	+5.92	4.82	0	12	3	8	20	s.	John G. Putz
Marble Hill	Bollinger	470	40	55.1	+ 7.5	84	23†	25	8	36	9.97	+5.56	3.75	0	12	10	10	11	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	14.18	+9.62	4.97	0	13	11	9	11	sw.	John A. Spence
Poplar Bluff	Butler	339	30	54.2	+ 5.6	85	23	27	8	31	10.16	+5.60	3.75	0	9	17	3	11	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	55.2	+ 6.6	82	23	27	8	33	14.61	+10.18	5.45	0	17	7	15	9	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	63	55.2	+ 8.0	81	23	28	8	30	12.00	+8.25	3.76	0	14	4	8	19	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**55.2**	**+ 6.8**	**87**	**23**	**25**	**8**	**39**	**12.31**	**+7.88**	**5.45**	**0**	**13**	**9**	**9**	**13**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	51.2	+ 6.6	82	23	24	8	42	9.22	+5.42	4.33	T.	12	12	8	11	s.	Arcadia College
Birchtree (near)	Shannon	1,000	40	52.7	+ 5.4	79	20†	24	7†	39	9.82	+5.67	3.20	0	9	12	7	12	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	6.32	.....	2.00	0	9	9	6	16	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	3.06	.....	1.32	0	7	11	11	9	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	51.9	.....	85	23	25	8†	47	5.29	.....	2.10	0	12	4	12	15	sw.	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	31	52.6	+ 3.8	79	24	18	7	38	9.05	+5.53	2.66	0	6	14	6	11	se.	H. E. Dean
Eldon	Miller	934	40	49.3[d]	+ 5.7	81	20	20	8	41	2.20	−0.89	0.60	0	6	4[d]	18[d]	5[d]	ne.	E. H. Shepherd
Farmington	St. Francois	918	24	49.8	+ 3.3	81	23	24	12	44	9.02	+5.61	2.11	0	11	14	8	9	s.	H. O. Miller
Garber	Taney	950	0	54.7	.....	82	23	23	7	46	10.28	.....	3.42	0	12	7	4	20	se.	William H. Durham
Goodland	Iron	1,000	42	51.5	+ 6.5	81	22	22	12	40	8.93	+4.80	3.00	0	11	13	8	10	s.	F. M. Adams
Greenville	Wayne	381	26	53.0	+ 5.3	82	23†	23	8	36	10.58	+6.08	4.07	0	13	8	13	10	se.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	11.99	+8.51	3.72	0	9	16	9	6	ne.	A. W. Madison
Koshkonong	Oregon	958	34	54.6[a]	+ 5.2	84	24	26	7†	30	10.20	+6.27	3.05	0	10	12[a]	4[a]	14[a]	s.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	50.8[a]	+ 5.8	79	20†	21	7†	42	7.65	+4.11	2.95	0	10	15	2	14	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	53.6	+ 6.3	78	20	21	7	35	6.67	+3.84	1.83	T.	10	14	10	7	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	51.9	+ 6.5	79	22	22	7	40	9.32	+5.20	2.91	T	13	9	12	10	sw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	54.2	+ 6.1	79	20	19	7	39	7.42	+3.94	2.47	0	8	11	11	9	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	52.6	+ 7.1	82	20	23	7	35	5.06	+1.34	1.36	0	9	..	..	..	.....	F. H. Lane
Salem	Dent	1,173	31	51.9	+ 5.5	79	20†	23	7†	37	7.34	+3.72	2.56	0	12	7	8	16	s.	E. E. Martin
Seligman	Barry	1,542	34	54.0[a]	+ 7.4	76	26	20	7	33	10.36	+6.84	3.25	0	8	11[b]	5[b]	13[b]	w.	Floyd E. Fawver
Seymour (near)	Webster	1,642	29	51.4	+ 6.0	76	20†	21	7	41	9.70	+5.83	2.93	0	11	8	10	13	s.	A. L. Hailey
Springfield	Greene	1,324	47	52.8	+ 7.6	77	20	20	7	43	9.09	+5.70	3.63	T.	12	11	8	12	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	52.1	...	81	22	19	7	41	3.53	.....	1.12	3.0	7	9	6	16	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**52.3**	**+ 5.9**	**85**	**23**	**18**	**7**	**47**	**7.70**	**+4.73**	**4.70**	**0.1**	**10**	**11**	**8**	**12**	**s.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	50.8	+ 5.7	72	22†	19	7	27	2.24	−0.94	0.61	2.5	7	7	19	5	sw.	W. G. Bigelow
Clinton	Henry	765	42	51.0	+ 6.0	76	15	23	17	36	2.70	−0.41	0.81	0	8	5	21	5	sw.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	1.94	−0.31	0.98	0	7	14	1	16	s.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	50.2	+ 8.9	80	22	24	17	34	1.80	−0.88	0.51	T.	7	7	14	10	sw.	John H. Patterson
Lamar	Barton	980	47	52.2	+ 6.2	78	22	20	7	37	3.56	+0.56	1.50	0	11	12	9	10	sw.	Jesse A. Mann
Lamonte	Pettis	867	34	49.4[a]	+ 5.4	78	22	18	7	38	1.97	−0.93	0.85	T.	6	10	10	11	sw.	J. E. Wheeler
Marshall	Saline	779	48	50.4	+ 7.4	80	22	18	7	43	1.91	−0.88	0.73	T.	9	8	16	7	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	52.5	+ 7.6	79	26	18	7	34	2.73	−0.22	0.78	0	5	12	4	15	sw.	George A. Kaupp
Warrensburg	Johnson	878	48	50.8	+ 6.8	79	22	17	7	34	2.25	−0.42	0.75	0.5	6	12	10	9	ne.	E. A. Markey
Warsaw	Benton	687	34	53.6	+ 6.6	81	22	20	7	42	3.07	−0.51	0.99	5.0	8	9	10	12	s.	Everett Martin
Division means	**and extremes**	.....	..	**51.2**	**+ 6.7**	**81**	**22**	**17**	**7**	**43**	**2.61**	**−0.30**	**1.53**	**0.8**	**7**	**10**	**11**	**10**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	46.3	+ 6.0	80	22	12	7	46	1.15	−1.15	0.63	0.8	3	17	5	9	ne.	A. S. Cumming
Chillicothe	Livingston	779	26	46.8	+ 5.7	84	14	13	7	42	0.64	−1.84	0.30	0	3	16	8	7	se.	Wm. J. Olenhouse
Conception	Nodaway	980	46	45.3	+ 5.5	82	22	9	7	45	0.71	−1.01	0.24	1.5	5	5	17	9	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	49.6	+ 6.4	83	22	14	7	46	0.29	−1.88	0.08	0.3	6	20	3	8	s.	Fred L. Stiff
Grant City	Worth	1,134	31	44.7	+ 3.4	81	22	10	7	47	0.38	−1.67	0.21	1.0	4	2	17	12	sw.	Howard Rybolt
Kansas City	Jackson	963	46	51.2	+ 8.5	83	22	16	7	40	0.69	−1.84	0.41	T.	4	10	9	12	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	44.2	+ 3.4	79	22	12	7†	43	1.12	−1.07	0.47	1.2	5	9	14	8	s.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	0.72	−1.19	0.26	0.2	7	3	18	10	sw.	John M. Martin
Lexington	Lafayette	688	50	48.4	+ 5.0	81	22	16	7†	40	1.30	−1.24	0.41	1.0	6	13	14	4	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	46.2	+ 8.3	82	22	8	7	45	0.40	−1.44	0.24	1.5	4	5	17	9	sw.	R. B. Montgomery
Oregon	Holt	1,048	79	48.7	+ 9.1	84	22	9	7	47	0.93	−1.15	0.37	2.0	5	17	7	7	nw.	Mina Wright
St. Joseph	Buchanan	967	25	49.0	+ 6.9	84	22	12	7	40	1.61	−0.62	1.01	0.1	9	14	7	10	sw.	U. S. Weather Bureau
Tarkio	Atchison	916	32	46.4	+ 6.3	82	14†	9	7	50	0.35	−1.37	0.15	4.0	4	16	5	10	se.	Albert Volker
Trenton	Grundy	822	39	46.5	+ 5.4	80	22	14	7†	44	2.16	−0.26	0.74	3.5	11	6	17	8	s.	W. H. Estes
Division means	**and extremes**	.....	..	**47.2**	**+ 6.1**	**84**	**14†**	**8**	**7**	**50**	**0.93**	**−1.23**	**1.01**	**1.2**	**5**	**11**	**11**	**9**	**sw.**	
State means	**and extremes**	.....	..	**50.4**	**+ 6.7**	**87**	**23**	**8**	**7†**	**50**	**5.27**	**+2.09**	**5.45**	**0.7**	**9**	**10**	**10**	**11**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for March 1935

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri				.18	.43		.66			.43		.07								.02					.18	.08	.01	.02				2.08
Bowling Green	Mississippi					.62		.42			.72		.04																				5.31
Brunswick	Grand				.54	.22		.48			.18													.04		.88	.44					.15	1.64
Canton	Mississippi				.07	.69		1.02			.30												.02			.15	.05						2.69
Clifton Hill	Chariton				.62		.62			.26	.08						T.				.05		.10	.01		.34		.02					2.10
Columbia***	Missouri			T.	.83		.79			.73	.03	.20					T.			T.	T		T.			.22		.01			.02	.05	2.88
Downing	Mississippi			.04	.48		.10	.27		.09	.31		.02					T.			.32					1.17		.07			.17		3.04
Edina	....do				.26	.04		.64			.50		.04					T.				T.	T.			.35	.28		T.				2.11
Elsberry	....do			T.	.45		.11	.54		.43	.45	.32					T.			.12					2.10					.20		4.72
Farber	....do					.52		.60			.50			.30												.69		.50				.16	3.27
Fayette	Missouri				.72		**	.82		T.	.32	T.								T.			T.			**	1.25	.04					3.15
Fulton	....do				.70	.16		.66			.03	.61	.20													.25	.45					.17	3.23
Gorin	Mississippi			T.	.42		.35	.36		.40	.20			T.				T.			.40		T.			.65		.10			T.		2.88
Hannibal	....do				.55		.32	.58		.12	.50	T.		T.						.03	.02		.02			.88		.02			.15	.01	3.20
Hermann	Missouri			.01		.82		.45			1.05	.21	.54							.06	.10			.02			.64					.67	4.57
Jefferson City	....do				.05	.90		.97		T.	.38	.22	.36													.22	.20					.15	3.45
Kahoka	Mississippi				.25	.30		.67						.45								.50		.05	1.00					T.		3.22
Kirksville	....do				.75			.30		.90							T.									.44							2.39
LaBelle	....do				.30	.28		.90			.50			.03												.40	.30		.05				2.76
Linneus	Grand				.05	.23		.66		T.	.30			T.				T.				T.	.01			T	.25						1.50
Louisiana	Mississippi				.65		.55			**	1.20	T.														1.55						.50	4.85
Lucerne	Grand				.29			.31			.18			.04				T.			.24	T.	T.			.09	.05	.10			.07		1.37
Macon	Chariton					.50		.79		T.	.21			T.							T.		.11	.06		.40	.11						2.18
Madison	Mississippi				.38	.31		1.18			.52												.18			.48	.41		.08				3.54
Memphis	....do					.34	T.	.54		T.	.35	T						T.				T.	T.			1.46							2.69
Mexico	....do		.02	.01	.07	.64		.65		T.	.90		.20	.06												.56	.15						3.26
Milan	Grand				.12	.37		.28		.15	.13							.10				.12				.63			.11		.08		2.09
Monroe City	Mississippi				.74		.42	.50		.31	.35			T.									.20			.70		.09			.02		3.33
New London	....do					.84		.14			.07		.04														.97		T.			.56	2.62
Palmyra	....do					.38		.30			.42															.46	.21		.11				1.88
Paris	....do				.13	.50		.80			1.43			.03											.23	.85	.35		.03			.04	4.39
Perry	....do				.51		.09		.47	.30	.30														.23	.88	.20					.06	3.04
Philadelphia	....do																																
St. Charles	Missouri					.57		.64			1.47	.57	.70							.10				.11		.72	.91					.26	6.05
St. Louis***	Mississippi				.41		.66			.05	1.50	1.34		T.			.01		T.	.10	T.		.01	T.	T.	2.16		T.			.19		6.43
St. Louis University*	....do				.47		.80			.04	1.43	1.22					T.			.31	.01		.02		T.	1.82					.19		6.31
Shelbina	....do			.02	.19			1.44			.46			.02							T.					.71	.37		.01			.04	12.90
Shelbyville	....do				.60			.92			.40													.09		.07	.50					.10	2.10	10.66
Steffenville	....do				.57		.41	.70		.30	.25			.05				T.						.19		**	.53							2.64
Troy	....do					.69		.48			.65	.18	.28								.21					1.10		.10					3.48
Union	Meramec			T.		.57		.51			1.04	.57	1.14					T.		T.	T.			.04		.15	.90					.26	3.80
Unionville	Chariton				.18		.40				.33										.09					.44	.85					.70	5.42
Valley Park	Meramec				T.	.50		.71			1.01	.50	1.05				T.				.38	T.		T.		T.	1.80					.42	1.44
Warrenton	Mississippi				1.01		.14	.45		.45	.75	.30								.02	.10		.02			.95					.52	.08	6.37
Keokuk, Ia.***	....do			T.	.54		.83	T.		.45	T.			.02			T.			T.	.25			.01	.01	.68		.13				.05	4.79
Southeast Lowlands																																	2.97
Bragg City	St. Francis					1.84		.18			.94	3.25	1.10					.45			.04		1.15			.25	.32				T.	1.95	11.47
Campbell	....do				1.86						2.75	4.57	1.24				.18	.15	.01			.81	.37		.70			.02	.02		.77	.82	14.27
Cape Girardeau	Mississippi					.76		.52			.83	4.00	1.71					.26			T.	.16	.08	T.	.17			.08		.01			2.16	10.74
Caruthersville	....do					1.40		.05			1.20	2.74	.80					.60					1.30		.12	.25					.10	2.10	10.66
Dexter	St. Francis					1.18		.22			1.67	3.13	1.21					.11		.02		T.	.53			.71	.37		.01			.04	3.74	12.90
Doniphan	Black				1.40		.18				3.13	3.53	.05				.05		T.		.50	.48		1.08			T.	T.			.82	2.95	14.17
Fisk	St. Francis					.93		.34			1.81	2.98	.83					.11		T.	.19	.53	.03	.44	.27	.18					.07	3.16	11.87
Jackson	Mississippi				.71		.62				1.52	4.82					.29		T.		.05	.29		.18	.23		.05			.71	.75	10.22
Marble Hill	....do				.46	.30	.18	.10			1.75	3.75	.50				.65						.20		.23					.77	1.08	9.97
Morehouse	....do				.77	.30	T.	T.			2.16	3.97	.63				T.	.16	T.			.17	.29	T.	.43	.30		.03			1.54	3.43	14.18
New Madrid	....do					1.40		.01			1.15	5.00	1.74	.01	.01			.37		T.	.05	.20	.77	.01	.30	.35	.01		.05			2.30	13.73
Parma	St. Francis					1.40					1.80	5.39	1.15					.35				.45	.66		.35	.05	.15				.10	1.89	13.74
Poplar Bluff	Black					1.88					1.15	3.75	1.42									.45	.40			.70	.18					.23	10.16
Sikeston	Mississippi				**	1.23	.02	.02			2.19	**	3.90					.30	.02	.03		.22	.26		.45	.46		.06			**	5.45	14.61
Cairo, Ill.***	....do				.99		.02			T.	2.90	2.65		T.			.23		.02	.05	T.	.17	.11	T.	.30	.75		.15			3.16	.50	12.00
Ozark Plateau																																	
Arcadia	St. Francis					.71		.53			.64	4.33	1.31					.02		T.			.12	.01	.03	.06	T.		.02				1.44	9.22
Birchtree (near)	Black				1.23		.23	.18			2.95	3.20											.19		.95						.27	.62	9.82
Buffalo	Osage					1.07		.43	.40	.35		2.00	.46										.91	.26		.44							6.32
Caplinger Mills*	....do				1.32		.32			.07	.18	.90					T.		T.			.05		T.	.22	T.	T.			T.		3.06
Crystal City	Mississippi					.34	T.	.52			.24	2.10	.93					.03			.02		.04	.10									5.29
Dean	Neosho				.96		T.				2.66	2.35					T.		T.		T.				1.96					.78	.34	9.05
Eldon	Missouri					.44		.29		T.	.40		.60																		.21	2.20
Farmington	St. Francis				1.26	.40					.60	2.11	2.10	.30			.30								T.	.82		.10			.63	.40	9.02
Fredericktown	....do					.72	.04	.31			.50	4.70	1.42					.22				.04	.10		.06		.05				1.29	9.45
Galena	White				1.02	.84	.05	.26			.92	2.36												.32	1.04	.24						.90	7.95
Garber	....do				1.50		.20				2.93	3.42					.02		.01		.02		.10	.16	1.29	T.					.05	.58	10.28
Goodland	Black				1.47			.40			1.95	3.00	.05					.10									.35	.05		.12		.62	.82	8.93
Greenville	St. Francis				.74		.16	.06			2.09	4.07	.25																					10.58
Hailey	White				2.25		.49				3.72	2.35					T.		.18					.45	1.15						.62	.78	11.99
Koshkonong	Black				1.11		.05				1.65	3.05										.18	.60		1.89	.18					.60	.89	10.20
Lakeside	Osage				.25	.85		.43		.11	.70	.84	.39					T.			T.	T				.27	T					.18	4.02
Lebanon	....do				.20	.89		.63			.65	2.95	.83						T.				.67	.10			.63				.10	7.65
Leeper	Black					.96		.22			1.03	3.67	1.63					.07				.17	.24	.01	.32	.13	T.		T.			1.73	10.18
Lockwood	Osage				1.83		.47			.12	.88	1.58					T.		T.		T.		.37	.76	.50	.05					T.	.11	6.67
Mountain Grove	White				1.13		.15				2.91	2.74					.06		.02		.03		.10	.04	.86			.07			1.20	.01	9.32
Neosho	Neosho				.86		.37			.03	1.10	2.47					T.				T.	T.		.41	1.51							.67	7.42
Owensville	Gasconade					.82		.28		T.	.92	.63	.97									T.		T.	.21	T.		.64	.13				.93	5.53
Rolla	Meramec					.80		.27			.96	1.36	.88											.47	.05		T.		T.	.15			.12	5.06
St. Thomas (near)	Osage					1.29		.48			.75	.81	.21								.08						.45					.35	4.42
Salem	Meramec				.72	T.	.27				2.56	2.40					.08		T.		T.		.20	.08	.28	.08		.06			.30	.31	7.34
Seligman	Neosho				1.48		.10				3.25	1.20					.15		T.		T.	T.		.58	2.78							.82	10.36
Seymour (near)	White				1.35		.45				2.48	2.93					.07				.06		.03	.18	1.34						.10	.71	9.70
Springfield***	....do				1.50		.31			.15	1.95	2.60					.03		T.			T	.02	.58	1.15	.07		T.			.71	.02	9.09
Stover	Missouri				.41	.33	.08	.60		.15	.03	.45	.13													.34						.11	2.68
Versailles	Osage				1.12		.84			.23	.15	.57										T.			T.	.55					.07	T.	8.53
Williamsville	Black					.87		.12			1.25	3.24	1.64					.13		.03	.01	.30	.25	.01		.44		.02				1.70	10.01
Willow Sprgs. (near)	White					1.16		.14			1.00	3.54	1.64					.05				.16	.13	.07	.60	.59						1.10	10.18
Southwest Plain																																	
Appleton City	Osage			T.	.61		.47			.13	.50	.40												T.	.10	.08				T.	T.	2.24
Clinton	....do				.81		.46			.09	.26	.40													.20	.40					.08		2.70
Concordia	Missouri				**	.72				**	.12					.02										.98		.10					1.94
Harrisonville	Osage				.40			.51		.02	.23														.04	.49		.11					1.80

Continued on next page

Daily Precipitation for March 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Joplin ‖‖	Neosho				.87		.27			.02	.91	1.53									.05		.04	.30	.78	.16					.06	.02	5 01
Lamar ‖‖	Neosho				.45	.40		.10		.14	.22	1.50	.08									.02		.35	.16	.14						T.	3.56
Lamonte	Missouri				.85		.20				.15						T.			T.						.62		.12				.03	1.97
Marshall	do				.66		.62	.11		.05	.12	T.								.02			.05			.23		.05					1.91
Nevada	Osage				.70		.12			T.	.38	.78							T.						.75							T.	2.73
Warrensburg	Missouri				.67		.46			.10	.22	.05						T.		T.					T.	.75						T.	2.25
Warsaw	Osage				.99		.63			.15	.18	.54					T.		T.		T.				.14	.42					.02	T.	3.07
Waverly ‖‖	Missouri				.72	.24		.80			.23												.02			.08							2.09
Northwest Plateau																																	
Bethany	Grand				T.		.08	T.		.44							T.				T.					.63		T.			T.		1.15
Chillicothe ‖‖	do				.14	T.		.30										T.			T.					.20							0.64
Conception	Missouri			T.	.16		.24			.03							T.								T.	.23		.05					0.71
Edgerton	do			T.	T.		.01	.03		.11	T.						.03						T.			.08					.03		0.29
Gallatin ‖‖	Grand				.31			.20			.17															.71	.09						1.48
Grant City	do			T.	.11		.21	T.		T.				T.			.01	T.	T.					T.	T.	T.		T.			.05		0 38
Kansas City***	Missouri			T.	.23		.04			.41	T.						T.		T.	T.			T.			T.						.01	0.69
Kidder ‖‖	Grand				.47			.17		T.	.18							.02			T.			T.		.28	T.						1.12
King City	Missouri			.03	.16			.02		.20							.03	T.					.02			.26		T.			T.		0.72
Lexington ‖‖	do				.25			.41		.06	.35															.17	.06						1.30
Maryville	do				.11		.24			T.							.04									.01		T			T.		0.40
Oregon	do			T.	.21		.25			T.							.05									.37		.05					0.93
St. Joseph***	do			.01	.30		.17			.06	T.						.01				T.		T.		T.	1.01		.02			.01	.02	1.61
Tarkio	do				.15		••	.10									.10											T.					0.35
Trenton	Grand			.07	.36		••	.53		••	.27						.02				.09		T.		T.	.74		.04			.04		2.16

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. •• Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for March 1935
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	¶	.088	.107	.158	.164	.094	••••	.112	.118	.028	.081	.030	.093	.114	.267	.413	.101	.105	.145	.071	.241	.161	.193	.216	.097	.120	.177	.081	.200	.233	.042	4.113
	Mean temperature	46	53	51	57	54	44	32	38	41	44	38	38	43	54	58	64	40	44	56	64	62	66	70	62	66	59	48	46	54	51	40	51.2
	Wind movement	98	93	65	129	91	69	128	81	109	102	69	79	83	64	123	197	149	66	115	59	113	68	105	74	70	57	82	80	102	95	102	2,917

•••• Daily evaporation included in next measurement; ice cover on tank. ¶ Estimated .063.
Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from page 11

Halos.—Solar, 1st, 4th, 8th, 18th, 23d, 26th; lunar, 12th, 14th, 15th, 16th, 17th, 18th, 19th, 20th.

Sleet.—6th, 7th, 9th, 11th, 18th, 27th, 30th.

Smoke.—Dense, 13th.

Thunderstorms.—4th, 5th, 6th, 7th, 9th, 10th, 11th, 12th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 25th, 27th, 30th, 31st.

Windstorms.—4th, (Farmington); 15th, (Warrensburg); 25th, (Cairo), very little damage done.

DUST STORMS

On March 5th, the sky was overcast with dust over a large part of the State, and gave the sunlight a queer whitish appearance. This dust was carried high aloft, and was hardly noticeable at the ground level.

On March 20th, a severe dust storm spread over the State during the afternoon and evening, being general north of the Missouri River on the 20th, and south of the river on the 21st. The dust cloud was dense at Kansas City about noon the 20th; St. Joseph about 2.30 p. m.; Columbia about 3.30 p. m.; Springfield about 6 p. m.; St. Louis about 9.00 p. m. Airplane schedules were cancelled as the visibility lowered, and other traffic was delayed. Bodily discomfort was felt by many, and all exposed surfaces became covered with a layer of dust probably as heavy or heavier than any previous deposit in Missouri. No crop damage was done in Missouri. "Muddy" rain occurred on several dates during the month.

FLOODS

Heavy rains from March 9th to 12th over the southern half of the State caused floods in the White, Black, Meramec, St. Francis, and lower Mississippi rivers.

Record high stages were reached on the Black and St. Francis rivers. Many levees were broken, practically all roads blocked, and numerous railway washouts reported. Three negro men were drowned at Sikeston, when their boat overturned. Some live stock were lost. Red Cross workers estimated that about 6000 persons were removed from the flooded areas in southeastern Missouri, southern Illinois, and Arkansas. Thousands of acres of wheat were flooded.

The Meramec at Valley Park reached 27.8 feet on the 14th, which stage is not quite as high as the last previous flood of consequence, which was in May 1933.

ERRATA

January 1935, page 2, St. Louis University mean temperature should be 33.9; departure should be + 3.7.

February 1935, page 7, Koshkonong, number of partly cloudy days should be 3.

Daily Temperatures for March 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	58	68	66	63	62	50	35	44	45	51	49	54	52	74	78	74	48	58	62	79	71	81	75	76	74	71	68	68	67	61	48	62.3
	Minimum ...	37	35	43	50	42	31	16	22	32	43	32	24	38	34	58	31	24	33	45	49	40	52	64	50	61	49	38	33	46	36	30	39.3
Columbia.	Maximum...	60	69	60	60	55	43	34	44	50	53	40	51	53	76	78	67	46	55	59	81	69	81	73	73	67	70	57	58	66	55	44	59.6
	Minimum ...	45	43	46	54	43	27	20	25	32	39	31	27	38	35	59	28	25	36	52	52	45	56	59	54	54	50	35	32	49	36	33	40.6
Fayette	Maximum...	62	70	63	58	52	42	34	44	46	52	40	53	54	76	79	70	50	55	57	81	69	81	75	75	71	70	67	59	64	60	48	60.5
	Minimum ...	44	44	53	50	34	20	20	24	32	34	26	25	45	29	55	33	22	34	47	49	38	50	60	51	56	50	39	32	45	35	32	39.0
Hannibal	Maximum...	55	67	61	59	57	49	35	38	39	49	44	46	48	65	77	71	43	55	54	83	78	78	75	71	68	64	58	55	63	60	49	58.5
	Minimum ...	34	39	39	44	46	31	21	18	31	38	31	25	38	28	50	33	24	31	47	49	46	51	62	46	53	46	36	35	44	33	31	38.1
Jefferson City §§	Maximum...	61	71	61	58	55	45	36	46	59	53	38	49	55	76	78	63	37	54	71	83	68	81	76	74	68	72	50	59	67	55	43	60.1
	Minimum ...	26	44	48	48	51	38	22	22	25	32	33	24	25	35	36	61	25	27	36	49	51	51	61	55	55	50	48	31	35	47	35	39.5
Kirksville.	Maximum...	55	65	52	57	56	45	32	34	35	43	43	50	49	71	73	79	45	54	59	75	68	78	75	74	70	68	60	54	66	65	47	58.0
	Minimum ...	33	37	35	39	38	28	14	10	29	34	31	24	34	29	55	29	20	30	42	43	40	50	56	43	53	47	34	33	40	32	28	35.2
Louisiana	Maximum...	60	65	58	64	54	52	33	38	53	55	48	45	43	62	76	64	50	57	55	82	68	80	82	79	70	60	55	50	64	55	50	58.9
	Minimum ...	31	40	31	48	50	30	26	20	30	45	34	27	33	27	57	30	26	27	45	45	42	50	65	50	50	50	39	31	42	40	33	38.5
Macon§§	Maximum...	58	67	57	58	53	34	28	37	46	48	42	49	49	72	76	47	45	54	60	80	68	79	70	76	68	65	47	57	65	41	49	56.3
	Minimum ...	34	40	39	39	41	30	15	11	23	31	31	24	32	30	38	46	22	29	37	46	39	51	61	45	53	48	42	34	44	32	29	36.0
Mexico §§	Maximum...	61	71	71	64	55	41	35	41	48	51	39	49	54	73	78	63	47	56	55	83	83	80	73	74	69	68	50	59	61	49	46	59.6
	Minimum ...	30	30	30	32	37	32	20	20	22	31	31	25	27	29	34	57	23	25	35	47	41	41	50	49	51	48	47	33	34	40	31	34.9
St. Louis	Maximum...	62	69	61	65	66	51	38	37	55	54	47	42	54	57	78	68	46	53	66	81	68	81	80	70	67	62	62	59	70	62	48	60.7
	Minimum ...	41	45	46	52	48	38	27	23	31	47	31	27	36	33	55	31	29	34	49	52	54	56	60	55	52	52	38	37	44	37	36	41.8
Unionville §§	Maximum...	56	59	55	57	50	31	15	35	40	42	40	49	45	71	72	46	45	53	58	74	69	76	67	74	69	64	48	53	66	36	47	53.6
	Minimum ...	23	34	34	34	35	26	11	11	14	31	30	24	25	29	32	44	19	20	35	45	39	41	51	33	45	48	39	32	35	32	30	31.6
Warrenton	Maximum...	63	70	64	59	58	52	38	41	42	53	50	43	52	66	77	71	45	55	63	83	73	79	77	71	71	65	64	57	68	65	44	60.6
	Minimum ...	40	41	43	51	51	33	23	20	31	41	30	22	35	30	57	39	24	31	47	49	47	50	63	51	55	49	39	32	45	44	33	40.2
Southeast Lowlands																																	
Campbell	Maximum...	53	64	67	64	67	68	65	47	60	62	60	43	51	59	74	67	54	53	69	76	72	73	82	73	69	61	68	71	71	62	59	64.0
	Minimum ...	35	43	48	48	54	53	32	28	29	49	36	30	37	35	51	50	30	34	42	59	58	62	57	40	49	44	46	32	50	41	43	43.9
Caruthersville	Maximum...	60	68	70	74	72	69	47	62	66	70	65	60	66	64	76	70	64	57	72	80	78	77	84	79	81	77	70	60	70	66	66	69.0
	Minimum ...	37	46	52	52	55	35	31	34	50	40	38	33	40	40	53	58	33	39	51	59	57	55	63	56	63	51	50	40	41	53	44	46.7
Doniphan	Maximum...	62	65	69	64	77	71	58	46	59	66	63	51	57	62	76	68	54	55	64	82	76	74	85	80	82	68	70	47	63	64	64	65.9
	Minimum ...	43	44	44	54	53	48	30	29	31	51	37	29	42	32	55	46	30	35	45	58	58	59	63	57	59	48	46	31	36	51	42	44.7
Jackson	Maximum...	60	68	71	67	72	66	66	49	58	58	59	45	59	59	75	71	53	53	66	82	77	82	87	79	78	64	62	63	67	63	59	65.7
	Minimum ...	35	33	50	53	52	48	31	26	29	49	35	28	37	30	49	52	30	31	46	53	53	58	65	56	60	51	42	31	40	49	38	43.2
Poplar Bluff	Maximum...	60	68	69	66	74	70	56	44	57	60	55	48	62	63	75	66	55	56	69	82	73	78	85	69	60	66	67	63	69	62	58	64.7
	Minimum ...	37	38	42	52	53	46	32	27	29	48	35	29	42	34	52	38	29	35	51	58	59	58	59	52	59	49	49	33	38	48	41	43.6
Sikeston	Maximum...	60	66	69	62	73	67	65	45	59	63	63	46	60	59	74	72	62	54	64	81	79	78	82	81	80	69	69	61	63	67	60	66.2
	Minimum ...	35	40	49	49	52	53	32	27	30	49	35	30	30	33	49	57	30	35	45	60	57	53	63	57	60	52	48	33	41	50	40	44.3
Cairo, Ill	Maximum...	58	66	69	68	73	70	53	44	60	64	64	45	59	58	74	66	47	55	65	78	73	76	81	70	74	63	65	58	65	62	57	63.9
	Minimum ...	38	48	54	52	56	53	32	28	33	49	34	31	42	38	56	41	33	38	52	64	55	58	66	57	57	54	43	38	47	52	42	46.5
Ozark Plateau																																	
Arcadia §§	Maximum...	59	67	68	61	73	60	43	44	56	53	44	48	59	63	76	65	53	54	68	78	66	80	82	70	81	65	61	60	68	55	54	62.4
	Minimum ...	27	39	42	50	51	44	27	24	26	31	42	25	28	29	34	55	27	28	35	54	60	56	59	55	56	47	45	30	36	45	35	40.1
Birchtree	Maximum...	57	71	65	62	71	68	63	49	51	56	50	45	53	66	75	64	53	53	73	79	73	79	79	73	79	67	63	57	65	65	62	64.1
	Minimum ...	28	47	48	51	50	56	24	24	28	50	33	28	33	31	55	33	25	33	42	48	52	55	58	55	57	47	40	28	38	47	36	41.3
Crystal City §§	Maximum...	61	72	66	68	71	51	39	41	59	54	37	49	57	65	80	75	48	56	74	83	69	83	85	74	70	65	65	60	73	64	48	63.3
	Minimum ...	30	35	41	58	52	42	29	25	26	31	36	25	27	27	33	61	28	30	35	49	56	56	56	55	61	50	46	31	42	45	36	40.5
Eldon §§	Maximum...	..	..	..	71	55	43	36	49	53	53	35	50	55	75	76	63	48	55	66	81	69	80	76	74	71	71	53	59	65	57	42	[c]60.0
	Minimum ...	..	..	..	..	52	38	21	20	24	32	31	25	30	34	36	60	25	24	36	49	49	59	53	55	46	48	33	35	45	34	[d]38.6	
Farmington	Maximum...	50	70	70	60	48	55	48	55	52	58	47	48	50	75	68	62	52	58	51	79	73	80	81	76	75	60	58	54	67	58	53	61.0
	Minimum ...	38	42	40	37	37	40	27	25	37	44	31	24	30	31	42	36	26	33	41	54	55	60	54	55	42	40	28	37	37	33	38.5	
Garber	Maximum...	60	75	70	64	76	71	45	51	58	55	53	51	62	81	77	67	52	59	75	81	73	79	82	76	79	75	69	63	71	70	54	66.9
	Minimum ...	43	31	44	50	49	44	23	30	34	49	34	26	41	35	60	40	25	35	52	50	55	56	58	57	59	47	44	30	33	47	38	42.5
Koshkonong	Maximum...	55	69	63	62	75	70	55	49	50	65	54	61	56	68	..	67	56	59	70	80	77	79	82	84	79	70	71	59	68	68	64	[a]66.2
	Minimum...	36	40	47	54	50	50	26	27	29	46	34	36	32	38	..	42	26	34	49	61	57	56	62	57	59	50	41	33	41	42	38	[a]43.1
Lebanon §§	Maximum...	59	60	69	59	57	64	41	48	51	55	38	48	57	74	74	61	51	62	73	79	71	79	70	73	74	77	56	59	67	68	..	[a]62.5
	Minimum ...	28	43	45	55	45	42	21	21	21	34	36	21	25	35	41	58	23	26	37	37	54	54	57	57	51	54	49	29	34	47	33	39.1
Mountain Grove	Maximum...	57	69	64	58	71	67	51	50	50	52	51	46	59	69	74	66	51	50	73	77	70	79	75	68	76	69	60	69	66	68	50	63.1
	Minimum ...	32	40	49	49	49	44	22	24	29	44	31	24	39	36	53	38	23	34	45	57	54	53	58	55	56	49	36	29	40	37	34	40.7
Neosho	Maximum...	59	72	72	65	64	68	40	53	58	58	52	51	60	78	78	73	48	56	73	79	76	75	75	75	75	76	76	63	63	65	65	65.8
	Minimum ...	43	44	48	49	53	34	19	31	37	49	32	25	42	39	57	38	20	38	52	55	55	56	64	59	57	48	42	29	36	37	36	42.7
Rolla	Maximum...	60	69	67	62	67	59	40	45	54	53	50	46	55	69	76	69	46	51	71	82	71	78	78	73	76	67	65	58	68	67	49	62.6
	Minimum ...	42	42	49	53	52	40	23	24	30	49	32	25	40	34	61	41	25	32	48	52	54	55	61	55	61	49	40	31	39	49	35	42.7
Springfield	Maximum...	57	71	67	60	67	67	38	49	55	52	49	49	56	75	75	64	48	54	72	77	71	76	73	70	72	71	60	55	66	67	47	62.3
	Minimum ...	47	46	55	50	48	24	20	29	35	49	31	27	43	44	59	29	25	37	52	62	56	58	59	56	58	53	38	35	44	35	34	43.2
Southwest Plain																																	
Appleton City	Maximum...	54	64	64	63	60	50	35	49	50	50	50	53	53	69	69	68	43	52	60	67	66	72	72	69	68	71	70	57	60	60	39	58.9
	Minimum ...	41	44	51	52	45	32	19	27	36	47	31	26	42	42	59	42	24	39	50	53	51	57	61	56	57	51	45	31	45	37	34	42.8
Clinton	Maximum...	55	65	71	65	58	52	44	46	50	53	51	52	53	68	76	68	47	53	62	75	75	75	73	74	68	63	62	55	60	60	40	60.3
	Minimum ...	43	40	53	52	46	32	24	26	35	48	32	25	42	42	57	32	23	37	48	52	46	53	62	54	55	47	40	31	45	36	33	41.6
Harrisonville §§	Maximum...	58	70	71	63	55	40	34	49	49	56	44	54	58	78	73	41	48	58	64	64	68	80	73	76	73	74	50	61	68	50	42	59.4
	Minimum ...	34	41	44	48	42	35	29	25	30	37	36	28	34	44	47	41	24	34	43	52	52	52	59	53	55	51	45	34	36	46	36	40.9
Lamar §§	Maximum...	61	71	71	64	55	58	40	55	56	52	43	52	61	75	75	47	50	60	73	77	70	78	75	74	75	77	52	60	65	70	42	62.4
	Minimum ...	32	47	48	53	50	43	20	21	31	38	33	27	27	40	48	45	23	26	41	58	56	56	60	59	61	55	51	33	33	48	35	41.9
Lamonte	Maximum...	..	68	65	60	56	45	34	47	48	51	53	53	55	73	75	64	48	56	58	76	69	78	72	74	70	74	68	59	63	64	43	[a]60.6
	Minimum ...	..	40	47	52	42	24	18	24	26	33	30	26	38	35	53	27	23	34	46	50	40	52	56	54	53	46	35	31	44	35	33	[a]38.2
Marshall	Maximum...	57	68	64	64	60	49	33	45	46	50	50	52	53	74	74	72	47	57	64	78	69	80	77	76	70	71	69	58	65	64	36	61.0
	Minimum ...	40	45	46	47	43	32	18	25	32	36	31	27	40	36	61	29	24	34	47	49	44	52	62	46	52	48	38	33	46	35	32	39.7
Nevada	Maximum...	58	70	71	65	57	48	37	54	54	55	53	54	59	75	75	66	47	55	72	76	69	76	75	75	72	79	64	59	69	64	40	62.7
	Minimum ...	45	48	54	53	45	30	18	28	36	47	31	26	40	45	62	32	22	37	49	55	46	57	60	54	60	49	41	30	41	37	34	42.3
Warrensburg	Maximum...	56	68	69	60	58	49	35	49	50	53	49	48	54	63	74	66	50	56	58	74	69	79	73	74	70	73	67	59	65	66	42	60.5
	Minimum ...	42	40	57	51	48	31	17	25	34	45	32	30	40	36	58	32	22	36	47	51	45	54	60	53	57	49	39	32	46	35	33	41.2
Warsaw	Maximum...	64	72	72	67	60	50	50	53	55	55	52	52	57	77	76	69	52	55	71	80	72	81	75	73	75	75	66	68	67	61	41	64.3
	Minimum ...	46	40	52	52	49	36	20	25	35	49	31	23	45	35	60	37	25	38	52	53	50	56	65	56	54	49	42	32	47	41	35	42.9
Northwest Plateau																																	
Chillicothe §§	Maximum...	59	51	56	62	53	33	38	48	51	48	47	53	57	84	75	42	51	60	61	77	71	82	71	81	73	73	53	59	71	48	46	59.2
	Minimum ...	27	35	37	40	38	29	13	14	19	32	33	25	29	34	38	42	22	28	38	46	38	40	46	47	49	49	41	33	35	38	29	34.3
Grant City	Maximum...	54	51	46	58	58	39	25	36	38	42	39	50	46	69	73	73	38	46	56	71	67	81	71	77	71	67	67	65	50	49	43	55.4
	Minimum ...	30	33	34	42	34	21	10	16	32	36	31	23	33	32	52	26	17	17	40	44	40	51	52	43	53	49	33	31	42	31	27	34.0
Kansas City	Maximum...	58	70	68	66	53	38	37	48	49	52	45	56	55	82	74	67	51	60	62	75	68	83	72	78	72	78	57	63	72	56	42	61.5
	Minimum ...	44	36	45	53	38	19	16	26	38	38	32	28	41	42	60	28	25	40	49	51	44	58	58	52	59	54	37	34	51	36	33	40.8
Kidder §§	Maximum...	57	65	55	61	47	31	31	37	44	46	41	51	50	77	74	38	45	56	58	73	66	79	68	75	69	72	51	55	69	38	43	55.5
	Minimum ...	26	36	37	37	35	27	12	12	19	30	30	25	28	34	36	35	19	22	36	44	42	43	52	45	47	47	36	32	33	35	27	32.9
Lexington §§	Maximum...	58	69	61	64	56	32	36	48	48	54	48	56	56	78	73	41	50	58	63	77	70	81	78	76	67	76	53	62	68	42	44	59.5
	Minimum ...	30	40	42	46	41	31	16	16	25	38	33	26	28	38	40	41	23	24	40	47	45	47	58	52	54	48	45	34	37	41	32	37.2
Maryville	Maximum...	54	56	46	62	57	39	27	36	42	44	40	50	50	76	78	69	45	59	58	69	68	82	75	79	72	73	65	56	70	51	44	57.8
	Minimum ...	29	34	34	43	33	19	8	16	31	37	29	32	33	34	53	24	15	33	45	45	43	50	50	45	53	49	33	30	41	31	25	34.7
Oregon	Maximum...	58	65	54	64	59	40	34	47	47	49	47	54	55	80	79	71	51	61	63	70	71	84	75	80	78	76	70	59	73	57	43	61.7
	Minimum ...	35	35	37	47	34	19	9	19	34	38	30	25	35	38	58	24	18	35	19	46	44	56	51	47	54	52	32	33	46	32	24	35.7
St. Joseph..	Maximum...	61	67	59	65	49	33	33	43	46	46	44	53	54	80	76	67	48	60	62	72	68	84	71	79	73	76	55	59	74	45	42	59.5
	Minimum ...	40	41	40	49	33	17	12	24	35	36	32	27	38	40	61	27	22	38	49	48	48	57	55	50	46	52	35	36	45	34	30	38.6
Trenton	Maximum...	56	58	52	58	50	40	30	36	36	44	48	49	50	76	74	65	38	55	59	69	66	80	69	76	72	63	52	56	69	55	45	56.3
	Minimum ...	34	35	37	38	36	27	14	14	32	34	32	27	34	32	54	31	22	34	43	52	42	52	55	48	55	50	33	34	44	34	29	36.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WBO, St. Louis, 4-22-35—945.

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CLIMATOLOGICAL DATA

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX APRIL 1935 No. 4

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

Temperatures were almost constantly below normal during the first three weeks of April. A period of warm weather occurred about the 22d to 28th. For the State as a whole, it was the coolest April since 1928. Minimum temperatures were as low as 24° at several northern and northwestern stations on the 16th, and as low as 28° to 30° in central sections, but not very much damage to crops or fruit was reported.

On several days of the month considerable dust was observed in the air, brought from areas to the westward or southwestward of Missouri. The principal dates of dense dust were the 11th and 27th. The dust was mostly in the upper air. At no time was the deposit of dust on ground surfaces greater than about the thickness of thin tissue paper.

Precipitation was considerably less than normal over most of the State; however, the Northwest Plateau had amounts averaging slightly more than normal, although some localities in that division received considerably less than normal. Deficiencies in precipitation for the month were greatest in the southern third of the State, but this was advantageous rather than otherwise, as the preceding month had given very heavy rains in that section. At the close of the month, the moisture situation was very good, except that a few counties in the northwestern corner of the State were rather dry. A feature of the precipitation of the month was the occurrence of heavy snowfall in some northeastern counties on the 7-8th. The snow melted as it fell for the most part, but at a few stations it accumulated to a depth of several inches, then quickly melted.

Although temperature conditions generally were not conducive to rapid growth, crops made satisfactory progress, as a rule. Corn planting was well advanced in some of the drier areas by the end of the month, but elsewhere not much had been planted. Wheat, oats, rye, barley, and alfalfa were in good to very good condition. Prospects for fruit were generally very good. Pastures were fair to good.

No severe winds occurred, although thunderstorms were reported at one or more stations on sixteen days.

The principal rivers maintained good stages, but were generally below normal height for April.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 52.3°, or 2.9° below normal. The highest monthly mean was 58.2° at Caruthersville, and the lowest monthly mean was 47.6° at Unionville. The highest temperature recorded was 90° at Lebanon on the 23d, and the lowest was 23° at Tarkio on the 1st. The greatest daily range was 49° at Tarkio on the 14th.

PRECIPITATION

The average precipitation for the State, 120 stations reporting, was 2.89 inches, or 0.98 inch less than normal. The greatest local monthly amount was 6.11 inches at Poplar Bluff, and the least local monthly amount was 1.00 inch at Willow Springs. The greatest amount in any twenty-four hours was 3.22 inches at Poplar Bluff on the 1st. The average number of days with 0.01 inch or more of precipitation was 9. The snowfall for the State averaged 0.7 inch, or 0.1 inch more than normal. The greatest monthly snowfall recorded was 10.0 inches at Shelbyville and Steffenville.

MISCELLANEOUS PHENOMENA

Dust.—Dense, 10th, 11th, 26th, 27th. Light, 1st, 5th, 13th, 14th, 15th, 16th, 17th, 18th, 25th, 28th, 30th.

Fog.—Dense, 1st, 6th, 13th, 18th, 19th.

(Continued on page 19)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.94	30.26	13	29.64	7	9.3	30	nw.	14	78	61	63	42
Kansas City.....	29.94	30.33	15	29.55	10	11.3	43	nw.	14	79	54	54	54
St. Joseph.....	29.94	30.33	15	29.53	10	10.0	35	nw	14	77	54	53	53
St. Louis.....	29.94	30.24	13	29.60	7	11.8	35	nw.	15	78	61	68	48
Springfield.	29.93	30.28	15	29.61	6	11.1	28	nw.	14	79	63	60	39
Cairo, Ill.....	29.93	30.19	13	29.56	7	9.6	26	nw.	15	76	57	59	49
Keokuk, Iowa..	29.98	30.29	3	29.69	11	9.0	30	n.	15	75	56	61	45

COMPARATIVE DATA FOR APRIL

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	57.9	+ 2.7	94	20	1.83	−2.04	3.91	0.80	....	5	..	..	..
1889....	55.7	+ 0.5	90	27	2.52	−1.35	5.40	0.67	....	8	..	..	..
1890....	56.2	+ 1.0	93	25	3.17	−0.70	7.00	0.00	....	8	..	..	..
1891....	56.8	+ 1.6	93	15	3.90	+0.03	9.50	0.90	T.	9	..	..	..
1892....	53.1	− 2.1	90	24	5.66	+1.79	9.14	2.50	0 0	11	9	8	13
1893....	53.9	− 1.3	95	19	7.84	+3.97	17.49	1.24	0.0	12	8	9	13
1894....	56.1	+ 0.9	95	20	3.17	−0.70	6.84	0.90	T.	8	12	10	8
1895....	57.9	+ 2.7	100	24	1.95	−1.92	4.41	0.02	T.	7	14	8	8
1896....	61.9	+ 6.7	92	17	3.51	−0.36	7.42	1.11	0.0	9	11	12	7
1897....	54.4	− 0.8	88	21	4.55	+0.68	8.21	1.20	T.	10	10	11	9
1898....	52.5	− 2.7	90	14	3.65	−0.22	6.65	0.87	T.	10	12	9	9
1899....	54.0	− 1.2	96	6	3.70	−0.17	6.88	1.62	3.8	8	12	9	9
1900....	56.7	+ 1.5	89	21	3.36	−0.51	6.76	1.34	0.7	9	11	10	9
1901....	53.3	− 1.9	94	24	2.85	−1.02	5.41	0.89	1.8	8	14	7	9
1902....	53.9	− 1.3	95	19	2.66	−1.21	7.13	0.72	T.	11	13	11	6
1903....	55.9	+ 0.7	91	26	3.54	−0.33	7.94	1.32	1.2	9	11	10	9
1904....	49.0	− 6.2	84	19	5.75	+1.88	11.03	2.25	2.7	9	15	6	9
1905....	54.9	− 0.3	92	20	3.19	−0.68	7.79	0.07	0.3	6	14	8	8
1906....	59.5	+ 4.3	93	22	2.24	−1.63	4.31	0.91	0.0	6	17	7	6
1907....	48.7	− 6.5	89	16	3.43	−0.44	5.75	1.08	T.	8	11	8	11
1908....	56.6	+ 1.4	90	18	5.30	+1.43	12.44	0.37	T.	11	11	8	11
1909....	54.8	− 0.4	93	19	4.35	+0.48	8.49	1.31	T.	8	13	9	8
1910....	54.8	− 0.4	97	21	3.51	−0.36	6.66	1.30	0.9	11	12	7	11
1911....	53.5	− 1.7	91	20	4.99	+1.12	9.30	1.29	T.	10	12	8	10
1912....	56.0	+ 0.8	89	24	5.98	+2.11	12.18	1.18	0.7	10	13	7	10
1913....	56.2	+ 1.0	94	25	3.33	−0.54	4.98	1.25	T.	7	16	5	9
1914....	55.2	0.0	91	18	3.14	−0.73	7.58	0.75	T.	8	12	7	11
1915....	61.9	+ 6.7	96	18	2.03	−1.84	4.27	0.90	T.	7	16	8	6
1916....	53.5	− 1.7	93	21	3.23	−0.64	5.70	1.20	1.9	10	11	8	11
1917....	53.2	− 2.0	89	19	5.97	+2.10	10.82	3.47	1.2	12	12	6	12
1918....	50.8	− 4.4	93	19	5.10	+1.23	12.14	1.64	0.9	11	12	6	12
1919....	55.3	+ 0.1	94	20	3.01	−0.86	5.72	1.48	T.	9	12	7	11
1920....	50.2	− 5.0	89	4	3.95	+0.08	8.19	1.41	4.8	11	11	7	12
1921....	56.0	+ 0.8	91	19	5.37	+1.50	8.42	1.86	1.1	10	13	7	10
1922....	57.3	+ 2.1	91	24	6.21	+2.34	14.34	1.72	T.	11	13	6	11
1923....	54.2	− 1.0	92	14	3.12	−0.75	6.08	1.12	0.4	8	14	8	8
1924....	56.6	+ 1.4	95	11	2.07	−1.80	6.32	0.48	T.	6	14	8	8
1925....	61.0	+ 5.8	92	24	4.11	+0.24	8.14	1.90	0.0	10	12	9	9
1926....	49.9	− 5.3	91	11	2.46	−1.41	4.96	0.50	2.4	8	14	6	10
1927....	57.7	+ 2.5	94	18	8.46	+4.59	18.25	3.95	T.	14	10	7	13
1928....	51.6	− 3.6	88	16	4.79	+0.92	9.62	1.01	0.2	8	13	7	10
1929....	57.4	+ 2.2	96	27	6.15	+2.28	10.58	3.51	0.0	12	11	8	11
1930....	59.1	+ 3.9	96	23	2.03	−1.84	7.72	0.22	0.0	8	14	8	8
1931....	54.8	− 0.4	90	22	3.07	−0.80	6.23	1.01	T.	9	14	6	10
1932....	57.6	+ 2.4	95	22	2.57	−1.30	5.79	1.12	0.0	8	14	8	8
1933....	54.9	− 0.3	88	22	3.53	−0.34	7.85	0.71	0.7	10	11	9	10
1934....	56.5	+ 1.3	90	24	2.41	−1.46	4.70	0.65	T.	7	16	8	6
1935....	52.3	− 2.9	90	23	2.89	−0.98	6.11	1.00	0.7	9	9	7	14
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
Period.	55.2	.....	100	4	3.87	.....	18.25	0.00	0.6	9	12	8	10

Climatological Data for April 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	52.2	− 2.0	82	25	28	16	41	3.47	−0.08	0.73	0.5	12	11	1	18	ne.	O. K. Benecke
Clifton Hill	Randolph	731	36	51.7	− 1.8	82	25	27	16	38	3.10	−0.76	1.25	6.0	11	10	7	13	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	52.1	− 2.8	83	25	30	16	40	2.66	−1.11	0.97	T.	12	6	9	15	n.	U. S. Weather Bureau
Downing	Schuyler	876	14	49.6	− 3.6	79	25	24	16	41	2.64	−1.12	1.19	0.2	8	13	7	10	e.	James Taylor
Elsberry	Lincoln	449	4	51.0	.....	81	26	28	16	40	2.78	.....	0.69	0.2	9	8	9	13	se.	Ray E. Mills
Fayette	Howard	680	55	51.7	− 2.5	83	25	26	16	39	2.66	−0.96	1.05	4.0	8	3	14	13	s.	Harry P. Mason
Fulton	Callaway	818	47	51.0	− 3.6	82	25	28	16	39	2.94	−1.24	0.98	0.4	10	10	8	12	ne.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	3.15	−0.68	0.98	5.0	8	8	12	10	se.	W. L. Harker
Hannibal	Marion	759	43	50.6	− 2.8	80	25	27	16	40	2.97	−0.22	0.85	5.0	9	4	9	17	se.	Hannibal Water Dept.
Jefferson City	Cole	557	45	51.7	− 4.3	82	25	30	16	39	3.44	−0.41	1.09	T.	11	6	15	9	ne.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	48.9	− 3.0	80	25	25	16	31	3.55	−0.04	1.09	3.5	8	9	9	12	e.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	3.59	.....	1.10	4.2	10	11	8	11	e.	J. Robert Hall
Louisiana	Pike	469	41	51.0	− 3.0	80	14†	30	15†	38	3.07	−0.37	1.07	T.	7	13	8	9	e.	Stark Bro's Nurseries
Macon	Macon	875	36	48.2	− 4.9	82	25	25	16	34	3.10	−0.26	0.80	8.0	9	14	5	11	e.	W. C. Brown
Mexico	Audrain	800	46	49.6	− 4.2	82	25	26	16	39	3.29	−0.37	1.20	T	10	18	3	9	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	2.82	−0 89	0.97	2.0	7	10	4	16	n.	J. S. Conway
St. Charles	St. Charles	520	47	51.6	− 4.0	84	26	28	16	35	3.04	−0.61	1.05	T.	13	15	5	10	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	52.4	− 3.7	84	26	32	16	30	2.50	−1.31	0.93	T.	13	9	7	14	ne.	**Section Center**
St. Louis University	St. Louis City	578	23	52.4	− 2.8	83	26	32	16	29	2.86	−1.28	0.96	0	18	10	7	13	ne.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	3.18	−0.40	1.11	8.0	9	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	37	49.8	− 3.3	80	25	27	15†	39	4.69	+1.00	2.00	10.0	9	11	10	9	s.	Frank Hall
Unionville	Putnam	1,062	42	47.6	− 3.4	81	25	24	16	34	2.98	−0.74	0.81	0.8	8	9	7	14	e.	John H. Schick
Warrenton	Warren	816	53	51.6	− 3.2	80	25	26	16	45	2.97	−1.19	0.95	T.	11	7	8	15	ne.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	49.4	− 2.9	79	25	28	16	33	2.48	−0.51	0.77	2.5	9	3	9	18	n.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**50.7**	**− 3.3**	**84**	**26**	**24**	**16**	**45**	**3.05**	**−0.73**	**2.00**	**2.5**	**10**	**9**	**8**	**13**	**e.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	54.8	− 3.9	84	26	31	16	30	2.63	−1.63	0.82	0	8	13	4	13	n.	Jeff. King
Caruthersville	Pemiscot	265	39	58.2	− 2.0	89	26	37	15†	32	2.16	−2.29	0.55	0	10	11	3	16	n.	Sam Smith
Doniphan	Ripley	344	31	56.0	− 2.5	85	26†	28	16	36	1.24	−4.14	0.43	0	8	7	4	19	se.	W. W. Martin
Jackson	Cape Girardeau	428	44	55.5	− 1.6	88	26	29	16	43	1.63	−2.91	0.81	0	13	4	4	22	s.	John G. Putz
Marble Hill	Bollinger	470	40	55.6	− 1.6	85	26	31	16	36	1.99	−2.73	0.92	0	10	13	6	11	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	3 11	−1.97	1.62	0	8	12	5	13	nw.	John A. Spence
Poplar Bluff	Butler	339	30	55.8	− 3.7	84	26	30	16	34	5.37	+0.67	3.22	0	10	15	3	12	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	56.3	− 1.8	87	26	32	16	37	3.96	−0.52	1.90	0	10	6	11	13	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	63	56.4	− 1.7	85	26	37	16	23	3.69	−0.03	2.02	0	12	5	9	16	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**56.1**	**− 2.4**	**89**	**26**	**28**	**16**	**43**	**2.67**	**−1.92**	**3.22**	**0**	**10**	**10**	**5**	**15**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	54	52.0	− 3.3	83	26†	29	16	39	1.77	−2.91	0.48	0	10	12	6	12	n.	Arcadia College
Birchtree (near)	Shannon	1,000	40	53.8	− 3.3	82	25†	28	16	37	1.66	−3.14	0.76	0	4	12	3	15	se.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	3.17	.....	1.03	0	5	12	2	16	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	3.46	.....	1.07	T.	9	9	10	11	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	52.4[a]	.....	86	26	28	16	39	3.47	.....	1.38	0	11	8	6	16	nw.	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	31	54.2	− 2.5	84	24	26	13	39	3.19	−1.41	0.95	0	8	8	6	16	ne.	H. E. Dean
Eldon	Miller	934	40	51.2	− 4.2	87	25	28	16†	45	2.67	−1.89	1.04	T.	7	5	16	9	n.	E. H. Shepherd
Farmington	St. Francois	918	24	51.1	− 5.8	89	28	26	16	38	1.15	−3.09	0.50	0	5	9	6	15	sw.	H. O. Miller
Garber	Taney	950	0	56.6	.....	82	24	32	13†	41	1.94	.....	0.80	0	8	8	4	18	e.	William H. Durham
Goodland	Iron	1,000	42	52.6	− 2.4	81	26	26	16	41	2.93	−2.07	0.98	0	6	10	8	12	n.	F. M. Adams
Greenville	Wayne	381	26	53.7	− 2.9	85	26†	25	16	41	2.51	−2.48	0.65	0	7	11	5	14	sw	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	2.20	−2.19	1.13	0	5	10	9	11	ne.	A. W. Madison
Koshkonong	Oregon	958	34	56.2	− 2.3	83	28	34	8†	35	1.83	−3.44	0.58	0	10	11	5	14	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	51.6	− 3.9	90	23	27	16	39	3.01	−1.35	1.02	T.	6	14	3	13	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	54.2	− 2.3	82	24	31	8	37	3.11	−1.20	0.88	T.	7	12	10	8	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	52.7	− 2.2	79	25	29	16	37	2.18	−2.78	0.59	T.	12	13	5	12	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	55.0	− 3.3	80	24†	28	13	44	4.09	−0.35	1.20	0	15	10	10	10	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	53.6	− 2.3	80	25	30	16	44	2.69	−1.93	0.70	T.	12	5	6	19	nw.	F. H. Lane
Salem	Dent	1,173	31	52.6	− 3.4	81	28	29	16	40	2.70	−1.93	1.06	0	9	11	5	14	s.	E. E. Martin
Seligman	Barry	1,542	34	54.8[b]	− 1.8	79	24	28	8	35	2.31	−2.03	0.79	0	6	8[b]	10[b]	10[b]	e.	Floyd E. Fawver
Seymour (near)	Webster	1,642	29	52.4	− 3.3	78	25	30	16	37	1.99	−2.30	0.75	T.	11	8	8	14	se.	A. L. Hailey
Springfield	Greene	1,324	47	53.2	− 2.8	79	24	32	8	30	1.86	−2.00	0.69	T.	11	7	6	17	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	53.2	.....	83	25	28	16	39	2.76	−1.68	1.16	T.	10	8	5	17	ne.	I. M. Wilson
Division means	**and extremes**	.....	..	**53.4**	**− 3.1**	**90**	**23**	**25**	**16**	**45**	**2.54**	**−2.26**	**1.54**	**T.**	**8**	**10**	**6**	**14**	**se.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	52.8	− 3.3	83	24	31	8†	29	3.58	−0.83	1.95	0.1	9	4	20	6	se.	W. G. Bigelow
Clinton	Henry	765	42	51.8	− 4.5	84	25	28	8	39	4.55	+0.24	2.04	0	10	5	14	11	se.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	3.43	+0.11	1.04	0	13	9	2	19	.....	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	51.0	− 2.9	83	14	28	15	47	3.10	−0.44	1.42	0	12	6	4	20	sw.	John H. Patterson
Lamar	Barton	980	47	52.5	− 4.1	83	24	31	8	42	3.33	−1.15	0.90	0	8	11	5	14	ne.	Jesse A. Mann
Lamonte	Pettis	867	34	51.2	− 4.0	81	25	28	16	32	3.17	−0.74	1.15	T.	11	9	10	11	sw.	J. E. Wheeler
Marshall	Saline	779	48	51.9	− 2.9	83	25	28	16	45	3.38	−0.46	0.84	T.	9	9	8	13	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	53.2	− 2.5	81	24	31	8	30	4.44	+0.24	1.81	T.	9	9	4	17	ne.	George A. Kaupp
Warrensburg	Johnson	878	48	51.6	− 4.5	77	22†	29	3†	37	3.06	−0.29	1.53	1.0	9	8	9	13	ne.	E. A. Markey
Warsaw	Benton	687	34	54.6	− 2.1	81	24	30	16	38	3.72	−0.86	1.80	0	11	7	11	12	w.	Everett Martin
Division means	**and extremes**	.....	..	**52.3**	**− 3.4**	**84**	**25**	**28**	**8†**	**47**	**3.54**	**−0.51**	**2.04**	**0.1**	**10**	**8**	**9**	**13**	**ne.**	
Northwest Plateau																				
Bethany	Harrison	916	40	49.4	− 2.1	77	14†	25	16	35	3.10	−0.17	1.10	1.0	8	8	11	11	se.	A. S. Cumming
Chillicothe	Livingston	779	26	49.5	− 3.6	81	23	26	16	44	4.46	+0.17	1.81	0	11	15	4	11	se.	Wm. J. Olenhouse
Conception	Nodaway	980	46	48.8	− 3.4	76	24	24	16	30	2.76	−0.09	1.16	T.	8	2	17	11	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	50.4[a]	− 3.4	80	22	24	16	40	2.77	−0.68	1.19	1.5	9	13	3	14	e.	Fred L. Stiff
Grant City	Worth	1,134	31	48.4	− 3.8	76	22	25	16	29	1.89	−1.13	0.57	T.	8	6	11	13	se.	Howard Rybolt
Kansas City	Jackson	963	46	52.2	− 2.6	82	14	31	3	43	2.30	−0.84	0.95	1.0	11	4	10	16	n	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	49.0	− 3.2	78	22	24	16	33	3.39	+0.21	0.87	0.5	10	8	10	12	ne.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	3.89	+0.62	1.19	3.0	9	2	10	18	e.	John M. Martin
Lexington	Lafayette	688	50	51.0	− 3.6	79	22†	28	16	40	4.12	+0.40	1.63	2.0	12	12	9	9	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	48.9	− 1.9	80	22	25	15†	32	2.12	−0.93	0.68	1.0	8	9	5	16	e.	R. B. Montgomery
Oregon	Holt	1,048	79	50.6	− 2.1	81	14	25	15	36	4.51	+1.19	2.09	0	9	10	11	9	se.	Mina Wright
St. Joseph	Buchanan	987	25	51.0	− 3.4	81	14	29	15	46	3.10	−0.11	1.11	T.	10	9	7	14	se.	U. S. Weather Bureau
Tarkio	Atchison	916	32	47.8	− 4.4	81	22	23	1	49	1.65	−1.50	0.77	0	6	8	10	12	se.	Albert Volker
Trenton	Grundy	822	39	49.4	− 3.3	77	22†	26	16	36	2.89	−0.58	0.92	T.	9	7	14	9	ne.	W. H. Estes
Division means	**and extremes**	.....	..	**49.7**	**− 3.1**	**82**	**14**	**23**	**1**	**49**	**3.18**	**+0.08**	**2.09**	**0.7**	**9**	**8**	**9**	**13**	**se.**	
State means	**and extremes**	.....	..	**52.3**	**− 2.9**	**90**	**23**	**23**	**1**	**49**	**2.89**	**−0.98**	**3.22**	**0.7**	**9**	**9**	**7**	**14**	**se.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for April 1935

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri	.03				.04		.78	.12		.01	.55	.02					.47	.26							.05		.03		.61			2.97
Bowling Green	Mississippi	.04						.58	.06			.60	.07				T.	.10	.51							.06				.51			2.53
Brunswick	Grand	.04						.60	.07		.15	.52	.10					.07	.52	.03						.73	.14			.50			3.47
Canton	Mississippi							.32	.34			.73	.11					.03	1.57							.34				.31			3.75
Clifton Hill	Chariton	.03						1.25		.01	.26	.25						.18	.38						.35		.03		.10	.26			3.10
Columbia***	Missouri	.01			T.	.03	.40	.57		.01	.36	.05						.82	.04				T.		.06		.01		.30				2.66
Downing	Mississippi							.30			.39	.24	.02					.01	1.19			T.			.13		T.		.36				2.64
Edina	do	T.						.30	.08		.08	.81	.15					T.	1.30							.31				.16			3.19
Elsberry	do	.07						.69	.07		.57	.15	.06					.39	.23				T.				T.			.55			2.78
Farber	do	.11						.22	.32			.62	.10					.60										T.		.62			2.59
Fayette	Missouri	T						1.05			.22	.05						.44	.16						.14		T.		.09	.51			2.66
Fulton	do	.06	T.			.03		.90	.04	.05	.30	.04						.69	.29											.54			2.94
Gorin	Mississippi	.05						.65			.39	.48						.10	.88			T.			.18		T.		.42				3.15
Hannibal	do	.03				.60	.25		.03	.80	.04	T.							.67				T.	T.		.11		T.		.44			2.97
Hermann	Missouri	.08				.08	.03	.60	.04		.03	.97	.07	.04				.20	1.26	.11										.50			4.01
Jefferson City	do	.12				.32	T.	1.09	.10		.02	.22	.08	.10				.30	.34											.75			3.44
Kahoka	Mississippi	.12						.45	.25		.25	.50	.25						.95							.35				.32			3.44
Kirksville	do	.10						.74			.60	.24						.14	1.09						.27				.37				3.55
LaBelle	do							.20	.60		.02	.60	.08						1.60							.35				.30			3.75
Linneus	Grand	.05						1.10			.24	.69	T.					.17	.41							.44	.18	.01		.30			3.59
Louisiana	Mississippi							1.07			••	.85						.45	.20										••	.50			3.07
Lucerne	Grand	.10						.43			.13	.01							.41						.18		.21			.40			1.87
Macon	Chariton	.03						.73			.04	.47	.14					.09	.80							.16				.64			3.10
Madison	Mississippi							.52	.32			.46	.09					.10	.37							.13				.45			2.44
Memphis	do							.74	T.		T.	.60	.16						.95						T					.47			2.92
Mexico	do							1.20	.10		.02	.21	.08	.03				.50	.25	.05										.85			3.29
Milan	Grand	.04						.68			.18	.78						.12	.80							.48	.05			.82			3.90
Monroe City	Mississippi							.97			.32	.28						.23	.40						.19				.43				2.82
New London	do		.14						.35		.27	.07	.09	.43					.73											.66			2.74
Palmyra	do								.93		T.	.38	.06						.60	.02						.14				.45			2.58
Paris	do	.05						.72	.04		.05	.64	.10						.44				.02			.13				.44			2.63
Perry	do							.55			T.	.32	T					.14	.44				T.			.15				.37			1.97
Philadelphia	do							.84	1.04		.19	.52							1.10	.10						.08				.50			4.37
St. Charles	Missouri	.01				.02		.72	.05		.02	.27	.05	.01				.11	1.05	.01									.34	.38			3.04
St. Louis**	Mississippi	.01	T	T.		.18	.10	.49	.01	T.	.12	.07	.01					.72	.23	T							.14		.03	.39			2.50
St. Louis University*	do	.01	T.			.25	.23	.56	.01		.22	.01	.01					.74	.22								.15		.05	.40			2.86
Shelbina	do	.15							.35	1.11		.02	.33	.03					.56							.26				.37			3.18
Shelbyville	do							••	.84		••	••	.65					.28	.73						.27				.45			3.22
Steffenville	do	.10						2.00			.32	T.	.37					.25	.70						.30		T.		.40	.25			4.69
Troy	do	.05						.61				.79	.04					.03	.69											.32			2.53
Union	Meramec	.02				.21	.15	.59	.04		T.	.15	.12	.02				.11	1.10									T.		.78			3.29
Unionville	Chariton	.15						.40	T.		.17	.81							.56							.28	.09			.52			2.98
Valley Park	Meramec			T.		.15	.07	.57	.10		T.	.31	.06	.02				T.	.90	T.								T.		.63	T.		2.81
Warrenton	Mississippi	.05				.06		.61	T.		.38	.30	.04					.95	.17							.02		.05	.34			2.97
Keokuk, Ia.***	do	T.					T.	.45		.02	.60	.18	.01					.70	.08			T	T.		.23		T.		.21	T.			2.48
Southeast Lowlands																																	
Bragg City	St. Francis	.05	.45	.01	T.	T	.31	.04	T.			.27	T.	T.					T		.49	T.				.85							2.47
Campbell	do		.45			.82	.28			.10	.10							.03		.50								.35					2.63
Cape Girardeau	Mississippi			.14		.03	.06	.86	.05			.36		.10					.12		.02							.11		.17	T		2.02
Caruthersville	do		.25	.08		.42	.08	.05			.30		.03					.05		.35					.55								2.16
Dexter	St. Francis			T.		.15	.11	.76				T.							.13	T.	T.							.03		.04			1.22
Doniphan	Black		.08			.43	.12	.13					.05							.35	.03									.05			1.24
Fisk	St. Francis		T.	.04		.58	.12	.83				T.	T	.27			.34		.07	T.									.11				2.36
Jackson	Mississippi		.03			.03	.11	.81	.03			.14	.04					.02	.05	.03						.06	.05			.23			1.63
Marble Hill	do		.08			.14	.19	.92	.10			.20	.05						.08	.05										.18			1.99
Morehouse	do		.11			1.62	.05	.44				.20							.10	.29								30					3.11
New Madrid	do		.01	.45	T.	.92	.45	.22	.05	.01		.27	T.	.05					.26	.01	.60						.25	T.	.01	T.			3.56
Parma	St. Francis			.08		.31	.15	.12				.12		.02					.14	.15	.37							.48					1.94
Poplar Bluff	Black	3.22	.05			.83	.13	.78				.08		.05						.11	.05							.07					5.37
Sikeston	Mississippi			.04		1.90	.08	.65	.02			.40		.02					.20	.40								.25					3.96
Cairo, Ill.***	do		.01	T.	T.	2.02	.54	.21	.02		.01	.10	.02					T.	.15	.15						.03	.43		T.				3.69
Ozark Plateau																																	
Arcadia	St. Francis			.05		.06	.14	.40	.10			.25	T.	.03					.48	T.	T.							.02		.24			1.77
Birchtree (near)	Black					.45		.76				.05																		.40			1.66
Buffalo	Osage					.98		1.03				.19							.26											.71			3.17
Caplinger Mills*	do					.92	1.07	.12			.12	.02						.09							T.		.36		.35	.41			3.46
Crystal City	Mississippi	.02				.34	.35		.40			.13	.04					.06	1.32								.39			.39	.03		3.47
Cuba	Meramec					2.01		1.10										1.03		.40										.73			5.27
Dean	Neosho		T.	T.		.42	.35	.25		T.	.30	T						T.		.48						.26	.95		.18				3.19
Eldon	Missouri	.01				.46		1.04		.14	.39							.21												.42			2.67
Farmington	St. Francis					.10	.40	.15				.40						T.		T								.10		T.			1.15
Fredericktown	do			.03		T.	T.	.52				.23							.85									.11		.31			2.05
Galena	White						.23	.48	.10			.27	T.							.49							.10			T.			1.67
Garber	do	T	T.	T.		.80		.42		T.		.10	.03					T.	.01	.53							.01			.04			1.94
Goodland	Black		.05			.38		.55					.27						.70											.98			2.93
Greenville	St. Francis		T.			.26	.65	.44			T.		.28						.60	.06										.22			2.51
Hailey	White	T.	T.	.08	T.	.68	T.	T.	T.	.18	.13	T.								T.							1.13						2.20
Koshkonong	Black		.04	.03		.58	.22	.54	T		.05	.08	.04						.05	.20													1.83
Lakeside	Osage	.03				.42	.01	1.44	.10			.15	T.					.07	.24								T.	.01		.53			3.00
Lebanon	do		T.			.63		1.02		T.	.05	.41	T.					T	.50								T.			.40			3.01
Leeper	Black		.02	T.			.32	.63				.18		.07					.10	.11	.11									.24			1.78
Lockwood	Osage		T.		T.	.38	.25	.40		T.	.30							.15	T							T.	.75		T.	.88			3.11
Mountain Grove	White		.05			.42	.56	.03		.02	.13	T.	.02					.12	.01	T.						.41	T.		.14	.27			2.18
Neosho	Neosho	.04	T.	.02		.41	.13	.54		.01	.40	.20	.01					.43	.16	.28						.04	1.20		.22				4.09
Owensville	Gasconade				T.	.31	.03	.53	T.			.14	.13					.32	.52	.08									.91	T.			2.97
Rolla	Meramec					.25	.35	.49	.13		.03	.17	.04	.05				.05	.40	.03										.70			2.69
St. Thomas (near)	Osage	T.				.48		1.10	.14			.21						.12	.21											.38			2.64
Salem	Meramec		.03			1.06		.46	.02			.04	.04					.08	.64	T							T.		T.	.33			2.70
Seligman	Neosho					.08		.56			.32	T.						T.	T.	.79						.08	.48						2.31
Seymour (near)	White		.03			.33		.75			.04	.27	.05					.23		.10							.01		.06	.12			1.99
Springfield ***	do	T.	.01			.37	.56	.13		T.	.22	T.	.05					.14	.02	T.							.05		.03	.28			1.86
Stover	Missouri					.54		1.15	.04				.02					.18	.02							.75							2.70
Versailles	Osage	.02				.54		1.16		T.	T.	.21	T.					.37	.02						.03		.02		.03	.36			2.76
Williamsville	Black			.18		.12	.26	.84				.10		.05					.15	.18	.11									.16			2.15
Willow Sprgs. (near)	White			.02		.10	.30	.20			.05	.13		.01					.07									.02		.10			1.00
Southwest Plain																																	
Appleton City	Osage	T.	T.			.58	.05	1.90			.04	T.						.16	T.						T.	.23	.25		.02	.35			3.58
Clinton	do					.42		2.04			.30	.02						.21							.32	.03	.82		.07	.32			4.55
Concordia	Missouri	••	.14			.16		••	1.04		.04	.36							.54	.08						.53	.18			.29	.07		3.43

Continued on next page

Daily Precipitation for April 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																
Harrisonville‖	Osage	.04				.21		1.35	.07		.01	.08						.04	.11						.05	.32	.24		T.	.58			3.10
Joplin‖‖	Neosho		T.			.23	.25	.22			.38							.05	.22	.03					.11	.93			.18			2.60
Lamar‖	Neosho			T.		.75		.78	.12		T	.20							.41							.30	.05		.72			3.33
Lamonte	Missouri	.02						1.15			.48	.05						.26	.06						.62	.04	.05		.22	.22			3.17
Marshall	do	.05						.84		T.	.25	.06						.45	.44						.61		.15			.53			3.38
Nevada	Osage	.04				1.20	.80	1.01			.18	.03														.06	.42		T.	.70			4.44
Warrensburg	Missouri	T.				.25		1.53		T.	.28	T.						.20	.04						.42		.13		.02	.19			3.06
Warsaw	Osage	.02	T.			.44		1.80	.07	T.		.27	.02					.18	.30						.35	.01	T.		T.	.26			3.72
Waverly ‖	Missouri	.05						.92	.07		.06	.35	.06					.10	.91	T.						.36	.53	.03		.62			4.06
Northwest Plateau																																
Bethany	Grand	T.						.55			.20	.06						.46	.64						.19	.47			.53				3 10
Chillicothe ‖‖	do	.06	T.					1.31			.38	.06	.08					.14	.56	T.						.91	.29	T.	.19	.48			4.46
Conception	Missouri							.78		.17	.06	.11						T.	1.16					T.	.04	.03			.41		T.		2.76
Edgerton	do	T.						1.19		.08	.01	.03						.10	.15						.33	.07			.81				2.77
Gallatin ‖	Grand	.12						.86			.20	.14	.04						.48							1.87	.04		.42	.51			4.68
Grant City	do	T.						.57		.06	.15	.06							.47						.18	.14			.26				1.89
Kansas City***	Missouri	T.			T.		.30	.65		.04	.01	.01	T.				.02	.16	T.					T.	.15	.01	.01		.94				2.30
Kidder ‖‖	Grand	T.						.87	.05		.20	.04						.20	.43			T.				.77	.03		.07	.73			3.39
King City	Missouri							1.19		.22	.09	.07						.57	.66						.22	.21			.66		T.		3.89
Lexington ‖	do	.08						1.43	.20	T.	.13	.20						.08	.35	.02						.77	.16		.05	.65			4.12
Maryville	do							.59		.16	.08	.06							.68						.06	.10			.39				2.12
Oregon	do	T.					T.	.95		.13	.03	.10						1.05	1.04					T.	.15	.23			.83		T.		4.51
St. Joseph***	do	.02					.51	.60		.17	.03	.04					T.	.45				T.		T.	.29	.26			.73		T.		3.10
Tarkio	do							.77		.22	.15	.08														.15			.28				1.65
Trenton	Grand	.04						.46			.16	.01						••	.60						.61	.09			.92				2.89

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. •• Precipitation in the next following measurement; separate dates of fall not recorded. • Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for April 1935
(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.006	.053	.053	.065	.152	.075	.063	.011	.099	.115	.121	.012	.072	.169	.364	.195	.160	.056	.044	.117	.133	.189	.268	.358	.278	.204	.187	.214	.086	.234	....	4.153
	Mean temperature	45	44	42	52	54	50	39	43	46	53	45	49	48	60	42	47	50	50	56	54	57	64	63	66	74	62	66	61	56	51	..	53.0
	Wind movement	50	74	80	55	85	64	100	131	67	121	161	168	101	57	178	104	64	71	43	45	38	54	57	98	109	44	89	74	51	78	..	2,511

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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Frost.—Freezing temperatures occurred rather generally as late as the 16th. Light frost occurred on the 30th.

Hail.—4th, 5th, 10th, 11th, 24th, 25th.

Halos.—Solar, 3d, 4th, 8th, 9th, 13th, 14th, 17th, 19th, 20th, 23d, 24th, 25th, 28th, 30th. Lunar, 13th, 14th, 18th, 20th.

Sleet.—6th, 7th, 9th.

Smoke.—Dense, 5th. (At St. Louis).

Thunderstorms.—2d, 3d, 4th, 5th, 6th, 7th, 10th, 11th, 17th, 18th, 24th, 25th, 26th, 27th, 28th, 29th.

Daily Temperatures for April 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	52	50	48	61	63	57	51	51	49	53	54	58	61	76	71	58	55	53	63	67	71	78	78	73	82	75	69	69	61	60	..	62.2
	Minimum ...	40	34	31	31	48	41	32	31	39	42	42	41	32	46	30	28	45	45	42	39	44	51	53	57	60	59	53	50	45	36	..	42.2
Columbia.	Maximum...	51	47	46	63	63	51	43	47	49	57	55	53	60	80	48	56	52	52	61	65	68	78	80	73	83	70	69	72	60	62	..	60.5
	Minimum ...	41	36	31	35	51	43	35	32	39	44	42	41	33	40	31	30	43	45	48	42	47	54	55	59	63	62	55	52	45	36	..	43.7
Fayette	Maximum...	53	49	48	63	63	68	46	49	49	54	55	56	63	76	68	57	54	52	62	65	71	80	78	69	83	73	72	67	60	64	..	62.2
	Minimum ...	40	38	30	31	38	41	32	31	38	42	41	41	33	42	29	26	43	44	45	39	41	51	47	54	61	59	54	47	46	33	..	41.2
Hannibal	Maximum...	48	47	49	58	58	57	47	47	46	49	50	51	59	74	68	53	49	50	59	65	66	69	79	76	80	75	66	74	60	55	..	59.5
	Minimum ...	37	37	30	32	48	39	32	33	35	41	43	39	37	44	28	27	41	42	43	41	47	46	48	47	59	63	58	49	45	38	..	41.6
Jefferson City §§	Maximum...	51	43	47	65	63	51	36	49	51	58	46	54	62	79	49	58	53	52	62	68	69	77	78	79	82	70	71	76	63	65	..	60.9
	Minimum ...	35	41	32	34	40	44	36	34	35	39	43	41	37	40	31	30	33	44	45	42	44	51	53	56	60	60	57	50	49	40	..	42.5
Kirksville.	Maximum...	46	46	45	57	57	54	48	51	49	48	47	57	61	70	55	54	48	52	61	67	67	74	76	73	80	76	67	62	61	58	..	58.9
	Minimum ...	35	32	27	28	44	37	30	28	32	33	40	38	32	42	27	25	40	42	38	38	45	49	45	52	57	59	52	46	40	33	..	38.9
Louisiana	Maximum...	50	53	50	60	60	48	45	50	50	48	50	50	65	80	50	60	50	55	60	60	65	63	76	75	76	76	75	80	62	60	..	60.1
	Minimum ...	40	39	33	32	48	40	33	34	31	40	44	40	31	42	30	30	42	44	44	46	44	40	50	56	52	56	60	56	45	34	..	41.9
Macon §§	Maximum...	48	44	47	58	58	48	35	48	47	50	47	57	63	73	48	53	50	52	62	65	62	76	78	68	82	70	69	62	61	59	..	58.0
	Minimum ...	36	34	29	29	31	39	31	27	29	35	41	39	34	39	28	25	31	41	40	39	39	49	47	52	52	59	54	50	42	35	..	38.5
Mexico §§	Maximum...	51	43	49	62	62	48	40	47	49	55	50	53	61	77	48	55	49	50	62	65	66	76	80	75	82	75	70	75	62	61	..	59.9
	Minimum ...	32	36	30	30	31	39	34	32	33	36	42	40	33	38	28	26	32	32	43	39	42	48	50	54	55	58	57	50	46	35	..	39.4
St. Louis	Maximum...	52	47	51	62	64	49	45	43	48	53	50	46	58	74	47	52	47	52	61	64	65	69	76	77	80	84	74	78	64	65	..	59.9
	Minimum ...	46	40	35	37	46	43	35	34	38	42	44	41	38	44	34	32	41	44	48	46	46	47	54	58	61	63	62	56	50	45	..	45.0
Unionville §§	Maximum...	48	44	44	58	57	52	38	52	47	47	45	57	60	72	45	55	46	51	62	70	71	75	76	65	81	68	68	56	60	57	..	57.6
	Minimum ...	30	31	27	27	30	36	31	28	30	38	39	37	34	38	26	24	29	41	36	38	46	50	48	53	57	57	50	48	39	33	..	37.7
Warrenton	Maximum...	48	49	48	61	62	60	45	45	50	52	53	46	59	75	75	55	55	50	60	64	66	71	78	76	80	77	74	78	62	63	..	61.2
	Minimum ...	42	38	30	33	50	41	33	32	33	40	44	39	35	42	30	26	41	42	46	41	42	47	49	54	55	60	62	50	48	38	..	42.1
Southeast Lowlands																																	
Campbell	Maximum...	57	57	58	61	65	59	50	49	55	55	53	65	68	60	60	50	57	72	65	60	60	74	63	72	80	84	72	83	73	69	..	63.5
	Minimum ...	48	49	45	46	52	48	37	36	42	45	44	43	42	40	37	31	43	49	49	52	49	44	45	48	52	56	56	56	59	42	..	46.2
Caruthersville	Maximum...	65	63	55	66	69	65	57	47	53	56	61	53	63	70	67	60	64	77	70	61	68	74	76	84	87	89	82	83	81	71	..	67.9
	Minimum ...	51	46	46	49	55	49	39	39	41	47	45	43	43	44	37	37	47	52	51	52	50	48	50	55	55	60	60	60	60	44	..	48.5
Doniphan	Maximum...	62	62	54	65	63	60	50	48	52	55	55	50	66	72	70	62	69	77	68	63	65	75	77	77	77	85	81	85	73	72	..	66.3
	Minimum ...	50	46	43	48	50	50	40	39	36	43	47	44	40	37	41	28	41	49	50	51	53	41	43	45	51	57	60	49	60	37	..	45.6
Jackson	Maximum...	62	62	57	69	65	63	50	43	51	55	56	50	61	69	68	59	55	66	59	66	70	75	80	83	86	88	79	85	81	81	..	66.5
	Minimum ...	44	42	40	45	54	46	40	35	36	42	46	41	40	38	36	29	42	46	49	47	47	39	44	52	55	56	59	50	56	38	..	44.5
Poplar Bluff	Maximum...	66	58	54	66	63	58	53	49	51	56	55	49	65	73	63	61	62	75	59	62	74	73	77	82	83	84	68	83	71	71	..	65.5
	Minimum ...	50	44	44	49	53	47	45	39	38	42	42	41	40	40	40	30	42	49	50	53	50	45	45	48	50	57	59	53	60	41	..	46.2
Sikeston	Maximum...	63	63	55	67	66	61	51	47	51	65	56	51	59	69	61	55	58	70	58	66	68	72	77	81	85	87	77	84	77	78	..	65.9
	Minimum ...	50	44	42	47	52	50	44	36	39	43	48	42	40	41	39	32	44	48	50	52	47	43	47	55	57	59	58	57	55	41	..	46.7
Cairo, Ill	Maximum...	60	57	54	67	66	59	51	43	51	59	57	46	58	67	63	52	57	66	56	65	66	70	76	80	84	85	76	81	70	65	..	63.6
	Minimum ...	52	46	45	49	56	48	38	37	42	47	46	42	43	46	40	37	46	50	51	53	50	50	55	61	62	65	58	62	53	48	..	49.3
Ozark Plateau																																	
Arcadia §§	Maximum...	55	46	51	65	63	49	47	46	52	53	49	44	63	72	50	63	54	50	56	55	71	74	77	79	80	83	77	83	66	69	..	61.4
	Minimum ...	35	45	39	39	45	45	42	34	34	38	45	40	36	35	34	29	35	45	48	43	45	41	46	49	53	59	62	44	57	35	..	42.6
Birchtree	Maximum...	68	64	52	63	62	59	48	46	52	52	50	45	62	72	68	60	65	72	62	64	71	75	75	81	82	79	76	82	75	68	..	65 0
	Minimum ...	45	39	39	39	42	44	38	32	36	42	42	39	34	39	40	28	40	47	47	45	46	43	46	50	56	57	48	45	52	38	..	42.6
Crystal City §§	Maximum...	59	46	52	65	66	..	48	44	51	56	50	47	73	76	50	56	51	54	61	67	67	72	80	82	84	86	79	80	64	66	..	[a]63.2
	Minimum ...	44	42	35	38	40	43	..	35	34	40	45	42	34	38	34	28	36	42	46	39	41	37	45	47	55	55	61	46	50	36	..	[a]41.7
Eldon §§	Maximum...	54	43	47	76	69	51	36	50	50	61	46	54	63	77	49	60	56	53	61	65	70	77	77	81	87	69	73	77	63	66	..	62.0
	Minimum ...	34	42	31	31	35	46	36	32	31	38	42	40	36	38	31	28	28	44	45	40	42	47	50	50	54	52	58	48	49	35	..	40.4
Farmington	Maximum...	60	53	45	50	65	60	45	42	50	55	50	45	60	72	65	58	53	51	59	65	66	65	75	72	68	84	83	89	63	68	..	61.2
	Minimum ...	43	43	32	32	37	37	35	32	32	40	40	35	33	50	32	26	42	45	43	40	40	50	37	46	52	52	60	62	48	34	..	41.0
Garber	Maximum...	68	59	51	70	69	60	56	58	55	65	65	55	67	81	73	63	70	65	61	69	75	79	77	82	79	72	78	80	69	69	..	68.0
	Minimum ...	47	44	40	45	57	54	35	31	41	44	43	40	32	40	35	32	51	55	49	51	42	42	44	49	60	57	58	47	53	33	..	45.1
Koshkonong	Maximum...	68	61	52	69	63	59	52	50	49	53	54	45	63	74	71	64	69	75	70	64	72	76	78	81	82	78	71	83	74	69	..	66.3
	Minimum ...	47	42	39	41	52	49	36	34	38	43	43	41	37	43	36	34	48	48	46	48	49	48	50	52	59	61	59	54	53	52	..	46.1
Lebanon §§	Maximum...	54	44	48	63	60	52	35	53	49	60	43	51	60	76	50	63	63	55	60	67	71	76	90	80	86	70	70	76	62	66	..	61.8
	Minimum ...	34	40	35	36	41	45	33	30	34	39	40	39	31	39	30	27	36	47	45	40	43	51	51	56	61	54	57	49	49	34	..	41.5
Mountain Grove	Maximum...	65	49	51	62	58	56	46	54	48	54	51	48	63	75	68	61	62	63	53	68	72	76	75	77	79	71	74	77	63	65	..	62.8
	Minimum ...	46	37	37	37	51	44	32	32	37	41	39	38	31	43	31	29	45	48	45	41	44	48	50	52	56	57	57	48	48	35	..	42.6
Neosho	Maximum...	57	48	46	67	67	66	55	54	58	66	66	57	65	77	77	63	70	69	58	67	74	77	76	80	80	73	72	72	71	67	..	66.5
	Minimum ...	40	42	38	40	51	50	35	29	41	49	46	38	28	45	33	32	50	49	47	43	39	42	50	55	59	56	55	49	49	33	..	43.6
Rolla	Maximum...	59	52	49	64	61	61	48	45	50	54	54	47	61	76	76	58	58	58	59	67	69	75	77	79	80	77	74	78	67	64	..	63.2
	Minimum ...	42	40	35	38	46	45	35	33	36	43	43	40	38	44	32	30	43	46	47	43	47	49	53	53	60	61	61	47	49	38	..	43.9
Springfield	Maximum...	53	48	48	64	60	54	45	51	52	60	50	52	60	75	49	61	65	57	58	67	69	75	74	79	75	66	69	74	59	64	..	61.1
	Minimum ...	43	38	39	43	52	45	33	32	40	44	39	40	37	45	32	36	50	49	47	46	49	52	53	57	64	58	56	53	48	42	..	45.4
Southwest Plain																																	
Appleton City	Maximum...	50	50	41	58	59	58	50	50	50	61	60	55	60	68	60	58	61	60	58	63	71	71	71	83	78	68	70	67	61	62	..	61.1
	Minimum ...	39	37	33	38	49	45	35	31	42	45	41	42	37	50	31	33	48	47	45	44	46	50	54	59	62	55	52	54	49	40	..	44.4
Clinton	Maximum...	48	41	41	62	60	58	47	48	50	55	55	58	58	74	70	58	68	58	60	62	78	70	71	75	84	65	65	68	66	62	..	61.2
	Minimum ...	40	34	32	34	48	45	32	28	40	45	42	42	34	45	31	31	47	46	45	44	44	46	44	53	62	55	52	52	46	35	..	42.5
Harrisonville §§	Maximum...	52	44	45	60	60	48	40	54	49	65	46	58	65	83	51	60	59	55	61	68	75	81	77	71	75	72	77	65	60	65	..	61.4
	Minimum ...	36	39	34	36	39	45	30	30	30	40	40	40	34	36	28	30	32	45	41	41	45	46	46	56	58	55	49	52	45	40	..	40.6
Lamar §§	Maximum...	59	43	43	63	58	55	40	52	57	69	45	57	65	76	55	65	69	56	61	67	73	76	75	83	76	70	70	70	62	66	..	62.5
	Minimum ...	35	41	38	37	42	49	34	31	33	42	42	40	33	34	32	33	36	49	48	45	43	43	49	56	59	56	52	52	51	39	..	42.5
Lamonte	Maximum...	51	46	44	64	63	52	45	51	49	62	52	57	62	72	51	60	59	53	62	67	74	75	77	71	81	70	70	69	61	64	..	61.1
	Minimum ...	41	35	30	32	48	43	32	30	40	45	40	38	33	41	29	28	45	45	42	40	42	45	47	55	62	56	51	53	41	33	..	41.4
Marshall	Maximum...	50	49	45	63	63	60	49	55	49	54	55	57	61	72	74	55	55	52	61	65	68	78	76	75	83	78	69	69	69	62	..	62.4
	Minimum ...	32	34	29	30	48	41	38	31	39	42	40	40	35	37	29	28	43	44	42	40	45	44	56	55	59	59	51	53	45	38	..	41.4
Nevada	Maximum...	52	50	41	60	60	55	47	52	55	64	59	57	63	72	62	62	67	64	60	65	70	76	75	81	75	68	70	68	65	63	..	62.6
	Minimum ...	39	35	33	35	48	45	34	31	42	45	40	40	42	50	32	35	50	47	46	41	42	51	55	61	49	54	51	55	49	37	..	43.8
Warrensburg	Maximum...	56	48	42	62	61	54	46	52	50	62	56	56	60	74	66	60	55	54	60	66	68	77	77	72	68	77	71	68	61	65	..	61.3
	Minimum ...	39	35	29	31	47	43	32	32	40	44	39	39	33	49	29	29	46	45	42	42	43	48	50	54	54	56	51	55	46	38	..	42.0
Warsaw	Maximum...	52	50	45	65	62	60	49	53	50	64	55	57	65	78	71	63	65	57	63	68	75	79	77	81	80	75	72	73	68	67	..	64.6
	Minimum ...	40	40	34	37	50	47	33	31	42	46	42	42	33	50	33	30	49	47	48	40	41	51	55	59	66	60	55	50	49	35	..	44.5
Northwest Plateau																																	
Chillicothe §§	Maximum...	52	46	44	60	60	48	49	55	48	53	47	60	63	76	50	56	51	53	65	68	72	79	81	65	78	71	71	57	61	58	..	59.9
	Minimum ...	36	32	28	28	33	39	32	31	36	39	42	39	32	32	28	26	32	43	34	39	47	50	52	56	54	57	51	50	42	34	..	39.1
Grant City	Maximum...	47	46	39	53	53	50	49	52	51	49	49	50	58	72	45	51	51	50	62	66	73	76	74	70	67	67	69	69	54	55	..	57.2
	Minimum ...	35	31	28	26	42	38	33	31	40	39	34	38	29	44	26	25	44	43	33	38	46	56	55	53	56	56	51	48	37	32	..	39.6
Kansas City	Maximum...	48	48	44	60	60	52	48	53	48	67	47	57	66	82	51	59	59	53	64	68	78	81	78	71	78	71	76	64	60	63	..	61.8
	Minimum ...	40	34	31	32	45	44	32	32	42	44	40	40	33	39	31	32	47	43	37	39	44	54	61	58	64	57	52	49	44	37	..	42.6
Kidder	Maximum...	48	47	42	57	57	55	47	52	51	55	52	55	60	75	51	54	51	51	61	66	72	78	76	69	74	73	69	68	59	57	..	59.4
	Minimum ...	36	30	27	26	42	38	30	30	38	38	36	36	32	42	26	24	41	42	35	38	45	47	53	51	56	54	47	49	35	35	..	38.7
Lexington §§	Maximum...	51	50	43	63	64	51	40	54	49	59	43	60	63	77	51	68	59	54	63	68	74	79	79	67	77	70	74	63	63	65	..	61.4
	Minimum ...	33	33	29	30	33	43	33	31	34	42	42	40	35	39	29	28	34	45	40	41	45	50	54	58	55	57	51	53	44	37	..	40.6
Maryville	Maximum...	49	46	44	54	53	49	50	52	49	49	48	56	61	77	48	53	55	52	63	69	73	80	75	72	72	69	70	67	60	55	..	59.0
	Minimum ...	35	31	27	26	39	39	32	29	40	38	38	35	32	45	25	25	44	42	33	39	45	48	55	52	55	52	49	43	36	34	..	38.8
Oregon	Maximum...	52	48	45	56	58	54	51	56	50	58	58	57	66	81	50	57	57	53	64	71	76	80	77	67	73	70	73	69	61	58	..	61.5
	Minimum ...	35	30	26	26	38	40	31	29	39	39	37	36	34	45	25	26	45	42	37	41	46	51	57	53	59	50	49	47	38	36	..	39.6
St. Joseph..	Maximum...	49	49	45	57	57	52	50	54	46	61	45	58	64	81	50	56	53	51	64	70	76	80	77	65	72	71	71	71	61	60	..	60.2
	Minimum ...	38	33	30	32	41	41	33	32	42	42	40	39	32	35	29	30	46	42	36	42	52	52	62	55	60	54	51	50	43	39	..	41.8
Trenton	Maximum...	49	46	42	55	57	54	47	57	53	50	46	57	58	72	60	52	48	54	62	65	67	77	75	70	77	72	66	58	58	60	..	58.8
	Minimum ...	35	33	28	29	44	39	30	31	33	40	40	38	34	36	28	26	43	44	35	39	47	49	54	55	58	57	51	49	40	34	..	40.0

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 5-22-35—945.

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CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX MAY 1935 NO. 5

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

In the records of May weather in Missouri for the last 47 years, May 1935, with an average temperature of 60.3° and average rainfall of 8.50 inches, is conspicuously cool and wet. It was in strong contrast with May 1934, which had an average temperature of 69.0° and rainfall of only 1.89 inches. May 1935, however, was not a record-breaker. Compared with the long-period May records, it was fifth in order of low temperatures and second in order of wetness. It was the coolest May since 1924, but only slightly cooler than May 1931. Other cooler Mays were in 1917, 1910, and 1907. For heavy rainfall, only May 1896, with an average of 9.09 inches, exceeds May 1935; but in the years 1933, 1929, 1915, 1903, 1898, and 1892, May had average rainfall ranging between 7.10 and 7.90 inches. May is normally the wettest month of the year, the normal amount being 4.81 inches. June, with a normal of 4.75 inches, is the second wettest month.

Temperatures were almost continuously subnormal, excepting a three-day period (11-13th) when above normal warmth prevailed. Light frost was reported at a few of the more northern stations on the 2d, 4th, and 24th. But lower temperatures than occurred this month, for brief periods, have often been recorded in May; the low average temperature this May was due largely to continued cloudiness and frequent showers, which prevented the usual strong afternoon rise. The average number of cloudy days, 17, and days with rain, also 17, is the greatest of record for May except in 1892, when they were the same.

Monthly rainfall was heaviest in the northern half of the State, generally speaking, but the area around Farmington, in the southeast quarter, received the maximum amount for any station, viz., 13.36 inches. Almost as much fell at several stations in the northern half. In the northern half amounts ranged from 6.90 to 13.30 inches; in the southern half, from 5.18 to 13.36 inches.

The wet weather seriously delayed farm work, and corn planting was not more than one-third done at the end of the month. Wheat was in good to excellent condition at the beginning of May, but made only fair progress, and at the close of the month was considered in fairly good to very good condition, with some too rank and some affected by rust, while some of the choice wheat areas were flooded. Oats, alfalfa, and pastures were good, but becoming weedy. Potatoes and gardens were doing fairly well. The outlook for peaches and apples was good.

Local storms of hail and wind did considerable damage on several dates, but on the whole were not unusually severe for this time of year.

Floods occurred on several dates in smaller streams, and about the 30th a strong flood was beginning in the Missouri River, which was later (in June) to be the worst since 1903 in the lower Missouri.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 60.3°, or 4.0° below normal. The highest monthly mean was 68.7° at Caruthersville, and the lowest monthly mean was 55.8° at Conception and Unionville. The highest temperature recorded was 92° at Caruthersville on the 12th, and the lowest was 32° at Downing and Tarkio on the 4th. The greatest daily range was 45° at Greenville on the 27th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 8.50 inches, or 3.69 inches more than normal. The greatest local monthly amount was 13.36 inches at Farmington, and the least local monthly amount was 5.18 inches at Cape Girardeau.

(Continued on page 24)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.97	30.42	3	29.58	1	7.7	25	nw.	12	85	68	69	29
Kansas City.....	29.96	30.43	3	29.40	1	9.1	34	nw.	1	89	70	73	34
St. Joseph.....	29.97	30.44	3	29.42	1	8.2	27	n.	8	87	68	72	37
St. Louis.	29.99	30.41	4	29.62	2	11.2	32	sw.	28	82	64	72	33
Springfield.	29.95	30.37	3	29.60	1	9.7	32	se.	19	86	69	73	31
Cairo, Ill.....	29.98	30.37	4	29.68	2	8.8	38	sw.	2	85	67	69	58
Keokuk, Iowa..	30.02	30.50	4	29.64	2	7.5	23	n.	13	81	64	68	34

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	62.1	− 2.2	93	30	5.35	+0.54	13.40	1.38	....	5	..	..	..
1889....	63.5	− 0.8	100	28	6.56	+1.75	14.35	2.75	....	5	..	..	..
1890....	62.8	− 1.5	97	26	3.47	−1.34	8.09	1.14	....	6	..	..	..
1891....	61.5	− 2.8	97	27	4.26	−0.55	7.68	1.42	0	8	..	..	..
1892....	60.7	− 3.6	91	28	7.80	+2.99	14.88	3.89	0	17	5	9	17
1893....	61.8	− 2.5	94	30	5.89	+1.08	12.10	3.15	0	10	11	11	9
1894....	63.7	− 0.6	96	29	3.99	−0.82	8.78	0.47	0	8	13	11	7
1895....	64.6	+ 0.3	103	28	4.08	−0.73	8.49	0.36	0	9	13	12	6
1896....	70.1	+ 5.8	96	37	9.09	+4.28	18.23	4.08	0	12	12	12	7
1897....	62.4	− 1.9	93	28	2.56	−2.25	5.38	0.70	0	7	16	11	4
1898....	65.2	+ 0.9	97	31	7.90	+3.09	19.22	4.62	0	14	12	10	9
1899....	66.9	+ 2.6	96	34	6.26	+1.45	11.38	3.08	0	2	10	13	8
1900....	66.3	+ 2.0	97	29	3.69	−1.12	7.61	1.01	0	10	14	11	6
1901....	63.8	− 0.5	98	30	1.47	−3.34	3.77	0.19	0	6	15	10	6
1902....	69.4	+ 5.1	98	39	5.03	+0.22	9.93	1.64	0	11	13	11	7
1903....	65.1	+ 0.8	92	23	7.10	+2.29	14.01	2.08	0	15	9	10	12
1904....	63.1	− 1.2	95	32	5.03	+0.22	10.70	1.45	0	12	13	10	8
1905....	64.9	+ 0.6	94	34	4.87	+0.06	12.03	1.74	0	10	12	11	8
1906....	66.3	+ 2.0	98	27	2.16	−2.65	7.85	0.31	0	7	15	10	6
1907....	59.5	− 4.8	91	17	5.56	+0.75	10.89	1.39	0.8	10	14	6	11
1908....	66.1	+ 1.8	96	24	6.92	+2.11	17.07	2.82	0	12	12	10	9
1909....	63.3	− 1.0	96	25	5.34	+0.53	9.02	1.85	T.	9	15	9	7
1910....	60.1	− 4.2	94	32	6.62	+1.81	10.92	2.03	0	13	11	8	12
1911....	68.8	+ 4.5	101	27	1.55	-3.26	5.31	0.10	0	5	19	7	5
1912....	67.6	+ 3.3	97	30	3.86	−0.95	7.81	1.16	0	7	18	8	5
1913....	65.8	+ 1.5	101	33	3.05	−1.76	6.85	0.56	0	8	16	7	8
1914....	66.6	+ 2.3	98	31	1.47	−3.34	4.71	0.16	0	5	17	9	5
1915....	63.7	− 0.6	97	30	7.86	+3.05	15.98	3.04	0	12	12	7	12
1916....	65.6	+ 1.3	96	33	5.61	+0.80	10.58	2.00	0	11	15	8	8
1917....	58.7	− 5.6	91	30	4.33	−0.48	7.12	1.41	0	10	15	7	9
1918....	68.3	+ 4.0	100	28	5.49	+0.68	11.53	2.42	0	10	16	8	7
1919....	62.0	− 2.3	93	35	5.80	+0.99	9.63	1.84	0	13	10	10	11
1920....	63.8	− 0.5	97	32	4.85	+0.04	10.15	1.47	0	12	9	9	13
1921....	66.4	+ 2.1	102	28	3.69	−1.12	7.54	1.28	0	7	17	8	6
1922....	67.2	+ 2.9	97	38	3.17	−1.64	6.86	1.01	0	10	14	10	7
1923....	62.7	− 1.6	97	25	4.59	−0.22	11.31	1.39	T.	12	11	10	10
1924....	58.6	− 5.7	96	31	4.67	−0.14	8.68	1.55	0	10	13	8	10
1925....	61.2	− 3.1	98	24	2.14	−2.67	5.49	0.39	0	7	14	9	8
1926....	67.0	+ 2.7	100	29	2.73	−2.08	7.82	0.40	0	7	16	9	6
1927....	64.6	+ 0.3	94	34	6.98	+2.17	13.62	1.46	0	12	11	10	10
1928....	65.8	+ 1.5	95	29	2.84	−1.97	6.37	0.78	0	8	16	9	6
1929....	61.7	− 2.6	95	28	7.52	+2.71	13.68	1.45	0.3	13	9	10	12
1930....	64.7	+ 0.4	95	33	3.43	−1.38	7.38	0.97	0	9	16	8	7
1931....	61.0	− 3.3	96	29	4.51	−0.30	8.05	1.62	0	10	15	6	10
1932....	66.1	+ 1.8	98	31	1.91	−2.90	5.58	0.32	0	6	18	9	4
1933....	65.9	+ 1.6	96	35	7.53	+2.72	12.97	2.23	0	13	11	9	11
1934....	69.0	+ 4.7	110	31	1.89	−2.92	4.64	0.22	0	5	21	7	3
1935....	60.3	− 4.0	92	32	8.50	+3.69	13.36	5.18	0	17	6	8	17
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	....	..	..	..	..
Period.	64.3	.....	110	17	4.81	.....	19.22	0.10	T.	10	14	9	8

Climatological Data for May 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	60.4	− 3.8	83	12	39	4	29	10.92	+6.19	2.03	0	21	6	1	24	ne.	O. K. Benecke
Clifton Hill	Randolph	731	36	59.4	− 4.2	82	12†	38	4	29	9.05	+4.51	1.78	0	24	5	8	18	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	59.9	− 4.4	84	12	39	4	29	8.19	+3.73	1.88	0	22	2	12	17	ne.	U. S. Weather Bureau
Downing	Schuyler	876	14	56 8	− 5.9	82	12	32	4	28	9.58	+5.85	2.55	0	17	9	9	13	e.	James Taylor
Elsberry	Lincoln	449	4	59.4	.....	81	12	38	4	32	6.90	.....	1.40	0	16	5	12	14	e.	Ray E. Mills
Fayette	Howard	680	55	59.8	− 4.0	83	31	38	4	35	9.86	+5.31	1.65	0	17	4	7	20	se.	Harry P. Mason
Fulton	Callaway	818	47	59.2	− 5.4	84	12	37	4	31	8.29	+3.47	1.39	0	22	3	5	23	se.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	10.25	+5.98	1.61	0	17	8	11	12	ne.	W. L. Harker
Hannibal	Marion	759	43	58.4	− 5.2	79	12	37	4	25	10.79	+6.44	1.53	0	22	6	6	19	se.	Hannibal Water Dept.
Jefferson City	Cole	557	45	59.9	− 4.8	86	12	39	4†	29	7.65	+3.13	1.30	0	18	3	13	15	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	57.6	− 4.7	80	12	36	3	32	9.60	+4.84	1.70	0	17	4	12	15	ne.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	13.10	.....	3.63	0	20	6	9	16	e.	J. Robert Hall
Louisiana	Pike	469	41	59.0	− 4.7	80	12†	38	4	30	10.33	+5.85	2.00	0	15	6	10	15	w.	Stark Bro's Nurseries
Macon	Macon	875	36	57.8	− 5.7	81	12	35	4	29	9.73	+5.33	1.72	0	21	6	7	18	e.	W. C. Brown
Mexico	Audrain	800	46	57.9	− 6.1	82	12	37	4	30	10.08	+5.39	1.23	0	22	12	0	19	e.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	9 96	+6.35	1.33	0	17	5	3	23	s.	J. S. Conway
St. Charles	St. Charles	520	47	60.6	− 2.5	84	30	39	4	33	7.48	+3.18	1.15	0	21	8	12	11	nw.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	61.4	− 5.6	82	30	39	4	24	7.35	+3.01	2.18	0	19	2	10	19	e.	**Section Center**
St. Louis University	St. Louis City	578	23	61.1	− 5.0	81	30	39	4	24	7.50	+3.29	1.88	0	19	8	7	16	e.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	10.63	+5.98	1.35	0	23	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	58.2	− 5.6	81	12	35	4	33	12.13	+7.51	2.30	0	16	9	8	14	s.	Frank Hall
Unionville	Putnam	1,062	42	55.8	− 6.3	80	12	33	4	31	7.73	+3.25	1.61	0	17	2	9	20	e.	John H. Schick
Warrenton	Warren	816	53	60.2	− 4.7	80	8	38	4	30	7.64	+3.00	1.20	0	17	3	11	17	ne.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	57.2	− 6.6	81	12	35	4	26	7.28	+3.35	1.39	0	19	4	3	24	e.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**59.0**	**− 5.0**	**86**	**12**	**32**	**4**	**35**	**9.45**	**+4.79**	**3.63**	**0**	**19**	**5**	**8**	**18**	**e.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	63.4	− 3.9	88	31	41	4	40	7.57	+2.56	1.65	0	13	14	11	6	n.	Jeff. King
Caruthersville	Pemiscot	265	39	68.7	− 1.1	92	12	44	4	32	5.96	+1.44	1.69	0	12	15	4	12	s.	Sam Smith
Doniphan	Ripley	344	31	64.2	− 2.3	90	12	41	25	32	10.14	+5.71	1.98	0	12	11	5	15	s.	W. W. Martin
Jackson	Cape Girardeau	428	44	64.8	− 0.8	89	12†	40	4	35	7.90	+3.46	1.70	0	13	2	12	17	s	John G. Putz
Marble Hill	Bollinger	470	40	64.6	− 1.0	88	12†	40	4	35	7.69	+3.10	1.70	0	12	14	8	9	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	7.00	+2.18	1.53	0	11	10	10	11	s.	John A. Spence
Poplar Bluff	Butler	339	30	64.8	− 2.7	87	12	41	4†	30	9.88	+4.82	2.55	0	11	11	8	12	s.	Mrs. J. H. Wolpers
Sikeston	Scott.	318	28	65.6	− 2.9	90	12	41	1†	39	6.62	+2.26	2.21	0	12	3	16	12	n.	John A. LaFont
Cairo, Ill	Alexander Ill	356	63	65.2	− 3.2	86	12	41	4	27	4.83	+1.12	1.50	0	14	2	7	22	s.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**65.2**	**− 2.2**	**92**	**12**	**40**	**4**	**40**	**7.25**	**+2.68**	**3.03**	**0**	**12**	**9**	**9**	**13**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	60.6	− 3.5	88	12	39	4†	32	6.37	+1.67	1.47	0	13	15	7	9	e.	Arcadia College
Birchtree (near)	Shannon	1,000	40	61.6	− 3.4	87	27	38	4	35	8.42	+4.05	1.96	0	13	11	5	15	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	7.65	.....	2.83	0	11	9	9	13	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	8.42	.....	3.43	0	17	0	14	17	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	60.4[e]	.....	90	12	40	4†	38	8.51	..	2.49	0	12	2	9	20	ne.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	31	62.2	− 3.5	90	12	38	7	39	6.22	+0.39	1.30	0	17	5	8	18	e.	H. E. Dean
Eldon	Miller	931	40	58.8[b]	− 5.4	85	12	37	1	34	8.63	+3.96	1.90	0	18	2[c]	13[c]	13[c]	s.	E. H. Shepherd
Farmington	St. Francois	918	24	60.7	− 3.0	89	12	35	5	36	13.36	+7.91	4.40	0	12	12	6	13	n.	H. O. Miller
Garber	Taney	950	0	62.7	....	89	12	41	4	39	7.43	.....	1.46	0	14	5	6	20	e.	William H. Durham
Goodland	Iron	1,000	42	61.2	− 2.8	88	13	36	25	37	5.49	+0.65	0.90	0	15	8	7	16	e.	F. M. Adams
Greenville	Wayne	381	26	62.0	− 3.9	88	12	38	26‡	45	8.71	+4.52	2.71	0	9	11	7	13	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	6.82	+1.58	1.43	0	16	8	15	8	ne.	A. W. Madison
Koshkonong	Oregon	958	34	62.8[a]	− 3.8	86	31	40	4	27	8.98	+4.41	2.00	0	14	8[a]	5[a]	17[a]	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	59.8	− 5.1	88	12	39	3†	38	7.60	+2.15	3.30	0	13	11	7	13	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	61.8	− 2.6	85	12†	40	4	27	5.46	+0.50	1.91	0	15	6	14	11	sw	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	60.3	− 3.5	84	12†	38	4	32	7.63	+2.80	1.41	0	18	10	4	17	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	63.0	− 3.0	88	12†	38	7	37	5.20	−0.66	1.95	0	18	9	10	12	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	61.3	− 3.2	86	12	38	4	29	6.84	+1.85	1.19	0	17	2	0	29	se.	F. H. Lane
Salem	Dent	1,173	31	61.6	− 2.9	88	12	38	4	35	5.28	+0.58	0.92	0	17	4	13	14	s.	E. E. Martin
Seligman	Barry	1,542	34	61.4[a]	− 3.1	85	12	40	4†	33	7.51	+1.87	2.16	0	13	5[b]	6[b]	18[b]	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	59.6	− 4.1	83	12	38	4	29	5.56	+0.31	1.19	0	16	7	5	19	s.	A. L. Hailey
Springfield	Greene	1 324	47	60.7	− 3.8	86	8	39	4	29	6.81	+1.62	2.29	0	17	6	8	17	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	60.6	.....	87	12	38	4	30	9.58	+4.01	2.65	0	19	3	8	20	e.	I. M. Wilson
Division means	**and extremes**	..	..	**61.2**	**− 3.6**	**90**	**12**	**35**	**5**	**45**	**7.42**	**+2.43**	**4.40**	**0**	**15**	**7**	**8**	**16**	**e.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	59.6	− 5.4	84	12	40	4†	27	8.35	+3.17	2.54	0	17	0	18	13	se.	W. G. Bigelow
Clinton	Henry	765	42	60.4	− 5.1	85	31	40	4†	31	9.54	+4.21	4.02	0	19	3	12	16	se.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	9.03	+4.81	2.55	0	19	6	8	17	ne.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	59.4	− 4.4	90	12	38	4	33	9.74	+5.21	2.25	0	18	1	6	24	se.	John H. Patterson
Lamar	Barton	980	47	61.2	− 4.4	86	12†	39	1	38	5.96	+0.59	1.35	0	17	6	5	20	ne.	Jesse A. Mann
Lamonte	Pettis	867	34	59.5	− 5.1	85	12	38	4	32	11.32	+6.37	2.46	0	21	9	6	16	nw.	J. E. Wheeler
Marshall	Saline	779	48	59.3	− 4.9	83	12	38	4	26	11.92	+7.07	3.08	0	19	5	11	15	ne.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	60.2	− 4.3	85	31	40	4†	33	8.89	+3.58	2.76	0	20	8	3	20	ne.	George A. Kaupp
Warrensburg	Johnson	878	48	59.6	− 5.4	84	12	38	4	30	7.42	+2 88	1.90	0	17	4	6	21	ne.	E. A. Markey
Warsaw	Benton	687	34	62.0	− 3.5	87	12	40	4	36	9.11	+3.99	3.60	0	19	4	8	19	e.	Everett Martin
Division means	**and extremes**	.....	..	**60.1**	**− 4.7**	**90**	**12**	**38**	**4**	**38**	**9.29**	**+4.35**	**4.02**	**0**	**19**	**5**	**8**	**18**	**ne.**	
Northwest Plateau																				
Bethany	Harrison	916	40	56.4	− 6.1	79	12	36	4	30	9.73	+5.30	1.62	0	22	9	11	11	ne.	A. S. Cumming
Chillicothe	Livingston	779	26	57.8	− 7.4	80	12	38	4†	31	13.30	+9.32	3.70	0	20	8	3	20	se.	Wm. J. Olenhouse
Conception	Nodaway	980	46	55.8	− 6.3	75	30†	34	4	26	8.62	+4.25	2.60	0	19	2	11	18	ne.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	58.4	− 4.6	83	12	37	24	31	10.89	+6.60	1.75	0	25	5	4	22	e.	Fred L. Stiff
Grant City	Worth	1,134	31	56.0	− 6.0	76	11	34	4	31	7.00	+2.74	0.86	0	19	1	14	16	se.	Howard Rybolt
Kansas City	Jackson	963	46	59.8	− 5.0	89	12	39	4	29	9.99	+5.34	1.90	0	22	1	8	22	ne.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	57.2	− 5.4	78	12	36	4	29	12.27	+7.60	3.23	0	21	4	9	18	ne.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	8.71	+4.26	1.38	0	20	1	14	16	ne.	John M. Martin
Lexington	Lafayette	688	50	59.0	− 5.4	87	12	38	4	31	10.29	+5.26	2.87	0	20	4	15	12	ne.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	56.3	− 5.0	74	1†	33	4	28	8.85	+3.86	2.10	0	20	4	8	19	e.	R. B. Montgomery
Oregon	Holt	1,048	79	57.8	− 5.4	79	1	33	4	33	8.20	+3.52	1.09	0	20	7	9	15	se.	Mina Wright
St. Joseph	Buchanan	967	25	58.2	− 6.0	80	12	39	4	29	7.92	+3.93	1.70	0	20	3	9	19	se.	U. S. Weather Bureau
Tarkio	Atchison	916	32	56.0	− 6.6	77	1	32	4	36	8.85	+4.56	2.00	0	15	4	7	20	se.	Albert Volker
Trenton	Grundy	822	39	58.7	− 4.8	80	12†	37	4	31	10.32	+5.51	1.25	0	18	6	12	13	ne.	W. H. Estes
Division means	**and extremes**	.....	..	**57.5**	**− 5.7**	**89**	**12**	**32**	**4**	**36**	**9.95**	**+5.23**	**3.70**	**0**	**20**	**4**	**10**	**17**	**ne.**	
State means	**and extremes**	.....	..	**60.3**	**− 4.0**	**92**	**12**	**32**	**4**	**45**	**8.50**	**+3.69**	**4.40**	**0**	**17**	**6**	**8**	**17**	**e.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated, ‡ Partially estimated.

Daily Precipitation for May 1935

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri	.24	.50	.47		.02	.20	.03	.44	.25			.20	.80	1.05		.22		.02	.67	.58	1.23		.05			.21	.01	1.52	.85			9.51
Bowling Green	Mississippi	.37	.88	1.82		**	.35	.08	.25	.31			**	.25	1.36	.13	.43			**	**	.98		.32	.04				.74				8.31
Brunswick	Grand	.90	.68	.28			.06	.04	.50	.72			.16	.48	.80	.04	.43		.06	1.17	.85	.76		.27			.07	.14	2.03	.48			10.92
Canton	Mississippi		1.17	.82			.07	.15		2.24		**	.73	.82	.59	.15	.38		**	.32	1.21	.03	.08	.25	.74		.06		1.14	.39	.40		11.74
Clifton Hill	Chariton	.99	.95	.03	.01	.02	.06	.01	.31	.35		.02	.15	.49	.76	.01	.36		.01	.80	.98		.62	.03			.02	.27	1.78		.02		9.05
Columbia***	Missouri	.17	1.88	.01	.03	.13	.22		.14	.30		T.	.35	.80	.44	.22	.06		.17	.49	.62		.05	.04			.03	.81	1.19			.04	8.19
Downing	Mississippi	.46	.82	.50			.38	T.		.51		.20	1.07	.16	.17		.31			.51	.41		.18	2.55				.04	1.06		.25		9.58
Edina	do	.44	.89	.17			T.	.12	T.	.93			.60	1.18	.63	.11	.35	.04		.30	.80	.28		.22	.73		T.	T.	1.93	.20	.48		10.40
Elsberry	do	.27	.49	.13	T.	.37	.44		.64	.30			.20	.19	1.40		.35			.69	.87			.13				.12	.31				6.90
Farber	do		1.40	1.25		.10	.32		.29	.21			.63	.18	1.35		.47			.75	.25	.28		.26					.69	.88			9.31
Fayette	Missouri	.22	1.19	T.		T.	.17		.23	.48		.14	.14	.90	1.08	T.	.32		T.	.72	1.24		.49	.15			.22	.52	1.65				9.86
Fulton	do	.07	.70	.26		.11	.48	.02	.07	.17			.26	1.26	.68	.02	.34	.01		.80	.89	.50		.13	.03			.09	1.18	.22			8.29
Gorin	Mississippi	.56	.89	.53			.13			.67		T	1.29	.53	.30		.31			1.00	.35		.25	1.61				.05	1.48		.16	.14	10.25
Hannibal	do	.40	1.53	1.19		.06	.14	.04	.04	1.11			.45	.41	.93	.02	.53	T.		.47	.65	.49		.28	.08			.05	.41	.84	.67		10.79
Hermann	Missouri		1.23	.28		.35	.68	.11	.10	.08			.10	1.60	1.58	.27	.30			.67	.50	1.02		.41	.04			.05	.51	.30			10.18
Jefferson City	do		.72	.47	..	.18	.47	.03		.06				1.14	.98	.18	.16	T.	.16	.40	.35	.30		.07				.08	1.30	.60			7.65
Kahoka	Mississippi	.40	1.10	1.00				.20		.65			.70	.30	.40	.25	.35			.35	1.00			.33	.62				1.40		.33		9.38
Kirksville	do	.64	1.20	.08			.20		.02	.85		.02	.62	.63	.52		.50			.43	.78			.86				.05	1.70		.50		9.60
LaBelle	do	.45	.85	.19				.15		2.85			.75	1.65	.74	.12	.37	.02		.72	.62	.03		.11	.87		.04	1.63	.29		.39		12.84
Linneus	Grand	.45	1.70	.12		.01		.01	.12	.91			.84	.03	.68	.05	.53			1.29	.69	.25		.53	T.		.25	.17	3.63	T.	.84	T.	13.10
Louisiana	Mississippi	.80	1.85		.10		.60	.15	1.25			.30	.15		2.00	.50				.75	.33			.35				.75	.45				10.33
Lucerne	Grand	.42	.23	.41						.68			.85	.25	1.16	.04	.45			.59	.24	.23		.75	.29		.02	.39	.74		.34		8.08
Macon	Chariton	.51	.60	.40			T.	.02	.16	1.41			.62	.43	.61	.17	.44	.02		.57	.35	.40		.29	.08			.28	1.72	.35	.30		9.73
Madison	Mississippi	.94	.70	.61			.16	.04	.27	.47			.35	.02	1.27	.02	.30	.01		.45	.21	.41		.48	.05			.20	.98	.82			8.76
Memphis	do	.45		.77	1.34		.10			1.10			1.07	.08	.20		.15			.65	.70			.85	1.15			T.	2.40	T.	.15	.17	11.33
Mexico	do	.55	.77	1.02	.02	.10	.26	.21	.58	.52			.52	.26	1.23	.13	.34	T.		.82	.45	.56		.30	.01			.20	.42	.81			10.08
Milan	Grand	.46	.80	.41		T.				.68			.47	.60	.43	.09	.52			1.04	.61	.06		1.16	.05			.35	1.02	.12	.78		9.65
Monroe City	Mississippi	.75	1.14	.43			.14		.20	1.06			.45	.53	1.09		.42			.60	.42		.13	.33				.54	1.33	.40			9.96
New London	do		1.49	3.09		.05	.24	.12					.56	.14	.56						.16	.41			.79			.54	.76	.14			9.05
Palmyra	do	.30	1.29	1.13	.08	.06	.08	.11	.16	1.08			.69	.82	.78	.19	.46	.03		.34	.59	.16		.29	.11		T.	.06	.76	.96	.52		11.05
Paris	do	.95	.63	.84			.18	.08	.14	.44			.45	.08	1.35	.03	.35			.65	.26	.31		.37	.05			.21	.82	.76			8.95
Perry	do	.83	.49	1.63		T.	.23	.05	.15	.31			.45	.10	1.10	T.	.45			.80	.20	.20		.30	.09		.27	.36	1.00				9.01
Philadelphia	do	.53	.98	1.45			.34		.15	1.75			.74	.24	.75				.05	.50	.45			.34	.05			.05	1.25	.15	1.22		10.99
St. Charles	Missouri		1.15	.40		.30	1.00	.01	.59	.02			.05	.38	.75	.26	.32	T.		.68	.54	.31		.42	.01			.01	.15	.12	.01		7.48
St. Louis**	Mississippi	.31	2.02	.03	.31	.41	.59	T	.10	T		T.	.05	.20	.67	.24	.09		T.	.90	.67		.24	.04				.22	.25	.01			7.35
St. Louis University*	do	.31	1.86	.02	.34	.42	.57		.20	T.		.06	.05	.13	1.02	.16	.13			.99	.63		.20	.03				.28	.10				7.50
Shelbina	do	.54	.96	.91		.01	.11	.12	.30	1.35			.63	.41	.94	.06	.28	.01		.48	.25	.16		.54	.04			.36	1.25	.61	.31		10.63
Shelbyville	do	.80	1.02	.15			.22	.16		1.33			.70	.75	**	.80	.30			.73	.48	.40		**	**			**	1.90	**	.68	T.	10.42
Steffenville	do	.60	1.60	.28			.48		.07	2.30			.86	.63	.60					.75	.48		.05	.42				.11	1.75		1.15		12.13
Troy	do	**	.64	.46		.25	.70	.04	.85	.05			.80	.65	.65	.36	.30			.69	.38	.60		.21					.56	.05			7.74
Union	Meramec		.91	.76		.44	.87		.05	.03			.02	.90	.53	.13	.32			.69	.39	.36		.61	.02				.55	.41			7.99
Unionville	Chariton	.50	.24	.40				.08		.55			.63	.15	.20		.48			.65	.54	.34		1.15	.46			.12	.82		.42		7.73
Valley Park	Meramec		1.50	.32		.45	.85		.12		T.		.03	1.05	.50	.18	.33	T.		.48	1.12	.50		.41	T.				.35	.32			8.51
Warrenton	Mississippi	.17	1.15	.19		.30	.92		.12	.08		T.	.23	.27	1.20		.37		T.	.78	.83		T.	.20				.42	.37	.04			7.64
Keokuk, Ia.***	do	.88	.73	.28		.01	.08	T.	.66	.62		T.	.35	.20	.24	.09	.13		T.	.51	.18		.07	.65				.11	1.31		.18		7.28
Southeast Lowlands																																
Bragg City	St. Francis			.86		1.50	.39	T.		.10						.23	T.			.86	.97									.69			5.60
Campbell	do		.25	.72	.70	1.65	.21			1.23				.05	.19	.03				.46	1.05	.03								1.00			7.57
Cape Girardeau	Mississippi		.24	1.39	.05	1.15	.17	.03			T				.19	.05	.07			.52	.34	.04								.94			5.18
Caruthersville	do			1.69	.02	1.24	.38	.43								.63	.04			.65	.30			.08						.45	.05		5.96
Dexter	St. Francis			1.21	.23	2.93	.51	.04		.02						.42	.03		.02	.74	.87		.03	.02						1.45			8.52
Douglas	Black		1.30	.52	1.45	1.94	.05			.05					.55				T.	.90	1.98		.12	.08						1.20			10.14
Fisk	St. Francis		T	1.17	.18	3.03	.29	T.			T.				.13		.06		T.	1.19	1.32	T.		.07						1.27			8.71
Jackson	Mississippi		1.70	.68	.51	1.04	.27			.21	.03				.13		.13			.87	.60									.09	1.64			7.90
Marble Hill	do		.75	.70	.65	1.70	.18				.05				.15		.15			.65	1.05									.12	1.54			7.69
Morehouse	do		.18	.95	1.12	1.53	.18				.02				.13		.04			1.07	.66									T.	1.12			7.00
New Madrid	do		.11	1.00	.07	1.20	.36	.10			.98	.01				.07	.12		T.	.55	.44	.11									.86	.02		6.00
Parma	St. Francis			1.27		2.13	.38	.05								.52				1.19	.65										.90			7.09
Poplar Bluff	Black		.08	1.50	.55	2.00	.30				.05				.90		.05			.85	2.55										1.05			9.88
Sikeston	Mississippi			1.16	.06	2.21	.50	.06			.04					.03	.06			.64	.47	.17									1.22			6.62
Cairo, Ill.***	do	T.	1.43	.02	.57	1.10	.02	T.		.02	.06	T.		T.	.04	.03	.01		T.	.30	.32		T.		T.					.62	.29			4.83
Ozark Plateau																																
Arcadia	St. Francis		.26	.09	.04	1.28	.11	T.			.14	T.			.21	T	.22		T.	1.05	1.30	.08		.12						1.47			6.37
Birchtree (near)	Black		.72	.20	.70	1.35	.07				.21				.48	.25	.03			.97	1.96	.30								1.18			8.42
Buffalo	Osage		.94	.44		.92					.10						.43			.96	.67						.01	.32		2.83	.03		7.65
Caplinger Mills*	do		1.14		.22	.05	.06			.34	T.		.01	T.	.45	.23	T.		.18	.62	.27	.07	T.				.12	.19	3.43	.14		.90	8.42
Crystal City	Mississippi		2.49			.51	.47	T.			.01			.91	1.03	.07	.34				1.92			.07	T.					.27	.42			8.51
Cuba	Meramec		.70	.17		.67	.90								1.56		.52			1.24	.50									1.10	.65			8.01
Dean	Neosho		.02		1.22	.35	T.			.15	1.15			T.	.15	.12	.02	.04	.15	.96	T.	.11		.22			.32		T.	1.08	.06	.10	6.22
Eldon	Missouri		.90	.73		.11	.45	.02		.06			.07	.94	1.04		.20		.07	.46	.82	.19		.13			.05		1.90	.49			8.63
Farmington	St. Francis		1.15		.40	.15				.40	.48			4.40	.77	.40				.53	3.40									.20	1.08			13.36
Fredericktown	do		.31	1.80	.10	1.31	.09				.09				.12		.27				3.43	.17		.20							.94			8.83
Galena	White		T		.37	.57	.26	T.			.36				.03		.12		.04	1.02	.29	.38	T.	.09			T.			1.80	.18			5.51
Garber	do		.01		1.07	.69	.12			.08	1.10				1.28	.17			.33	.93	.04	T.					.14			1.46	.01			7.43
Goodland	Black		.83	.15	.28	.85	.10			.13	.29					.11	.05	.11			.70	.80			.10					.09	.90			5.49
Greenville	St. Francis		1.08	.46	.77	2.23	.24				1				.32	.16				.74	2.71													8.71
Hailey	White				T.	1.43					.84				.24	.11		.17	.24	.34	1.30			.17	.17	.18	.11		.50	.72	.18	.12	6.82
Koshkonong	Black		.70	.30	.93	2.00	.12			.59	.05					.45			.10	.60	.96		.40					.04	1.74				8.98
Lakeside	Osage	.01	.51	.46		.26	.37			.05			.05	.02	.18		.33		.08	.38	.69	.05		.04			.18	.12	1.49	.57			5.84
Lebanon	do		1.00		.55	.65				.06	.30		T.		.10	T.	.41	.09	T.	.42	.51		T.					.09	12	T.	3.30	T	7.60
Leeper	Black		.02	1.76	.08	2.12	.21				.17				.60	.02	.15			.92	1.60	.26								1.90			9.81
Lockwood	Osage		.42		.23	.35	.13			T.	.25				.07	.33				.07	.80	.18	.20	.32			T.	.20	T.	.71	1.20	T.	T.	5.46
Mountain Grove	White	T.	.75	T	1.17	.17	.08			.44	.56			.60	.21	.18	.10		.18	.30	.31	.11	.02	T.			.02			1.02		1.41	7.63
Neosho	Neosho	T.	.06		.48	.37	.05			.02	.01			T.	.15	.20	.08	.01	.25	.96	T.	.21		.02			.09	T.	.12	1.95	.17		5.20
Owensville	Gasconade		.65	.21		.56	.97	T.		.06				.40	.19	.07	.39	T.		.69	.45	.74		.27				.50	.52				6.67
Rolla	Meramec		.45	.11	.04	.55	1.19			.05		.03			.55		.45		.03	.89	.43	.32		.09				.10	1.04	.52			6.84
St. Thomas (near)	Osage		.30	.48		.31	.48			T.				.98	.15		.18		.05	.39	.22	.27						.09	1.08	.39			5.37
Salem	Meramec		.75	.37	.30	.50	.24	.02		.26	.27			.06	.04	.17	.03		T	.71	.50	T.	T.	.14						.29	.63			5.28
Seligman	Neosho		.03		.98	.54				.10	.55				1.09	.09	T.		.30	1.28	T.	.25	T.	.03		T.	.11			2.16	T.		7.51
Seymour (near)	White		.18	.10	.36	.56	.30			.54	.65				.08	.37			.21	.87	.19	.12		.04			.12		T.	.87			5.56
Springfield ***	do	T.	.21	.11	.72	.30	.01			T.	.33		T.	T.	.07	.38	.01		.17	.66	1.04	.08	.23				.13	T.	1.62	.74		T.	6.81
Stover	Missouri		.80	.03		.13	.27			.06			.29			.69	.19	.02		.82	.65	.02		.05			.35	.17	2.73	.21	.01		7.49
Versailles	Osage		.73	.32	.01	.18	.35			.08			.08	1.18	.29	.14	.04		.15	.71	.99			.11			.28	2.65	1.18	.11			9.58
Williamsville	Black		.58	.96	.23	2.27	.30								.43		.10			.43	1.98	.29							.01		1.58			9.16
Willow Sprgs. (near)	White		.01	.59	.28	1.13	.24				.29				.47		.28			.72	.57	.07									1.05			5 70
Southwest Plain																																
Appleton City	Osage		.16	T.	T.	.08	.01			.18		T.	.15	.10	.33	.19	.03		.31	.51	.25		.10				1.11	2.24	2.54	.06		T.	8.35
Clinton	do		.60			.12	.17			.27		.08	.10	.18	.65	.25	.10		.42	.35	.68		.25				1.05	1.20	2.82	.10		.15	9.54
Concordia	Missouri	.33	**	.29					.38	.50		.46	.71	.17	.98	.22	.34		.17	1.17	**	.45		.15				.16	.45	2.10				9.03

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Daily Precipitation for May 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Harrisonville‖	Osage	....	.57	....	....	....	.01	....	.02	.53	....	.09	.10	.20	.95	.01	.31	....	.34	1.32	.80	.03	....	.06	....	....	.85	1.30	2.25	....	....	....	9.74
Joplin ‖	Neosho	.02	.31	....	.63	.06	....	....	....	....	.19	....	....	T.	....	.03	....	.03	1.30	.48	1.80	.89	.18	....	....	....	.22	T.	1.40	1.05	....	.10	8.69
Lamar ‖	Neosho	....	1.35	....	....	.31	.03	....	....	.05	.12	T.	....	....	.10	....	.11	....	.05	.95	.20	.35	.07	.15	....	....	T.	.17	.10	1.20	.65	....	5.96
Lamonte	Missouri	....	1.15	....	.01	.10	.22	....	.02	.23	...	.10	.40	.05	.70	.15	.25	....	.25	1.15	.60	....	.10	.25	....	....	.28	1.00	2.46	....	....	1.85	11.32
Marshall	do	.24	.85	.03	....	....	.13	....	.24	.44	....	.24	2.84	.01	1.30	T.	.40	....	.10	1.10	1.26	....	.11	.06	....	....	.30	.24	2.03	....	....	....	11.92
Nevada	Osage	....	.39	....	.05	.05	T.	....	.05	.14	.19	T.	.06	.05	.55	.11	.04	....	.42	1.42	.87	.08	T.	....	....	....	.23	.69	2.76	.40	....	.34	8.89
Warrensburg	Missouri	T.	.68	....	T.	.02	....	....	....	.50	....	.14	.05	.15	.96	.05	.20	....	.32	.80	.46	....	.22	T.	T.	....	.71	.16	1.90	....	....	.10	7.42
Warsaw ‖	Osage	T.	.93	.05	T.	.15	.20	.02	....	.05	....	....	.08	.10	.72	.02	.25	....	.18	.48	1.05	....	....	.05	....	....	.57	.13	3.60	.48	....	....	9.11
Waverly ‖	Missouri	.26	.62	.13	....	....	.03	.07	.06	1.00	....	....	.16	.85	1.20	T.	.57	....	.07	.77	1.86	....	....	.29	....	....	.20	.25	3.00	.11	....	....	11.50
Northwest Plateau																																	
Amity ‖	Grand	**	1.66	.02	....	....	....	.12	....	.02	.50	1.08	.74	.03	.68	1.00	....	....	.34	.91	1.83	....	....	.08	.01	....	....	.16	3.44	....	.51	....	13.13
Bethany	do	.49	.17	.32	....	....	....	....	.45	.37	..	.03	.66	.44	.32	.43	.25	....	.05	.70	.86	....	.14	.06	....	....	.23	.37	.75	.11	.91	1.62	9.73
Chillicothe ‖	do	.46	1.43	.55	....	....	.03	....	.18	1.12	....	T	.69	.03	.74	.06	.44	.01	T.	.96	.77	.08	....	.54	T.	....	.22	.35	3.70	....	.94	....	13.30
Conception	Missouri	.17	T.	.31	....	....	T.	T.	T.	.65	....	.05	.25	.29	.44	.34	.24	T.	.27	.78	.74	....	.14	.04	....	....	.04	.55	.72	T.	1.01	1.59	8.62
Edgerton	do	.28	.38	.44	.02	....	.22	T.	.35	.75	....	.79	.10	.31	1.04	.34	.18	.02	.56	.87	1.36	.02	.03	T.	....	....	.05	.50	1.75	.06	.12	.35	10.89
Gallatin ‖	Grand	.45	.92	.95	....	....	....	.04	....	.83	....	....	.50	.63	.35	....	.45	....	.51	.72	.50	.05	....	.27	....	....	.13	.27	2.85	.03	.63	....	11.08
Grant City	do	.13	.04	.67	....	....	T.	....	....	.22	....	.05	.79	.23	T.	.27	.17	....	.12	.68	.86	....	.29	.06	....	....	.06	.59	.71	....	.25	.81	7.00
Kansas City***	Missouri	.57	.13	T.	....	.05	.03	.02	.72	.01	....	.19	.58	.44	.62	.30	.02	T	1.01	.41	.98	.01	.18	T	....	T.	.46	1.40	.70	T.	T.	1.16	9.99
Kidder ‖	Grand	.65	2.01	.61	....	....	.07	.06	.05	.97	....	.02	.70	.17	.57	T.	.46	....	.15	.73	.45	....	....	.76	....	....	.02	.31	3.23	.04	.24	....	12.27
King City	Missouri	.67	.16	T.	....	....	.12	T.	....	.89	....	.41	.77	.03	.25	.50	.25	....	.27	.82	.48	....	.03	.01	....	....	.02	.16	.98	....	.51	1.38	8.71
Lexington ‖	do	.60	.35	.15	....	....	.03	....	.05	1.00	....	.06	.17	.47	1.12	.03	.53	....	.16	.85	1.10	....	....	.12	....	....	.16	.44	2.87	.03	....	....	10.29
Maryville	do	.17	.12	.28	....	....	.02	....	....	.32	....	.04	.80	.32	.28	.37	.09	....	.20	.72	1.38	....	.10	.09	....	....	T.	1.00	.64	....	.62	1.20	8.85
Oregon	do	.22	.10	.04	....	....	.01	....	....	.30	....	.09	1.00	.12	.36	.40	.12	....	.60	.88	.90	T.	.32	.02	....	....	T.	.56	.82	....	.88	.46	8.20
St. Joseph***	do	.79	.10	.02	....	T.	.10	T.	.34	.03	....	.38	.14	.10	.37	.61	.03	..	.87	.83	.44	....	.17	T.	....	T.	T.	1.52	.19	.37	....	.52	7.92
Tarkio	do	.05	....	....	....	....	....	....	....	....	....	.32	1.68	.54	.34	.21	.05	....	.39	.94	1.61	....	.31	....	....	....	....	.31	.25	.25	....	1.60	8.85
Trenton	Grand	1.25	.32	....	....	T.	T.	....	.68	....	....	.13	.81	.04	.37	.08	.38	....	T	1.02	1.19	....	.09	.26	....	....	.50	.30	1.20	....	1.17	.53	10.32

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for May 1935
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.241	.118	.138	.090	.019	.014	.026	.202	.216	.104	.160	.185	.219	.130	.075	.006	.048	.166	.062	.205	.054	.183	.220	.099	.206	.202	.075	.128	.068	.091	.205	3.955
	Mean temperature	60	66	48	44	46	53	60	70	66	60	68	75	72	58	50	54	60	60	70	61	61	60	55	56	58	61	62	66	68	67	72	60.9
	Wind movement	78	94	89	68	68	30	34	67	55	30	62	62	55	36	67	43	47	63	92	58	38	48	50	97	59	28	42	64	50	35	38	1,747

Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from page 21

The greatest amount in any twenty-four hours was 4.40 inches at Farmington on the 13th. The average number of days with 0.01 inch or more of precipitation was 17.

MISCELLANEOUS PHENOMENA

Floods.—In Grand River, 2d and 3d, 17th, 20th and continued into June; in Meramec, 22d; in Missouri, 30th and continued into June; in Mississippi, at Grafton, 17th, and at New Madrid 19th and continued into June; in Osage, 29th and continued into June.

Fog.—Dense, 6th, 7th, 30th.

Frost.—Light, 2d, 4th, 24th.

Hail.—Light, at one or more stations on 2d, 6th, 8th, 9th, 12th, 13th, and 22d; moderate, on 8th at Mexico, 9th Hannibal, 10th Dean; heavy, on the 8th in parts of Ray, Carroll, and Lafayette counties, 9th near Fayette and near Maryville, 12th Brunswick, Fulton, near Warrensburg, 13th Farmington, Desloge, Bismarck, Bonne Terre, and Flat River, 14th Farmington, 20th near Warrensburg, 28th Lamar. The hail on the 8th in Ray, Carroll, and Lafayette counties caused damage estimated at $100,000. The path of the storm was from 2 to 5 miles wide and 25 to 30 miles in length. A number of cattle were killed; crops, orchards, greenhouses, and automobile tops severely damaged. Considerable damage was done by the hailstorms on the 9th, 12th, 13th, and 28th; estimates of damage not available.

Halos.—Solar, 7th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 17th, 21st, 22d, 27th, 29th, 31st; lunar, 9th, 10th, 13th, 17th.

Thunderstorms.—Local, 3d, 5th, 6th, 8th, 10th, 11th, 15th, 16th, 18th, 20th, 23d, 26th, 29th, 30th; more or less general, 1st, 2d, 9th, 12th, 13th, 14th, 19th, 22d, 27th, 28th, 31st.

Windstorms.—2d, 13th, 28th. On the 2d, in Pemiscot County, the damage was estimated at $100,000. On the 13th considerable damage was done in St. Francois County, and on the 28th in Barton County.

ERRATA

April 1935, page 17, Springfield mean temperature should be 53.3; departure — 2.7. Page 20, Springfield maximum temperature on 29th should be 61; mean maximum temperature 61.2.

Daily Temperatures for May 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	69	70	57	46	58	57	69	77	75	75	74	83	79	67	60	61	68	65	71	70	73	72	65	69	73	71	70	73	77	77	80	69.4
	Minimum...	47	57	41	39	41	47	44	54	53	46	56	62	61	49	46	50	46	52	53	54	51	55	46	42	45	56	60	62	56	64	60	51.5
Columbia.	Maximum...	69	71	52	45	51	55	67	79	71	74	78	84	75	64	58	57	66	65	73	62	70	73	58	65	72	70	67	75	75	77	80	67.7
	Minimum...	51	52	42	39	43	47	52	57	54	48	56	64	64	46	46	51	47	54	56	49	49	52	46	43	43	56	61	61	61	64	61	52.1
Fayette	Maximum...	66	71	64	45	54	58	70	81	74	75	76	81	79	67	60	58	68	65	73	64	75	72	56	61	75	69	70	76	79	79	83	69.2
	Minimum...	47	56	42	38	40	47	44	54	55	43	51	62	66	47	46	50	45	53	54	53	49	47	46	43	40	52	58	60	57	59	57	50.4
Hannibal	Maximum...	59	68	59	43	53	56	66	74	72	73	72	79	77	64	60	58	67	69	63	58	72	69	59	63	72	73	70	72	77	75	75	66.7
	Minimum...	46	45	39	37	41	46	49	53	54	50	53	60	63	45	45	47	42	50	51	51	47	55	47	41	51	53	58	61	55	60	60	50.2
Jefferson City §§	Maximum...	70	72	50	46	51	58	67	83	71	73	80	86	78	54	55	57	67	65	77	59	72	74	58	68	73	69	70	75	76	80	81	68.2
	Minimum...	50	55	44	39	39	44	49	56	57	49	55	61	62	53	47	48	47	51	53	58	47	52	52	41	44	54	56	60	59	59	60	51.6
Kirksville.	Maximum...	60	62	49	52	72	59	67	70	71	74	72	80	79	59	59	57	65	63	60	67	73	72	61	69	72	70	68	68	76	77	74	67.0
	Minimum...	45	48	36	38	40	45	40	51	49	45	54	59	56	45	44	45	40	48	49	50	47	54	42	40	45	52	60	60	54	58	57	48.3
Louisiana	Maximum...	57	55	53	56	53	55	64	76	70	72	76	80	73	65	60	56	65	65	66	58	72	70	55	70	70	72	69	72	76	77	80	66.4
	Minimum...	49	48	45	38	48	48	50	54	58	58	53	60	65	46	46	50	39	53	55	55	42	54	50	40	43	50	60	60	54	60	64	51.5
Macon§§	Maximum...	65	69	46	45	56	58	68	74	72	72	75	81	67	51	60	57	66	64	64	56	75	74	53	67	74	73	71	72	77	78	74	66.3
	Minimum...	44	46	41	35	40	44	45	49	52	49	54	57	62	50	44	46	41	49	50	53	46	52	51	41	46	53	58	59	53	60	58	49.3
Mexico §§	Maximum...	67	70	48	45	51	56	68	78	71	72	75	82	76	50	60	58	62	68	58	58	71	75	59	65	72	72	70	75	75	77	80	66.6
	Minimum...	45	46	42	37	38	42	46	54	50	44	53	58	63	49	44	47	43	51	52	51	44	49	50	39	42	53	58	61	57	60	57	49.2
St. Louis	Maximum...	71	70	63	48	49	56	66	77	70	72	78	79	81	67	60	55	67	68	64	57	71	76	67	66	71	73	77	78	75	82	81	68.9
	Minimum...	53	58	42	39	44	48	51	53	61	56	57	65	66	47	49	49	46	53	54	53	52	55	51	47	54	55	58	63	60	65	63	53.8
Unionville §§	Maximum...	60	55	42	52	57	57	70	68	70	75	73	80	58	51	59	58	65	64	55	58	72	71	55	69	72	68	69	68	77	78	68	64.3
	Minimum...	40	46	37	33	36	41	39	44	46	44	55	56	56	50	44	44	41	47	48	49	48	53	41	41	47	55	57	60	56	58	58	47.4
Warrenton	Maximum...	67	69	67	46	49	57	66	80	79	73	78	79	78	75	59	57	67	68	66	63	70	71	69	65	72	73	70	73	74	79	78	68.9
	Minimum...	51	57	43	38	42	47	51	53	56	51	52	64	63	45	46	49	43	51	53	53	45	52	53	42	50	50	57	63	54	61	60	51.5
Southeast Lowlands																																	
Campbell	Maximum...	84	85	68	70	54	63	65	69	69	69	85	87	85	79	64	71	62	68	76	76	69	69	69	68	69	70	79	84	82	80	88	73.4
	Minimum...	44	64	52	41	43	51	51	58	59	58	64	66	54	52	55	50	55	59	55	52	49	47	46	46	45	50	56	59	61	64	53.5
Caruthersville	Maximum...	84	81	76	64	55	64	73	84	88	80	89	92	91	87	72	71	73	73	86	80	70	76	79	76	76	79	85	86	83	88	88	79.0
	Minimum...	52	72	59	44	46	54	52	55	60	62	68	67	67	54	58	54	59	62	63	54	52	56	49	53	55	63	67	63	64	66	58.4
Doniphan	Maximum...	72	77	66	58	52	67	74	75	84	77	82	90	88	76	69	71	68	68	84	73	68	64	66	70	70	75	85	79	75	85	86	74.0
	Minimum...	51	65	58	42	44	51	46	52	59	57	51	60	65	63	59	55	53	56	59	61	53	46	50	43	41	45	53	67	62	61	63	54.5
Jackson	Maximum...	78	77	66	53	52	61	72	81	82	77	85	89	89	81	64	66	72	72	84	80	75	77	73	69	77	79	85	82	78	86	87	75.8
	Minimum...	52	60	51	40	43	49	53	54	63	52	55	64	67	53	50	54	46	54	58	55	50	47	51	48	42	45	57	66	61	60	64	53.7
Poplar Bluff	Maximum...	77	80	69	53	53	62	71	80	81	75	83	87	86	84	64	70	67	71	83	70	71	73	70	72	73	76	83	80	73	84	85	74.4
	Minimum...	47	69	50	41	41	51	46	52	60	59	62	62	67	64	52	53	54	57	57	61	54	49	52	48	45	47	54	65	64	59	64	55.1
Sikeston	Maximum...	80	79	69	53	57	61	72	79	83	76	84	90	87	82	62	66	71	74	86	82	74	75	74	72	75	79	87	84	78	86	88	76.3
	Minimum...	41	66	53	41	43	52	54	53	60	59	58	64	67	62	51	56	48	55	60	60	51	50	54	47	45	49	54	65	62	60	65	55.0
Cairo, Ill.	Maximum...	79	76	70	48	54	63	71	78	82	73	82	86	85	78	63	65	68	71	80	66	71	72	72	66	72	75	83	82	74	83	83	73.3
	Minimum...	52	62	48	41	47	53	56	56	64	61	60	69	72	55	54	55	51	59	61	53	52	54	54	51	53	58	63	65	64	64	67	57.2
Ozark Plateau																																	
Arcadia §§	Maximum...	75	62	54	45	50	60	62	80	71	70	83	88	85	70	57	62	65	67	80	62	70	72	67	66	71	73	80	77	74	82	84	69.8
	Minimum...	43	55	53	39	40	44	49	49	59	53	52	59	64	63	47	50	47	50	54	58	47	53	49	48	39	43	53	62	59	57	59	51.5
Birchtree	Maximum...	72	75	65	52	52	66	70	81	75	73	81	86	86	78	68	64	64	68	81	67	69	72	68	68	76	76	87	71	72	84	85	72.6
	Minimum...	59	63	47	38	40	46	45	53	59	53	55	59	56	50	50	52	44	52	52	57	45	46	46	44	41	45	53	51	56	58	52	50.5
Crystal City §§	Maximum...	64	70	52	50	52	56	68	86	70	74	..	90	81	57	60	58	69	..	73	59	74	75	66	67	..	76	82	80	76	83	83	[c]69.7
	Minimum...	53	50	50	40	40	48	50	52	56	49	51	..	59	55	48	52	46	51	..	55	47	47	50	49	41	44	..	64	60	63	62	[c]51.1
Eldon §§	Maximum...	69	72	49	44	50	55	69	83	..	..	81	85	79	60	55	58	67	62	82	60	71	74	57	66	74	69	69	72	74	78	82	[b]67.8
	Minimum...	37	56	44	39	39	43	47	49	54	..	..	47	63	59	46	47	51	50	52	54	48	49	50	41	42	45	53	60	60	59	61	[b]49.8
Farmington	Maximum...	65	75	71	50	47	55	68	80	75	71	83	89	88	70	50	63	68	68	80	68	73	70	68	73	73	79	78	78	78	85	83	71.7
	Minimum...	55	55	45	37	35	39	45	50	60	51	52	61	62	46	48	49	46	50	53	53	41	45	50	47	41	43	52	62	55	60	60	49.7
Garber	Maximum...	72	75	69	51	50	62	73	88	79	72	83	89	84	78	62	64	63	63	79	72	69	72	67	70	74	69	83	83	77	83	85	72.9
	Minimum...	53	62	47	41	42	48	42	49	54	57	54	53	60	60	50	55	58	54	57	57	52	49	47	45	42	49	53	62	59	57	61	52.5
Koshkonong	Maximum...	74	74	65	53	52	68	71	81	79	73	82	85	85	77	58	65	65	65	81	74	66	69	68	68	71	74	81	74	82	..	86	[a]72.2
	Minimum...	51	62	50	40	41	41	45	54	59	56	58	62	65	56	48	55	56	53	55	59	49	51	50	45	45	50	57	58	68	..	64	[a]53.4
Lebanon §§	Maximum...	71	73	48	45	50	57	70	83	68	70	70	88	80	78	64	59	65	65	80	66	73	81	58	71	66	77	64	71	83	73	86	69.5
	Minimum...	49	57	39	39	39	39	48	55	57	53	55	59	59	63	45	47	49	51	42	55	47	49	53	49	42	40	53	50	60	56	58	50.2
Mountain Grove	Maximum...	70	70	59	45	50	60	69	80	71	68	79	84	84	72	56	61	63	61	78	73	68	69	63	70	73	68	79	78	69	83	83	69.5
	Minimum...	50	58	43	38	40	45	43	53	52	52	56	63	64	51	45	53	49	52	54	52	47	49	49	44	41	51	50	64	57	58	62	51.1
Neosho	Maximum...	72	72	70	71	52	56	75	84	83	73	84	88	88	75	67	62	62	66	75	77	73	75	73	67	75	73	77	83	83	82	87	74.2
	Minimum...	52	57	44	40	40	47	38	54	56	57	54	62	62	58	49	50	51	53	53	53	49	48	47	41	44	52	57	66	58	57	61	51.9
Rolla	Maximum...	70	73	67	48	48	54	66	82	80	71	81	86	84	77	54	57	65	65	78	73	66	72	69	64	69	69	74	77	72	78	81	70.0
	Minimum...	53	58	46	38	40	46	51	56	58	53	54	65	64	48	46	51	49	52	55	56	47	50	48	45	42	54	59	65	59	60	63	52.6
Springfield	Maximum...	69	72	54	43	52	57	69	86	69	68	81	86	78	69	55	59	62	61	77	69	66	68	58	65	69	68	80	80	70	78	84	68.5
	Minimum...	55	54	42	39	40	48	42	57	61	54	60	66	66	47	46	52	50	54	57	53	49	54	44	44	47	55	60	59	59	61	66	52.9
Southwest Plain																																	
Appleton City	Maximum...	70	66	55	43	48	55	69	78	75	67	82	84	75	66	54	56	63	63	71	67	69	65	58	65	71	67	66	67	72	74	73	66.3
	Minimum...	57	55	43	40	40	47	44	55	55	52	59	63	63	51	47	52	52	54	54	58	52	50	47	44	44	55	60	60	60	59	64	52.8
Clinton	Maximum...	73	70	62	55	52	54	72	80	72	70	74	84	78	69	58	55	62	63	74	65	74	75	60	62	70	65	66	78	74	75	85	68.6
	Minimum...	53	58	44	40	40	47	41	57	54	54	55	62	62	52	46	52	52	51	54	54	52	50	46	42	44	55	55	60	59	60	64	52.1
Harrisonville §§	Maximum...	79	63	48	53	53	68	69	75	71	75	80	90	63	62	53	59	65	58	78	65	72	74	51	70	75	70	75	79	75	78	80	68.6
	Minimum...	46	57	42	38	39	47	42	43	51	49	54	59	60	56	45	46	50	50	52	54	51	50	50	40	49	49	54	59	59	57	60	50.3
Lamar §§	Maximum...	74	73	49	45	49	56	73	84	69	69	83	86	77	68	56	60	66	66	80	72	69	72	60	67	73	69	78	81	78	80	86	69.9
	Minimum...	39	58	46	42	42	42	45	46	57	55	56	62	63	60	49	49	52	53	56	58	51	51	52	43	45	54	57	62	60	61	63	52.5
Lamonte	Maximum...	70	72	51	44	54	56	69	82	71	75	80	85	73	62	55	56	67	63	77	63	73	72	56	68	74	70	71	76	76	79	84	68.5
	Minimum...	53	50	41	38	40	40	43	54	51	45	56	64	61	50	44	51	50	52	53	54	50	50	45	39	42	55	59	60	58	59	58	50.5
Marshall	Maximum...	69	70	67	44	54	56	64	78	76	71	76	83	80	68	52	55	65	65	69	67	69	73	59	64	70	70	75	75	75	79	78	68.0
	Minimum...	47	56	41	38	39	39	47	53	54	47	55	60	60	48	45	50	46	51	54	54	50	52	45	42	45	55	54	63	57	61	62	50.6
Nevada	Maximum...	72	72	60	45	50	59	70	83	74	68	82	84	78	65	54	59	69	64	77	69	67	71	60	67	71	70	72	75	75	75	85	69.1
	Minimum...	47	49	44	40	40	46	45	56	55	51	49	64	51	51	46	51	52	54	54	58	51	50	47	42	49	55	61	60	48	58	64	51.2
Warrensburg	Maximum...	71	70	56	56	51	55	69	78	72	73	80	84	78	63	54	55	63	61	73	65	72	71	59	65	74	69	70	73	74	74	82	68.1
	Minimum...	53	56	42	38	39	46	43	55	52	49	57	54	61	49	45	51	50	52	53	55	51	51	45	41	46	55	60	59	58	60	58	51.1
Warsaw	Maximum...	72	74	64	46	50	57	73	84	80	73	82	87	80	79	54	59	68	65	81	65	74	75	68	70	77	71	71	77	77	79	86	71.5
	Minimum...	58	59	45	40	41	47	41	57	55	48	58	64	63	51	48	52	52	53	54	59	50	47	47	41	41	55	61	60	59	59	60	52.4
Northwest Plateau																																	
Chillicothe §§	Maximum...	69	67	57	50	54	60	70	73	72	75	71	80	63	54	57	58	66	62	69	58	74	71	56	69	73	72	73	72	75	79	74	66.9
	Minimum...	45	47	40	38	39	46	44	51	49	48	50	53	57	53	45	46	44	41	51	55	48	52	46	38	43	54	57	59	55	60	59	48.8
Grant City	Maximum...	67	66	47	47	53	63	68	68	66	72	76	63	64	54	51	58	62	61	58	56	69	68	59	63	68	66	66	69	72	75	70	63.4
	Minimum...	46	45	36	34	40	44	46	49	44	41	69	58	50	47	45	46	46	50	47	51	42	49	40	39	57	55	60	59	59	55	58	48.6
Kansas City	Maximum...	78	63	47	45	53	67	68	75	70	74	82	89	69	57	52	58	64	59	76	64	71	72	56	68	75	69	74	79	74	77	79	67.9
	Minimum...	50	47	42	39	42	47	45	52	51	46	61	66	57	49	47	51	51	52	53	54	52	56	46	44	46	58	59	59	58	62	61	51.7
Kidder	Maximum...	73	71	51	47	54	60	67	71	69	72	71	78	75	57	54	56	64	60	68	66	70	67	59	66	69	67	70	68	73	74	75	65.9
	Minimum...	44	48	38	36	39	44	44	50	47	49	53	58	53	46	43	46	46	49	49	53	48	51	41	41	46	54	59	57	53	58	57	48.4
Lexington §§	Maximum...	74	61	43	46	56	60	69	79	73	79	77	87	63	56	55	52	57	61	73	65	72	74	50	68	75	70	73	78	76	80	82	67.2
	Minimum...	46	49	41	38	39	44	45	50	51	48	56	58	62	55	46	47	49	51	52	57	51	54	50	40	47	56	56	60	58	61	61	50.9
Maryville	Maximum...	74	72	45	48	58	66	71	69	70	72	72	72	62	53	51	55	62	60	59	56	72	68	57	68	69	67	69	70	72	74	72	64.7
	Minimum...	46	45	38	33	39	45	45	50	44	46	55	58	51	47	44	45	48	49	47	51	44	49	40	41	43	57	59	58	56	54	57	47.9
Oregon	Maximum...	79	74	48	46	61	69	73	72	72	75	72	75	59	54	53	59	65	61	69	62	72	64	60	70	74	72	74	75	74	77	74	67.2
	Minimum...	46	46	38	33	38	44	48	50	45	47	58	54	52	48	44	46	48	49	49	53	46	51	42	41	46	57	59	58	54	56	57	48.5
St. Joseph..	Maximum...	77	62	45	47	57	65	72	71	71	74	74	80	60	55	51	59	64	58	73	60	71	64	55	68	73	69	72	74	74	77	68	65.8
	Minimum...	48	43	41	39	42	48	48	52	48	50	60	60	60	54	47	46	48	51	51	52	52	52	54	43	42	46	60	60	59	56	59	50.7
Trenton	Maximum...	67	60	50	58	57	61	68	76	73	70	69	80	75	57	55	60	68	66	64	62	75	72	65	72	73	70	72	71	76	80	75	67.6
	Minimum...	47	49	39	37	39	47	50	51	48	45	54	58	54	47	45	48	45	50	50	52	50	56	47	41	43	56	60	59	56	60	60	49.8

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside. Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

19 **MISSOURI SECTION**
ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX JUNE 1935 No. 6

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GENERAL SUMMARY

The month is outstanding in respect to both temperature and rainfall. In the records for Missouri, covering the last 48 years, June was cooler only in 1903, 1912, and 1928, and wetter only once, viz., in 1928. These comparisons are for the State as a whole. It is interesting to compare this June with June 1934, which was the warmest June of record, with temperature averaging 80.4°, while June 1935 averaged 69.6°. The low average temperature this month was due to a considerable extent to the prevailing cloudiness and showery weather, which kept afternoon temperatures down. There were very few days with temperatures registering as high as 90°. On an average for the State, the month had only 9 clear days, which is the second smallest number of record for June, while the cloudy days were 9, which is the second largest number of record for June. The number of days with rain, averaging 15, is also the second largest number of such days for June.

The average monthly rainfall for the State, 9.25 inches, has only been exceeded in June records by that of June 1928, with an average of 11.17 inches. In 1935 a very wet May was followed by a very wet June. For the two-months period, May-June, the State average was 17.75 inches, which is slightly more rainfall than has ever before been recorded in Missouri for a like period. The next greatest May-June total was 17.41 inches in 1896. Last year the total May-June rainfall was only 4.74 inches. The rainfall in June 1935 was very unevenly distributed over the State, with some small areas receiving less than 3 inches, while some others received as much as 16 inches, or more, and one received 18.63 inches. The wettest area, averaging more than 12 inches, was in the southern half and extended across the State from Cass County east-southeastward to St. Francois, Iron, and Reynolds counties, including about 20 counties. In northern Missouri amounts ranged from about 3 inches over a small eastern area to about 12 inches in some other small areas, but the average for the whole northern section was near 7 inches. Some excessive local downpours—especially in the counties of Scotland, Pike, St. Charles, Crawford, and Phelps—caused disastrous local floods and washouts.

The wet weather, with floods and washing of land, caused much damage to crops. Corn planting was almost unprecedentedly backward, with less than three-fourths of the acreage planted at the end of June, and the condition of corn was considered the lowest in the history of the crop reporting service, which began in 1866. Wheat deteriorated decidedly during June, but a fairly good crop was still expected. Hay crops and pastures were rank in growth, but not of the best quality. Gardens and truck crops were fair to very good. Apples and peaches promised good crops.

The floods in the principal rivers were the highest since 1927 at many points, and the highest since 1903 in the lower Missouri. The Grand and the Osage had major floods and these produced the great flood in the lower Missouri. In the Mississippi the flood, coming mostly from the Missouri River, was strong, but not equal to the floods of 1927 and 1929 in the St. Louis district. Flood losses in Missouri were estimated to be approximately $14,000,000. Of this, more than $10,500,000 was in damages to crops and lands, mostly in the rich Missouri River bottom lands.

(Continued on page 29)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.89	30.14	9	29.39	18	7.4	23	w.	18	85	64	68	48
Kansas City.....	29.89	30.17	7	29.41	18	9.4	36	nw.	1	83	58	62	58
St. Joseph.....	29.88	30.17	7	29.44	18	7.9	30	nw.	4	84	59	60	60
St. Louis.	29.91	30.17	9	29.44	18	11.7	32	nw.	19	80	61	65	54
Springfield.	29.93	30.12	9	29.49	17	9.5	30	nw.	2	87	71	71	64
Cairo, Ill.....	29.94	30.16	9	29.53	18	7.7	27	sw.	12	86	72	70	63
Keokuk, Iowa..	29.91	30.17	9	29.39	18	7.3	29	nw.	19	80	60	66	52

COMPARATIVE DATA FOR JUNE

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	72.6	− 0.9	103	36	6.20	+1.36	10.52	2.87	0	7	..	..	..
1889....	70.7	− 2.8	100	38	4.66	−0.18	8.80	1.78	0	6	..	..	..
1890....	77.2	+ 3.7	106	44	2.59	−2.25	7.47	0.37	0	6	..	..	..
1891....	73.2	− 0.3	103	46	6.94	+2.10	13.54	3.29	0	13	..	..	..
1892....	74.5	+ 1.0	100	45	3.18	−1.66	7.63	0.45	0	7	15	9	6
1893....	72.6	− 0.9	98	40	4.61	−0.23	8.58	1.29	0	9	12	12	6
1894....	74.5	+ 1.0	105	35	3.92	−0.92	9.78	0.75	0	7	16	11	3
1895....	73.3	− 0.2	100	42	5.77	+0.93	9.95	0.45	0	10	12	11	7
1896....	72.5	− 1.0	101	45	8.32	+3.48	9.97	0.77	0	9	12	11	7
1897....	73.6	+ 0.1	102	38	6.18	+1.34	11.67	2.78	0	12	9	14	7
1898....	75.3	+ 1.8	100	49	5.88	+1.04	11.08	2.42	0	11	13	12	5
1899....	74.3	+ 0.8	101	42	3.87	−0.97	9.05	1.53	0	9	15	10	5
1900....	73.3	− 0.2	103	44	4.79	−0.05	9.07	1.12	0	10	12	12	6
1901....	77.9	+ 4.4	106	40	2.13	−2.71	5.31	0.26	0	6	18	10	2
1902....	70.9	− 2.6	100	37	6.57	+1.73	12.55	2.55	0	12	11	10	9
1903....	67.3	− 6.2	95	36	3.25	−1.59	8.30	1.22	0	9	15	9	6
1904....	70.5	− 3.0	93	45	6.42	+1.58	13.79	1.60	0	11	12	12	6
1905....	75.2	+ 1.7	103	42	3.09	−1.75	6.88	0.74	0	7	15	10	5
1906....	72.7	− 0.8	101	40	4.70	−0.14	11.15	0.98	0	10	15	9	6
1907....	71.2	− 2.3	97	40	5.84	+1.00	10.35	0.94	0	11	14	10	6
1908....	72.3	− 1.2	98	43	6.30	+1.46	13.29	2.05	0	11	13	10	7
1909....	73.9	+ 0.4	98	48	5.21	+0.37	10.05	0.74	0	11	11	13	6
1910....	70.4	− 3.1	99	38	3.92	−0.92	9.01	0.96	0	8	16	7	7
1911....	78.9	+ 5.4	112	43	1.78	−3.06	5.85	0.08	0	6	18	8	4
1912....	69.5	− 4.0	100	42	4.78	−0.06	8.88	0.96	0	9	14	8	8
1913....	75.4	+ 1.9	107	33	2.57	−2.27	6.39	0.37	0	6	18	8	4
1914....	79.3	+ 5.8	106	43	2.37	−2.47	7.31	0.10	0	5	18	7	5
1915....	70.8	− 2.7	98	38	6.51	+1.67	12.88	0.57	0	12	11	10	9
1916....	70.0	− 3.5	100	42	6.99	+2.15	12.81	2.52	0	10	14	9	7
1917....	71.0	− 2.5	103	35	3.78	−1.06	13.54	0.09	0	8	19	7	4
1918....	77.2	+ 3.7	110	48	3.15	−1.69	8.06	0.62	0	7	17	8	5
1919....	75.0	+ 1.5	104	44	5.59	+0.75	10.69	1.91	0	11	14	10	6
1920....	72.7	− 0.8	104	41	2.35	−2.49	6 63	0.57	0	6	18	7	5
1921....	76.6	+ 3.1	105	44	5.71	+0.87	11.39	2.31	0	12	12	10	8
1922....	76.5	+ 3.0	108	43	1.66	−3.18	3.57	0.13	0	5	19	8	3
1923....	73.5	0.0	103	45	5.48	+0.64	9.86	2.12	0	11	14	9	7
1924....	72.5	− 1.0	101	38	7.39	+2.55	13.53	2.59	0	14	12	12	6
1925....	76.5	+ 3.0	103	46	6.10	+1.26	12.55	0.27	0	9	15	10	5
1926....	70.9	− 2.6	101	37	3.62	−1.22	8.42	0.34	0	8	15	9	6
1927....	70.3	− 3.2	99	41	5.77	+0.93	11.61	1.99	0	10	15	7	8
1928....	67.7	− 5.8	91	40	11.17	+6.33	22.00	5.08	0	15	8	11	11
1929....	71.3	− 2.2	99	39	5.77	+0.93	11.42	2.66	0	10	16	8	6
1930....	72.4	− 1.1	109	36	3.83	−1.01	10.35	0.30	0	7	18	8	4
1931....	77.1	+ 3.6	107	40	2.94	−1.90	9.14	0.56	0	6	19	8	3
1932....	75.2	+ 1.7	103	47	4.95	+0.11	14.12	1.57	0	10	12	12	6
1933....	78.4	+ 4.9	107	38	1.72	−3.12	9.10	0.00	0	3	22	6	2
1934....	80.4	+ 6.9	108	47	2.85	−1.99	5.95	0.23	0	7	17	10	3
1935....	69.6	− 3.9	98	39	9.25	+4.41	18.63	2.77	0	15	9	12	9
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
Period.	73.5	.....	112	33	4.84	.....	22.00	0.00	0	9	14	10	6

Climatological Data for June 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	70.4	− 2.6	93	15	47	7	29	9.83	+4.34	3.05	0	15	13	4	13	se	O. K. Benecke
Clifton Hill	Randolph	731	36	71.1	− 1.3	91	28	46	7	31	4.79	−0.10	0.90	0	16	11	10	9	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	69.6	− 3.2	89	30	50	7	26	5.72	+0.96	1.31	0	16	9	12	9	w.	U. S. Weather Bureau
Downing	Schuyler	876	14	68.4	− 3.0	88	25†	42	7	29	7.87	+2.41	2.36	0	16	10	17	3	sw	James Taylor
Elsberry	Lincoln	449	4	69.2	.....	91	30	46	9	32	3.84	.....	1.53	0	15	8	18	4	nw.	Ray E. Mills
Fayette	Howard	680	55	70.0	− 2.8	92	28	47	5†	34	7.19	+2.40	2.40	0	12	7	19	4	s.	Harry P. Mason
Fulton	Callaway	818	47	68.6	− 4.6	89	28†	48	7†	29	6.96	+2.29	1.32	0	18	14	7	9	s.	Clyde C. Herring
Gorin	Scotland	700	48	....	....	..	..	..	..	..	12.60	+8.31	7.59	0	13	14	10	6	sw.	W. L. Harker
Hannibal	Marion	759	43	68.4	− 4.1	88	30	48	7	28	6.30	+2.40	1.51	0	15	9	6	15	nw.	Hannibal Water Dept.
Jefferson City	Cole	557	45	69.6	− 4.2	89	28	49	7	27	7.33	+3.06	1.09	0	13	7	14	9	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	68.4	− 3.3	88	27†	42	6	31	9.42	+4.71	3.17	0	13	6	17	7	sw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	7.80	.....	2.35	0	18	13	9	8	e.	J. Robert Hall
Louisiana	Pike	469	41	69.2	− 2.9	90	23†	46	9	35	3.77	−0.42	0.90	0	12	15	11	4	s.	Stark Bro's Nurseries
Macon	Macon	875	36	69.7	− 2.7	92	28	45	7	33	3.87	−1.02	1.32	0	13	10	16	4	w.	W. C. Brown
Mexico	Audrain	800	46	69.5	− 3.7	90	28†	44	5	29	8.86	+3.78	3.20	0	15	16	4	10	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	7.84	+2.77	2.39	0	15	11	12	7	n	J. S. Conway
St. Charles	St. Charles	520	47	71.6	− 2.3	92	28†	50	7†	29	4.39	+0.27	0.68	0	15	11	11	8	se.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	71.5	− 3.5	90	28	50	7	24	4.37	+0.55	0.70	0	16	8	12	10	sw.	**Section Center**
St. Louis University	St. Louis City	578	23	71.3	− 3.6	89	30	50	7	23	3.90	+0.23	0.71	0	17	12	10	8	se.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	4.60	−0.41	1.01	0	13	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	68.4	− 4.2	90	30	44	7	31	7.53	+3.05	1.25	0	15	14	13	3	s.[b]	Frank Hall
Unionville	Putnam	1,062	42	68.2	− 3.1	87	10†	41	7	28	9.38	+4.29	3.03	0	12	9	12	9	s.	John H. Schick
Warrenton	Warren	816	53	69.1	− 4.3	88	30	48	7	24	7.80	+3.58	1.59	0	20	5	17	8	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	69.0	− 3.5	88	30	47	7	27	6.40	+2.27	2.30	0	12	2	11	17	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**69.6**	**− 3.3**	**93**	**15**	**41**	**7**	**35**	**6.52**	**+2.11**	**7.59**	**0**	**15**	**10**	**12**	**8**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	69.3	− 6.2	90	26	45	19	30	5.21	+0.97	1.45	0	11	13	11	6	s.	Jeff. King
Caruthersville	Pemiscot	265	39	74.7	− 3.7	92	12†	53	23	31	4.73	+0.71	1.35	0	14	14	5	11	s	Sam Smith
Doniphan	Ripley	344	31	71.1	− 3.9	92	28†	45	5	34	9.58	+4.99	1.74	0	13	12	5	13	s.	W. W. Martin
Jackson	Cape Girardeau	428	44	72.4	− 1.7	94	28	49	9	31	8.73	+4.01	1.47	0	15	5	3	22	s.	John G. Putz
Marble Hill	Bollinger	470	40	71.2	− 2.8	92	30	46	9	33	8.50	+3.79	1.30	0	16	12	12	6	w.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	7.81	+2.78	2.49	0	17	11	11	8	sw.	John A. Spence
Poplar Bluff	Butler	339	30	72.0	− 3.4	92	28	52	4†	31	9.27	+4.60	3.54	0	14	13	7	10	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	72.6	− 1.7	95	28	52	5†	31	7.51	+3.28	1.95	0	15	9	16	5	s.	John A. LaFont
Cairo, Ill	Alexander, Ill	356	63	72.6	− 3.7	89	30	56	8	20	7.51	+3.68	1.39	0	17	4	8	18	sw.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**72.0**	**− 3.4**	**95**	**28**	**45**	**5†**	**34**	**7.73**	**+3.23**	**4.65**	**0**	**15**	**10**	**9**	**11**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	68.0	− 3.8	85	25†	42	9	32	12.48	+7.79	3.42	0	21	11	6	13	e.	Arcadia College
Birchtree (near)	Shannon	1,000	40	68.4	− 4.3	88	28	45	5	32	11.82	+7.24	2.30	0	15	13	6	11	.....	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	12.34	.....	3.27	0	13	11	9	10	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	8.61	.....	3.10	0	11	6	19	5	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	71.0[d]	.....	90	28	49	10	35	9.31	.....	4.07	0	17	2[a]	9[a]	18[a]	sw.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	31	69.6	− 3.1	91	24	40	5	41	10.64	+4.60	1.56	0	18	8	12	10	se.	H. E. Dean
Eldon	Miller	934	40	69.2	− 3.8	92	30	48	7	29	16.33	+11.71	3.65	0	18	4	16	10	sw.	E. H. Shepherd
Farmington	St. Francois	918	24	70.6	− 2.2	91	28	42	10	39	17.71	+13.06	5.20	0	16	13	10	7	sw.	H. O. Miller
Garber	Taney	950	0	70.0	.....	91	10†	45	5	36	12.46	.....	3.23	0	18	8	9	13	e.	William H. Durham
Goodland	Iron	1,000	42	68.0	− 3.9	87	27	44	4†	35	12.26	+8.00	2.18	0	16	11	9	10	n.	F. M. Adams
Greenville	Wayne	381	26	69.2	− 4.4	98	29	45	5	35	10.47	+5.69	2.80	0	16	10	8	12	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	12.24	+6.64	5.67	0	12	14	11	5	se.	A. W. Madison
Koshkonong	Oregon	958	34	70.9[a]	− 3.5	89	28	50	5	29	9.71	+5.00	1.50	0	16	12	6	12	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	69.0	− 3.7	88	27†	47	7†	38	15.46	+10.21	3.65	0	19	13	8	9	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	70.8	− 2.8	89	29	50	5†	27	8.99	+3.65	1.90	0	15	11	16	3	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	68.2	− 3.6	88	26	48	5	28	9.96	+5.18	1.98	0	18	11	10	9	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	70.4	− 3.4	90	11†	43	5	36	14.24	+8.43	3.58	0	18	10	15	5	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	68.7	− 4.3	86	25	49	7	23	12.84	+8.58	3.62	0	17	2	6	22	se.	F. H. Lane
Salem	Dent	1,173	31	69.0	− 3.4	89	25	48	7	32	12.80	+8.10	3.40	0	16	8	14	8	s.	E. E. Martin
Seligman	Barry	1,542	34	69.2[a]	− 3.2	87	11	46	5	30	12.82	+8.47	3.28	0	17	10[a]	18[a]	1[a]	sw.	Floyd E. Fawver
Seymour (near)	Webster	1,642	29	67.4	− 4.3	85	25	46	5	31	9.86	+4.46	1.86	0	17	8	12	10	se.	A. L. Hailey
Springfield	Greene	1,324	47	69.0	− 3.5	87	10	48	7	26	11.31	+6.63	2.01	0	17	15	12	3	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	69.8	.....	90	10	48	7	27	13.08	+8.25	4.01	0	17	9	8	13	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**69.3**	**− 3.6**	**98**	**29**	**40**	**5**	**41**	**11.72**	**+6.80**	**5.67**	**0**	**16**	**10**	**11**	**9**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	69.4	− 5.0	88	10	49	7	24	8.33	+3.08	2.37	0	19	4	23	3	sw.	W. G. Bigelow
Clinton	Henry	765	42	70.6	− 3.2	92	10	48	7	30	18.63	+13.61	4.15	0	15	5	19	6	se.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	9.13	+3.84	2.03	0	12	12	5	13	s.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	70.6	− 2.5	92	12	44	7	35	12.21	+7.58	2.11	0	16	5	6	19	sw.	John H. Patterson
Lamar	Barton	980	47	70.2	− 4.0	89	25	50	5†	34	7.69	+2.44	1.82	0	15	10	10	10	se.	Jesse A. Mann
Lamonte	Pettis	867	34	69.4	− 4.6	91	28	46	7	36	10.85	+6.02	2.45	0	18	11	7	12	se.	J. E. Wheeler
Marshall	Saline	779	48	69.2	− 4.0	89	27	46	7	35	5.25	+0.62	1.64	0	14	8	13	9	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	70.8	− 2.7	88	10†	49	7	27	7.09	+1.57	2.82	0	10	12	9	9	s.	George A. Kaupp
Warrensburg	Johnson	878	48	69.6	− 4.3	89	28	45	7	33	5.98	+0.95	1.43	0	16	11	6	13	sw.	E. A. Markey
Warsaw	Benton	687	34	71.4	− 2.4	90	10†	49	7	29	16.23	+10.85	3.70	0	17	11	7	12	s.	Everett Martin
Division means	**and extremes**	.....	..	**70.1**	**− 3.6**	**92**	**10†**	**44**	**7**	**36**	**10.13**	**+5.04**	**4.15**	**0**	**15**	**9**	**10**	**11**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	67.4	− 4.6	86	27	41	7	27	7.65	+2.83	1.80	0	16	16	8	6	se.	A. S. Cumming
Chillicothe	Livingston	779	26	69.4	− 3.5	89	10	42	7	31	5.40	−0.44	1.50	0	14	14	13	3	se.	Wm. J. Olenhouse
Conception	Nodaway	980	46	67.3	− 4.2	86	29	41	7	32	6.70	+1.76	1.50	0	13	4	21	5	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	68.9	− 3.0	86	14	43	7	30	5.02	+0.52	1.08	0	18	14	7	9	s.	Fred L. Stiff
Grant City	Worth	1,134	31	67.0	− 3.8	85	15	39	7	26	12.12	+7.21	3.02	0	16	3	23	4	se.	Howard Rybolt
Kansas City	Jackson	963	46	71.6	− 2.0	91	10	46	7	31	3.24	−1.75	0.95	0	17	4	14	12	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	67.9	− 3.9	86	25†	41	7	27	7.31	+2.31	1.72	0	15	4	21	5	s.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	4.92	−0.50	1.69	0	13	1	25	4	se.	John M. Martin
Lexington	Lafayette	688	50	70.4	− 2.5	91	10	46	7	29	8.53	+3.41	1.95	0	15	11	15	4	se.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	67.6	− 2.2	87	27	39	7	28	7.91	+2.82	2.83	0	14	2	21	7	nw.	R. B. Montgomery
Oregon	Holt	1,048	79	68.9	− 3.3	89	27	40	7	30	6.79	+1.78	1.24	0	16	17	10	3	se.	Mina Wright
St. Joseph	Buchanan	967	25	69.5	− 4.9	88	27	44	7	25	8.20	+3.17	2.46	0	16	9	13	8	se.	U. S. Weather Bureau
Tarkio	Atchison	916	32	67.4	− 4.4	87	15†	40	7	32	8.94	+3.84	2.74	0	12	4	20	6	se.	Albert Volker
Trenton	Grundy	822	39	69.6	− 2.6	89	15	47	7	29	6.01	+1.01	1.46	0	14	6	19	5	s.	W. H. Estes
Division means	**and extremes**	.....	..	**68.7**	**− 3.5**	**91**	**10**	**39**	**7**	**32**	**7.15**	**+1.96**	**3.02**	**0**	**15**	**8**	**16**	**6**	**se.**	
State means	**and extremes**	.....	..	**69.6**	**− 3.9**	**98**	**29**	**39**	**7**	**41**	**9.25**	**+4.41**	**7.59**	**0**	**15**	**9**	**12**	**9**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for June 1935

Stations	Drainage-basins	Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Total
Northeast Plain																																	
Boonville	Missouri	1.92	.66	.11	T.			.43			.01	1.85			.01		.02	.65	.30	.05		.63					.48	.03		.08	.11		7.34
Bowling Green	Mississippi		**	.37		.10	.06	.31			.14	.19			.17			.45		.29		.25	.22				.12			.10			2.77
Brunswick	Grand	.85	2.83	.12			.04	.15				.93					.15	.40	3.05			.30	.05			.08	.18	.10			.60		9.83
Canton	Mississippi		1.85			.87		.07			.05				.03			.42	.94	.15		.24	.10				.19			1.86			6.77
Clifton Hill	Chariton	.88	.65	.11	.02		.12	.17			.06	.28		T.	T.		.90	.01	.66	T.	.23	.05			T.	.05	T.						4.79
Columbia***	Missouri	.50	.47				.53	.03			.01	.45		.01	T.	.04	.99	.44	.08		.66	.01				.45	.41		.64		T.		5.72
Downing	Mississippi	2.36	.85	.01	.12		.36	.02			.08			.57			.60	.58	.75	.22	.28					T.	.26			.29	.52		7.87
Edina	do	.15	3.12	T.	.10		.69	T.			.15	T.			.77		.72	.04	2.98	.19		.27	.31					.09					9.58
Elsberry	do	T.	.47			T.	.12	.24			1.53	.07			.09	T.	.38	.07	.10	.02	.29	.07				.14	.16			.09			3.84
Farber	do		.67	.03				.47				.18			.15		.40	.55	.08			.33					.34				.30		3.50
Fayette	Missouri	1.54	.56	T.			.22	.20				2.40		T.			.58	.43	T.		.40	T.				.17	.27		.24	.18			7.19
Fulton	do	.80	.64	.09			.01	1.32			.03	.70	.01		.56	.02	.68	.46	.06	T.		.74	.01				.52	.06		.25			6.96
Gorin	Mississippi	6.29	1.30	T.	T.	T.	.57				.45			.21		T.	1.09	.39	1.10	.22	.30	T			T		.21			.18	.29		12.60
Hannibal	do	T.	1.51				.42	.32			.49	.02			.72		.08	.34	.44	.23		.24	.49				.16	.12		.72			6.30
Hermann	Missouri	.09	.43	.27			.04	.91			.17	.75			.57		.24	1.36		.10		.68					.56	.03		.04			6.24
Jefferson City	do	.30	.50	.60				.81				1.04			.10	T.	.16	1.09	.12	.34		.60					.62	T.		1.05			7.33
Kahoka	Mississippi	.10					.45											.93	2.80	.35		.32											4.95
Kirksville	do	3.17	.37		.18	.70					.12						.70	1.25	1.44	.30	.39	.07			.05						.68		9.42
LaBelle	do	.16	.10	1.30			.86	.05			.68				.19		.10	.73	4.37	.26		.31	.06										9.17
Linneus	Grand	.82	2.35	.07	.04	.02	.63	T.		.07		.16					1.14	.03	1.74	.07		.26	.05			.16	.08	.05			.06		7.80
Louisiana	Mississippi	.08	.22			.20	.50				.42			.80	.10		.40		.05		.40					.20			.40			3.77
Lucerne	Grand	1.27		1.06	.25	.05	.44	T.			.70						1.06	.15	1.61	.34		.33				.15	.28	.47			.04		8.20
Macon	Chariton	.47	1.32	.05	T.		.45	.13			T.	.05					.77	.02	.10	.10		.26	.13			.02	T.						3.87
Madison	Mississippi	.50	.90	.04			.21	.27			.03	.32					.21	.88	1.06			.32					.24			1.54	.02		6.54
Memphis	do		2.47	T.	T.	.47		.34					1.18					1.02	2.12	.31	.25					.15				T.	.65		8.96
Mexico	do	.20	3.20	.10				.50			.05	.45			.40		.37	.50	1.33	.13		.43					.37	.01		.82			8.86
Milan	Grand	1.12	1.68		.30	.04	.76				.04						1.30	.06	.63	.07		.37				.16	.08	.11			.04		6.76
Monroe City	Mississippi	1.17	1.10				.53	.46			.15	T.			.13		.62	.66	2.39	.14	.24	.08				.05			.09		.03		7.84
New London	do		1.04				.33	.34			.14				.26			1.65	.75			.47		.03			.36		.17				5.54
Palmyra	do		1.62	.02			.72	.17			.32				.08		.04	.36	1.79	.48		.36								.11			6.07
Paris	do	.18	.86	.07		.02	.07	.26			.03						.83	.33	.30			.37					.34			.60			4.26
Perry	do	.11	1.53			.10	.05	.17			.09	.06			.35		.44	.03	.47	.10		.28					.28			.07			4.13
Philadelphia	do	.40	1.15				.40	.07				.04					.69	1.50	.10	.04	.02	.28									T.		4.69
St. Charles	Missouri		.02					.68	T.		.50	.51			.33	.03	.09	.52	.09	.09		.62	.01				.61	.01		.28			4.39
St. Louis**	Mississippi	.18	.16	T.	T.		.28	.10			.35	.14		T.	.10	.02	.31	.17	.03	T.	.70	.50				.49	.20		.64	T.			4.37
St. Louis University*	do	.23	.10	T.	T.		.17	.04			.23	.11		T.	.07	.07	.34	.20	.08	.01	.61	.31				.52	.19		.62	T.			3.90
Shelbina	do	.32	.81	.02			.55	.36			.08						.22	1.01	.80	.06	.28	.04								.05			4.60
Shelbyville	do	**	1.73				**	.63			.15						**	1.58	**	1.46	.14	.28	.05										6.02
Steffenville	do	.72	1.25				.75	.05			.40						.95	1.20	1.25	.20	.28	.12				.02	.22		.08		.04		7.53
Troy	do	.13	.25	.03		.01	.05	.60			1.23	1.90			.09		.40	.80	.05	.03		.46	.06				.14			.21			6.44
Union	Meramec	.12	.02	.21		.04		.27	.06		2.80	2.24	.06		.44	T.	.17	.86	.09			1.18					.92			.06	.04		9.58
Unionville	Chariton	.93	1.59		.19		.53				.21						1.10	.70	3.03	.44		.37					.10				.19		9.38
Valley Park	Meramec		.02	T.		T.	T.	.21			.15	.59			.17	.02	.04	.85	.10	T.		.70	T.				.79	T.			T.		3.64
Warrenton	Mississippi	.35	.30	.08		.02	.21	1.08			1.59	.44		.20	.25	.15	.80	.05	.07	.02	1.13	.08				.30	.37			.31	T.		7.80
Keokuk, Ia.***	do	1.79	.51	T.	T.	.19	.29				.08			T.		T.	.61	.68	1.19	.06	.24	.17			T.	.59	T.		T.	T.	T.		6.40
Southeast Lowlands																																	
Bragg City	St. Francis		.26	1.60	.10			.46					.55		.70		.39		.30											.19	.50		5.05
Campbell	do	.20	.50					1.40					.47		1.43	.02	.30		.10		.40						.04				.35		5.21
Cape Girardeau	Mississippi		.02	.22				.40	.38			1.40	.33		.38	.05	.26	1.19	.65	.03		1.41	.02					T.					6.74
Caruthersville	do		.05	1.35					.50			.40	.15		.37	.05	.10	.53	.25	.07		.05						.16		.70			4.73
Dexter	St. Francis		.10	.55				.74	.76			.64	.32		1.37	.37	.04	3.07	.47	.07		1.01						.49			1.57		11.57
Doniphan	Black	.70	1.74	.32				1.12			T.	.12			1.69	.11	1.74	1.15	.50		.09	.12					.18			T.			9.58
Fisk	St. Francis		.23	.72	T.	T.		.21	.82			.31	.51		.23	.33	.27	4.65	1.59			1 69											11.56
Jackson	Mississippi		.70				.05	.98			.25	1.47	.24	1.02	.21	.07	1.40	.41	.39		.41	1.05					.08						8.73
Marble Hill	do	.10	.48	.10				.90			.77	.48	.28	1.00	.38	.05	.67	1.26	.28		.31	1.30					.14						8.50
Morehouse	do	.03	.47	.23				1.42	.24		.11	.18	.10	.48	.54	.13	**	2.49	.32		.76	.03					T.				.28		7.81
New Madrid	do	.01	.12	.90	.07			.15	.55	.02		.21	.16		.25	.16	.21	.13	.35	.02		1.35						.10					4.76
Parma	St. Francis		1.32	1.03				.22	.75			.37	.17		.52	.15	.22	1.00	.38	.08		1.15											7.36
Poplar Bluff	Black		.73	.45				1.04	.30			.06	.11		.38	.35	.36	3.54	1.00	.41		.47						.07					9.27
Sikeston	Mississippi		.18	.95				.62	1.07			.35	.13		.48	.20	.37	1.95	.50	.24		.44	.02					.01					7.51
Cairo, Ill.***	do	T.	.77	.33	T.			.88	.38		.16	.14	.06	.29	.43	.04	.94	1.21	.09		1.13	.27					.02			.37	T.		7.51
Ozark Plateau																																	
Arcadia	St. Francis	.02	1.05	.68	T.			.75	.12	.02	.70	1.24	.18	T.	.23	.04	.20	.26	.89	.10	T.	3.39	.03	.01			2.30	T.	T.	.07	.20		12.48
Birchtree (near)	Black	2.30	1.40	.84				1.17					.05		1.20		1.10	.83	1.17		.54	.05					.51		.06	.40	.20		11.82
Buffalo	Osage			1.56				1.16				.20	.85		2.00	.89	.36	.04	.12			3.27					1.33	.15		.41			12.34
Caplinger Mills*	do	T.	.98				.94	.62				.32		T.	3.10	T.	.30	.08	T.		.03					T.	2.00		.12	T.	.12		8.61
Crystal City	Mississippi	.04	.41	.37	T.			.04	.02		.06	1.28	.19		.38	.11		.29	.45	.02	T.	4.07					1.06	.39			.13		9.31
Cuba	Meramec	.30		.63							.93				1.10		1.36				2.56	2.05					3.22						12.15
Dean	Neosho	.06	.96	.04			1.03			.55			.45	1.56	.03	.05	.36	1.55	.28	.36	.15	1.20					.86		T.	.78	.37		10.64
Eldon	Missouri	1.66	1.17	.94		T.		.75				2.17			.42	.20	.39	.50	.03	.11	2.15	.10					3.65	.18	1.34	.17	.40		16.33
Farmington	St. Francis	.15	1.85	.10	T.			.70			1.10	.75		.23	.40	.20	.35		1.67		1.60	3.60				1.11			2.80	1.10			17.71
Fredericktown	do		.70	.76				.59				1.69	.08		1.90		.10	.30	1.02			1.72					.95	.03			1.40		11.24
Galena	White	1.30	.98	1.16				3.00					1.48		.96		1.15	.80	.83		T.	.28					.16			.23			12.33
Garber	do	.10	1.23	.95			.64	2.59					1.22	.08	.43	.06	1.50	1.03	.04		.18	.69					.16		.08	.13	1.45		12.46
Goodland	Black	.27	1.08	.15				.68			1.50	.65	.06		.52		.32	.04	1.05		1.24	2.18				.59	1.85		.08				12.26
Greenville	St. Francis	1.00	1.80	.34				1.17			.22	.08	.85	.25	.62	.21	1.80	.27	.34		.93	.38					T.		T.	.21			10.47
Hailey	White		.25	.12			4.15	1.52					.68	.82			1.72	1.25			.20						1.11			.18	.24		12.24
Koshkonong	Black	1.00	.71	.79			T.	1.38	.03				.15		1.50	.85	.56	.73	.54		.04	.63					.11			.57	.12		9.71
Lakeside	Osage	.80	.50	.52		.01		.83				1.45	.02		.18	.10	.84	.11	.04	.03	T.	1.81					.70			2.37	.05		11.87
Lebanon	do	.53	.64	1.09				1.30	T.		.36	.55	.61	1.31	.62	.61	.30	.20		3.65					.30	1.73	.40		.16	.35	.75		15.46
Leeper	Black		.54	.68				.85	.28	T.	.03	.20	.83		.27	.57	.34	.66	.72	.19		1.12						.34		.16	.08		7.86
Lockwood	Osage		1.65		T.		.47						.60	T.	1.02	.13	.48	.98	.12	.01	.09	.70					1.90		.10	.02	.72		8.99
Mountain Grove	White	.15	1.51	.47	T.		.12	1.56	.01			.15	.11		1.35	.09	1.44	.91	.03		.67	.15					.42		.72	.10	T.		9.96
Neosho	Neosho	.46	1.23	.18	T.	T.	.91	2.67	.02	.14				.43	.95	.02	.15	.90	.20		.18	1.97					1.80			1.73	.30		14.24
Owensville	Gasconade	.19	.31	.33				.35			.69	1.23	.35		.36	T.	.48	.52		.33		1.90					1.25	T.		.11			8.40
Rolla	Meramec	.79	.70	.60				.51	.03		.19	1.04	.55		.15	.22	.87	.95	.28	.11		2.20					3.62			.03			12.84
St. Thomas (near)	Osage	.65	.56	.54				.75				.83			.06	.15	.40	.92	.09	.08		2.48					2.99	.17		.85			11.52
Salem	Meramec	.89	1.18	.24				.79			.03	1.18	.17		1.10	.12	.67	.03	.85		1.43	.72				1.91	1.49				T.		12.80
Seligman	Neosho	.12	1.94				.48	2.80		.12				.12	.81	.07	1.21	1.40		.03	.11	2.03					.33		.13	.06	1.06		12.82
Seymour (near)	White	.74	1.24	.54			.28	1.58				T.	.26		1.53	.02	1.11	.25	.72		.25	.24					.39		.12	.13	.46		9.86
Springfield ***	do	.11	1.99		T.		.82	1.19	T.			.31	.02	.52	1.46	.11	1.71	.54	.02		.80	.21					.70		.79	.01	T.		11.31
Stover	Missouri	1.94	.99	.81				.79				1.70			.16	T.	.68			.06		1.50					3.25	.06		.56			12.50
Versailles	Osage	1.04	.78	.07	.02		.48	.49				1.82		.13	.10		.83		.18		1.61					1.00	3.01		.69	.26	.57		13.08
Williamsville	Black		1.88	.86				1.07	.32			.05	.66		.48	.33	.06	1.75	.50	.06		1.07	.01					T.			.14			9.24
Willow Sprgs. (near)	White	.90	.92	2.25				1.48	.20			.04			.54	.88	.50	.70	1.59	.05		1.12						.15		.54	.02			11.88
Southwest Plain																																	
Appleton City	Osage	1.49	.77	.01	.07		.41	.40				.12	.03	.01	.83	.05	.08	.03	T.		.39					.58	1.79		.02	.64	.61		8.33
Clinton	do	2.85	.90		.13		.74	.67				3.83		.10	.18		.18		.18		.97				1.80		4.15		1.80		.15		18.63
Concordia	Missouri	1.86	.85					.27				2.02					.16	.36	.04			2.03					.78	.50	.02		.24		9.13

Continued on next page

Daily Precipitation for June 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																
Harrisonville‖‖	Osage	1.15	1.39	.83			.01	.24				1.79	.55		.05		1.39		.28		.80	.01				.24	1.37			2.07	.04		12.21
Joplin‖‖	Neosho		1.52				1.18	1.65				1.48	.60	.03	1.19	.21	.21	1.16	.01	1.32	.81						1.43		.24	.36	.16	13.56
Lamar‖‖	Neosho	.05	.48	.50			T.	1.82			T.		.47		.65	.60	.30	.17	T.		.08	.20					1.30	.40		.45	.22	7.69
Lamonte	Missouri	1.10	1.00	.04	.05	.10	.40	.40				2.25	.02	.10	.08	.50	.45	T.	.15		2.45					.65	.85		T.	T.	.26	10.85
Marshall	do	.35	T.	.54	.11		.10	.18				1.64		T.	.02		.54		T.		.68	.11			.21	.05	.42		T.	T.	.30	5.25
Nevada	Osage		.79				.87	.66							.54	.22	.08		T.		.27						2.82			.82	.02	7.09
Warrensburg	Missouri	.50	.72	.14			.19	.19				.10	.07	.08	.01		.35		.02		.77					.98	1.43	.03			.40	5.98
Warsaw ‖‖	Osage	.74	.72	.73		.05		1.32				2.78	.02		.70	.60	.18	.05	.05			1.20					3.70	.24		2.55	.60	16.23
Waverly ‖‖	Missouri	1.25	1.01	.15	.05	.04	.05	.30			.13	1.65	T.				.38	.30	.05			.92				.95	.20	.14					7.57
Northwest Plateau																																
Amity ‖‖	Grand	.38	2.86	.08	T.		.41				.12	.03			.25		.46	.83	.36	T.		.81				1.31	**	.40	.03				8.33
Bethany	do	.30	.99	.05	.08		1.15				.20				.02		1.52	1.67	.13		.25				.17	.04	.83			.12	.13	7.65
Chillicothe ‖‖	do	1.10	1.50	.05			.41				.12	.02					.96	.08	.35	T.		.17				.23	.06	.32			.03		5.40
Conception	Missouri	.80	.27		.04		.54				.42			T.		T.	T.	.30	.16		.24				1.26	.05	1.12			1.25	.25		6.70
Edgerton	do	.21	1.08	.02	.04	.02	.24	.05			.19	.82		.13		T.	.40	.06	.35		.48					.21	.30		.12	T.	.30		5.02
Gallatin ‖	Grand	.53	1.00		.08		.45				.25						1.15		2.25			.21				.77	.57				.07		7.33
Grant City	do	.72	.96	.16	.20		.89				.63			.13		T.	.11	.88	1.98		.29				.82	.03	1.30			.32	2.70		12.12
Kansas City***	Missouri	.55	.33	.02	.01	.03	.06				T.	.95		.13	T.	.04	.21	.30	T.		.04	T.			.09	.08	.33		.06	T.	.01		3.24
Kidder ‖‖	Grand	.50	.73	.09	T.	T.	.31				.08	.01			T.		.95	.22	1.01			.71				1.72	.77	.14	.02		.05		7.31
King City	Missouri	.75	.94	.01	.06		.32				.13						.20		.01		.33				1.10	.10	.62			T.	.35		4.92
Lexington ‖	do	1.95	1.50	.20			.07	.25			.03	.85					.93	.07	.03			1.53				.23	.72	.12			.05		8.53
Maryville	do	.87	1.18		.02		.61				.50				.02		.03	.42	2.41		.27				.31	.04	.78			T.	.45		7.91
Oregon	do	.36	1.00	T.	.03		.28				.30	.23			.07		T.	.04	.74	.50	1.20				.07	.04	1.11		.09		.73		6.79
St. Joseph***	do	2.27	.31	T.	.02	.42	.01			T.	.77	.61		T.		T.	.14	.68	.01		1.31				.29	.06	.35		.05	T.	.90		8.20
Tarkio	do	2.43	.12					.66			.16			.08				.82	1.92		.30				.28	.18	1.24				.75		8.94
Trenton	Grand	.61	.89	.04	T.		1.19				.14						.22	1.46	.40	.19	.19				.20	.03	.33			.12			6.01

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. |||| Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for June 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.208	.145	.131	.244	.217	.208	.071	.171	.209	.276	.265	.122	.230	.092	.041	.076	.099	.200	.118	.205	.159	.270	.240	.251	.283	.253	.159	.254		.192		5.575
	Mean temperature	72	68	68	63	66	66	58	70	67	80	72	76	74	74	76	76	76	66	64	61	68	66	70	72	77	73	76	77	75	78	..	70.8
	Wind movement	75	52	70	71	85	45	65	59	43	79	40	1	34	39	35	59	31	65	166	63	68	101	54	37	81	66	42	42	60	39	..	1,821

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 69.6°, or 3.9° below normal. The highest monthly mean was 74.7° at Caruthersville, and the lowest monthly mean was 67.0° at Grant City. The highest temperature recorded was 98° at Greenville on the 29th, and the lowest was 39° at Grant City and Maryville on the 7th. The greatest daily range was 41° at Dean on the 5th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 9.25 inches, or 4.41 inches more than normal. The greatest local monthly amount was 18.63 inches at Clinton, and the least local monthly amount was 2.77 inches at Bowling Green. The greatest amount in any twenty-four hours was 7.59 inches at Gorin on the 1st-2d. The average number of days with 0.01 inch or more of precipitation was 15.

MISCELLANEOUS PHENOMENA

Floods.—In Black River, 23th to 24th, 28th to 29th; in Bourbeuse, 23d to 24th, 28th to 29th; in Grand, continued from May to June 24th, 27th and continued into July; in Meramec, 11th to 13th, 21st to 26th, 28th to 30th; in Missouri, continued from May into July; in Mississippi, continued from May into July; in Osage, continued from May to June 23d; 27th to 30th.

Fog.—Dense, 9th, 10th, 12th, 27th, 28th, 30th.

Hail.—Light, 1st at Amity, 3d at Grant City, 10th at Mexico and Warrenton, 11th at Versailles and Warsaw, 17th at Cassville and vicinity, 20th at Arcadia, Joplin, St. Joseph, and Springfield, 21st at St. Louis, 24th at Maryville, 25th at Columbia, 26th at Maryville and Warsaw, 28th at Springfield; moderate, 17th at Brunswick, 20th near Cairo, Ill., but in Missouri, 21st and 28th at St. Louis University; heavy, 10th in vicinity of Marshall, with much damage to window glass and some to wheat, and on 21st in Greene and Webster counties, damaging wheat, oats, and clover.

Halos.—Solar, 2d, 3d, 4th, 5th, 6th, 7th, 11th, 12th, 13th, 24th, 25th, 26th, 27th, 28th; lunar, 12th, 19th.

Thunderstorms.—Local, 3d, 4th, 5th, 6th, 7th, 12th, 13th, 14th, 15th, 18th, 24th; more or less general, 1st, 2d, 10th, 11th, 16th, 17th, 20th, 21st, 25th, 26th, 28th, 29th, 30th.

Windstorms.—1st, 17th, 20th. Severe at Maryville and in southwest part of Nodaway County on the 1st, damaging houses (some farm buildings wrecked), trees, and wire lines, and accompanying heavy rain flooded bottom lands; total damage estimated about $20,000. On 17th, in McDonald and Barry counties, wind damaged trees and wire lines; amount of damage not given. On the 20th a severe storm of wind and rain came from Kansas into Newton and Jasper counties, doing considerable damage in the vicinities of Joplin and Neosho; amount of damage not available.

Daily Temperatures for June 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	76	76	75	73	72	71	68	74	79	87	84	84	85	82	93	86	84	71	72	72	72	76	85	80	81	81	90	88	87	85	..	79.6
	Minimum ...	65	61	61	56	52	54	47	53	56	68	62	61	67	69	71	69	65	58	52	57	59	55	57	63	69	66	61	68	67	69	..	61.3
Columbia.	Maximum...	82	75	74	72	69	67	66	71	79	85	78	82	84	80	85	82	83	74	72	65	74	75	81	80	86	79	85	88	85	89	..	78.2
	Minimum ...	65	62	59	52	52	52	50	51	55	67	64	66	68	69	72	71	70	53	52	57	59	54	55	61	67	65	60	67	67	69	..	61.0
Fayette	Maximum...	82	79	72	74	71	72	69	72	82	90	80	85	88	84	89	86	89	80	73	71	74	77	86	83	86	83	89	92	90	90	..	81.3
	Minimum ...	64	60	58	50	47	53	47	48	50	65	61	61	62	67	69	69	69	58	51	52	59	53	52	57	65	64	57	63	66	67	..	58.8
Hannibal	Maximum...	80	76	74	71	69	71	65	71	75	83	82	81	87	83	80	80	79	78	67	69	67	74	78	79	85	77	86	86	81	88	..	77.4
	Minimum ...	63	61	61	53	52	53	48	53	54	61	63	61	62	63	69	68	69	58	50	56	56	53	57	58	62	65	58	65	65	67	..	59.5
Jefferson City §§	Maximum...	80	75	73	73	75	71	67	74	79	87	78	83	86	76	85	84	83	66	74	65	75	80	79	80	88	79	86	89	85	87	..	78.7
	Minimum ...	64	60	58	53	51	58	49	51	53	60	64	64	65	67	70	69	68	66	51	55	59	54	56	59	68	64	62	64	64	66	..	60.4
Kirksville.	Maximum...	74	78	76	72	70	70	69	73	77	86	81	84	86	83	86	83	79	73	71	70	73	77	81	78	85	82	88	87	86	88	..	78.9
	Minimum ...	63	60	57	50	46	42	43	46	53	65	59	58	62	67	70	67	66	54	49	55	56	50	53	60	66	65	57	65	63	69	..	57.9
Louisiana	Maximum...	80	76	75	70	67	60	67	75	80	81	81	80	86	84	86	84	83	76	65	65	75	80	90	88	85	80	89	88	89	90	..	79.4
	Minimum ...	60	62	60	50	50	54	50	49	46	63	67	59	57	65	70	67	70	60	50	54	50	55	55	55	65	66	65	64	64	65	..	58.9
Macon §§	Maximum...	80	79	75	74	73	61	69	74	79	88	83	85	89	86	89	86	84	73	73	67	74	78	84	79	85	83	88	92	89	91	..	80.3
	Minimum ...	60	60	58	52	48	53	45	49	53	64	61	58	61	68	70	68	70	65	49	55	57	52	57	59	64	65	55	64	64	68	..	59.1
Mexico §§	Maximum...	83	75	74	73	71	72	66	74	79	85	80	85	88	80	86	83	84	71	71	68	75	77	82	83	88	81	86	90	90	90	..	79.7
	Minimum ...	63	60	59	51	44	54	48	49	52	63	63	62	64	67	69	67	68	65	49	55	59	52	57	59	64	63	57	65	64	67	..	59.3
St. Louis	Maximum...	81	75	77	74	72	77	64	73	77	82	85	87	88	77	85	84	84	75	73	74	75	77	81	86	87	82	86	90	89	90	..	80.2
	Minimum ...	66	64	63	57	54	53	50	56	60	66	68	71	67	72	70	69	72	60	56	52	60	60	57	60	66	65	67	65	69	70	..	62.8
Unionville §§	Maximum...	75	77	75	71	68	59	69	73	78	87	82	86	86	83	85	82	77	66	70	69	72	77	82	79	86	78	87	86	87	85	..	77.9
	Minimum ...	56	61	60	51	46	51	41	47	54	61	59	58	63	68	70	67	65	62	49	54	58	52	54	61	65	66	60	68	64	67	..	58.6
Warrenton	Maximum...	78	75	74	71	70	71	64	72	78	81	80	83	82	76	81	78	83	81	71	69	76	74	81	80	86	77	85	86	85	88	..	77.9
	Minimum ...	64	61	60	52	50	57	48	49	55	60	65	65	66	65	70	68	69	61	51	56	61	54	57	60	65	65	61	64	64	67	..	60.3
Southeast Lowlands																																	
Campbell	Maximum...	88	70	71	75	78	78	71	70	74	80	82	80	77	78	79	83	80	78	75	75	80	72	84	80	82	90	85	86	85	81	..	78.9
	Minimum ...	68	64	64	54	51	56	56	55	53	55	55	54	61	68	68	65	65	45	54	70	55	55	57	59	65	66	65	66	66	66	..	59.7
Caruthersville	Maximum...	87	86	83	83	81	85	82	75	78	82	91	92	86	81	78	88	88	83	81	84	83	81	84	87	89	92	88	88	89	88	..	84.8
	Minimum ...	68	66	64	59	55	60	61	58	59	62	70	66	70	68	70	71	68	67	60	61	72	58	53	62	62	67	70	71	70	69	..	64.6
Doniphan	Maximum...	82	75	80	78	78	79	70	70	74	82	89	88	82	81	82	83	86	78	70	76	78	83	84	89	89	88	89	92	90	92	..	81.9
	Minimum ...	61	65	64	50	45	55	57	48	52	55	66	65	61	59	69	69	69	65	56	53	69	52	56	55	65	67	65	63	69	65	..	60.3
Jackson	Maximum...	89	84	82	80	81	82	77	70	80	79	85	89	88	81	80	82	85	80	78	75	80	78	85	80	89	89	89	91	94	92	..	83.5
	Minimum ...	66	65	63	52	60	50	53	54	49	57	64	67	66	67	69	69	69	66	55	58	66	54	53	57	63	68	66	60	69	67	..	61.4
Poplar Bluff	Maximum...	83	73	82	79	78	80	75	70	77	82	86	89	85	81	79	84	84	76	77	79	82	80	85	84	87	89	90	92	90	88	..	82.2
	Minimum ...	65	66	64	52	52	57	58	56	52	56	67	65	67	68	69	69	63	66	58	55	67	55	54	55	61	66	67	64	69	68	..	61.7
Sikeston	Maximum...	89	79	81	77	78	83	72	68	78	78	86	87	89	80	83	86	84	79	76	76	79	77	87	88	88	91	91	95	93	90	..	82.9
	Minimum ...	65	65	64	60	52	58	58	55	52	53	65	65	68	67	69	69	68	66	57	57	66	55	56	59	63	66	73	65	69	68	..	62.4
Cairo, Ill.	Maximum...	86	80	80	77	75	82	70	66	75	71	83	87	87	79	78	84	84	77	74	77	78	75	81	83	84	88	87	88	86	89	..	80.4
	Minimum ...	68	65	65	60	57	62	56	56	58	60	66	68	69	68	70	71	69	66	59	61	67	60	61	65	66	69	71	69	71	71	..	64.8
Ozark Plateau																																	
Arcadia §§	Maximum...	79	69	77	72	72	78	59	70	74	77	80	84	83	77	78	80	79	73	72	70	76	74	79	81	85	83	83	85	85	85	..	77.3
	Minimum ...	64	63	60	49	51	52	51	51	42	57	58	64	61	67	68	69	69	65	53	52	61	54	51	54	59	66	61	58	65	65	..	58.7
Birchtree	Maximum...	83	71	74	73	77	77	72	74	78	83	85	87	87	76	79	79	77	76	73	72	77	75	81	83	87	86	86	88	87	86	..	79.6
	Minimum ...	62	58	59	48	45	54	52	52	53	57	61	63	63	63	65	63	61	56	51	50	53	50	50	54	56	64	62	60	64	64	..	57.1
Crystal City §§	Maximum...	..	82	79	75	76	81	66	..	79	84	84	86	88	79	..	85	85	77	74	74	78	..	83	86	89	87	87	90	89	89	[d]82.0
	Minimum ...	66	..	61	52	52	54	50	51	..	49	59	66	64	67	70	..	68	67	54	54	62	54	..	54	63	67	63	60	66	67	[d]60.0
Eldon §§	Maximum...	79	75	74	73	75	71	66	74	79	90	77	85	84	76	79	82	84	66	74	65	74	76	83	84	82	81	87	88	85	92	..	78.7
	Minimum ...	62	59	58	53	51	52	48	49	52	65	66	63	65	67	68	68	68	66	51	52	56	54	54	58	61	63	61	65	66	66	..	59.6
Farmington	Maximum...	80	73	80	78	74	81	73	80	79	80	84	88	80	81	87	88	85	83	74	72	87	73	82	79	90	88	87	91	89	90	..	81.9
	Minimum ...	64	60	58	47	46	52	48	54	62	42	63	63	62	65	66	69	65	65	60	55	48	53	52	54	63	69	65	69	70	70	..	59.3
Garber	Maximum...	84	77	76	73	81	77	65	71	74	91	89	87	81	85	78	84	80	75	78	88	88	78	83	83	91	81	88	89	84	81	..	81.3
	Minimum ...	64	59	59	47	45	53	52	57	53	58	63	61	64	66	65	68	65	62	53	58	64	50	50	55	61	65	60	60	62	65	..	58.8
Koshkonong	Maximum...	83	72	78	74	..	79	66	78	78	88	84	87	85	79	77	80	79	76	72	79	79	75	79	84	87	85	85	89	88	86	..	[a]80.2
	Minimum...	67	58	60	54	..	50	54	58	53	63	68	64	65	65	65	65	65	62	59	55	66	60	56	59	63	67	65	66	66	68	..	[a]61.6
Lebanon §§	Maximum...	80	74	73	71	76	73	64	85	86	87	80	77	84	84	79	82	73	70	73	75	82	83	79	83	81	87	88	84	88	86	..	79.6
	Minimum ...	61	58	58	50	49	51	47	47	55	66	50	62	65	67	64	63	63	54	57	52	52	59	55	63	61	65	65	64	64	63	..	58.3
Mountain Grove	Maximum...	78	70	77	71	76	71	62	74	73	87	84	87	81	77	79	77	78	69	73	73	74	75	82	80	86	88	85	86	84	85	..	78.1
	Minimum ...	63	57	57	51	48	57	49	53	51	59	63	63	65	64	65	65	63	57	50	55	58	51	54	60	62	62	61	64	62	64	..	58.4
Neosho	Maximum...	83	79	78	76	79	80	65	77	77	87	90	90	83	80	79	82	82	76	77	81	81	78	84	86	87	87	89	90	88	84	..	81.8
	Minimum ...	61	58	60	48	43	56	49	56	53	63	67	63	65	65	62	66	63	61	50	59	60	48	52	59	69	61	60	64	63	65	..	59.0
Rolla	Maximum...	78	77	73	70	69	73	68	70	75	82	82	80	85	80	81	78	79	75	70	70	72	72	77	80	86	78	82	84	81	84	..	77.0
	Minimum ...	64	60	60	52	50	60	49	54	52	62	65	63	65	66	67	69	67	62	52	55	61	54	55	59	65	64	62	66	65	66	..	60.4
Springfield	Maximum...	80	71	71	67	76	67	59	71	73	87	84	85	80	76	77	80	74	71	73	83	73	74	78	81	86	79	85	82	80	84	..	76.9
	Minimum ...	65	57	60	52	50	53	48	55	57	64	66	65	65	66	68	68	64	58	52	58	59	55	60	64	69	63	67	68	66	67	..	61.0
Southwest Plain																																	
Appleton City	Maximum...	78	76	74	70	76	70	64	73	73	88	84	82	78	79	77	76	75	73	76	70	72	78	77	83	80	80	83	83	80	77	..	76.8
	Minimum ...	65	60	59	55	52	55	49	53	57	67	65	64	70	68	69	69	68	64	52	60	61	55	58	63	67	64	65	68	68	71	..	62.0
Clinton	Maximum...	84	74	74	64	74	72	64	74	84	92	83	90	85	84	84	86	85	80	78	72	80	80	85	82	84	85	85	82	84	88	..	80.6
	Minimum ...	63	60	59	54	50	54	48	52	54	62	64	66	70	68	68	68	68	62	51	56	60	54	55	67	66	62	63	62	68	68	..	60.7
Harrisonville §§	Maximum...	81	75	78	73	78	72	68	78	80	91	75	92	87	89	90	89	88	70	77	70	73	80	88	89	87	84	90	89	85	90	..	81.9
	Minimum ...	64	59	56	53	49	51	44	45	58	63	63	59	62	67	67	67	67	60	50	53	56	52	53	64	64	68	63	66	67	66	..	59.2
Lamar §§	Maximum...	81	74	72	66	77	66	66	77	76	87	85	86	79	78	82	80	82	75	77	88	76	76	83	88	89	80	87	87	81	87	..	79.6
	Minimum ...	66	59	60	54	50	51	50	50	57	64	68	65	66	68	69	68	66	65	51	54	62	54	56	62	65	64	64	65	61	70	..	60.8
Lamonte	Maximum...	81	76	79	79	75	69	69	77	80	88	87	86	84	79	85	84	84	72	78	68	75	80	85	86	81	82	88	91	87	88	..	80.8
	Minimum ...	64	59	56	52	49	52	46	49	50	52	52	56	66	67	69	67	68	55	48	55	55	51	54	61	64	64	59	66	68	69	..	58.1
Marshall	Maximum...	76	73	74	73	72	72	66	71	79	86	85	81	81	80	85	83	82	82	73	73	70	75	84	81	81	81	89	83	83	82	..	78.5
	Minimum ...	64	60	60	52	51	53	46	52	57	51	62	61	66	68	69	64	69	58	50	57	60	55	56	61	70	66	59	66	65	68	..	59.9
Nevada	Maximum...	82	72	74	73	78	76	66	74	76	88	83	85	81	88	81	81	80	75	78	82	74	77	81	86	87	83	85	86	80	84	..	79.9
	Minimum ...	65	61	60	55	51	55	49	55	57	66	67	65	68	67	68	68	66	64	51	60	61	54	60	64	70	63	62	72	57	69	..	61.7
Warrensburg	Maximum...	78	75	76	73	76	72	68	76	81	88	83	81	86	81	86	85	84	76	75	71	74	79	84	82	85	81	86	89	85	86	..	80.1
	Minimum ...	63	59	58	54	50	53	45	50	51	55	66	57	64	68	68	68	69	57	50	58	59	53	60	62	57	58	58	68	68	70	..	59.2
Warsaw	Maximum...	85	75	77	72	79	70	71	79	80	90	86	88	81	79	84	84	85	74	76	71	74	79	86	87	87	82	90	90	85	87	..	81.0
	Minimum ...	65	59	59	55	52	56	49	54	54	67	64	63	67	68	69	70	69	61	52	57	60	65	64	62	67	65	61	67	67	70	..	61.9
Northwest Plateau																																	
Chillicothe §§	Maximum...	77	79	78	74	75	61	69	76	82	89	80	84	85	85	88	85	79	68	73	68	73	78	85	81	87	82	88	88	88	87	..	79.7
	Minimum ...	63	59	58	52	48	56	42	48	53	67	60	57	64	68	70	68	71	64	55	55	56	51	54	57	65	66	58	62	66	62	..	59.2
Grant City	Maximum...	73	76	73	70	69	66	65	72	75	83	78	81	82	82	85	84	78	71	73	68	69	74	78	78	84	78	83	83	81	76	..	76.3
	Minimum ...	61	57	55	49	44	49	39	46	54	63	57	57	63	61	70	67	64	52	49	55	50	58	54	62	70	62	60	65	70	66	..	57.6
Kansas City	Maximum...	82	74	77	73	77	66	66	79	80	91	75	91	86	87	88	88	87	70	75	70	72	79	87	87	86	83	90	88	85	90	..	81.0
	Minimum ...	60	61	59	54	54	48	46	53	60	72	61	60	71	69	72	70	70	55	53	62	59	55	62	68	69	66	63	68	70	73	..	62.1
Kidder	Maximum...	75	77	74	72	72	69	66	73	79	85	78	81	82	84	85	83	83	68	71	67	70	76	82	78	86	81	86	85	85	85	..	77.9
	Minimum ...	60	57	55	49	46	50	41	49	53	66	60	57	63	65	68	66	65	53	48	55	56	51	55	61	69	63	60	65	65	67	..	57.9
Lexington §§	Maximum...	80	74	78	75	73	63	66	77	83	91	74	86	79	86	88	86	88	64	72	64	72	79	86	84	84	83	89	83	88	89	..	79.5
	Minimum ...	64	60	58	54	52	59	46	52	57	64	61	60	64	67	70	68	70	64	52	58	59	54	57	64	67	65	64	70	68	70	..	61.3
Maryville	Maximum...	71	77	74	71	71	67	66	74	76	83	78	82	81	85	86	85	83	72	71	72	70	76	83	78	85	80	87	84	85	78	..	77.7
	Minimum ...	61	56	56	48	44	49	39	48	56	63	57	57	63	64	70	67	63	54	47	56	56	49	55	62	68	62	59	64	64	67	..	57.5
Oregon	Maximum...	73	75	76	72	76	69	68	76	79	86	81	84	84	87	87	87	79	74	74	73	71	78	85	83	87	83	89	84	87	83	..	79.7
	Minimum ...	61	57	55	49	47	50	40	50	55	65	58	56	55	65	70	67	64	56	49	58	58	50	55	63	66	68	62	64	63	68	..	58.1
St. Joseph.	Maximum...	78	77	75	71	74	60	68	75	80	87	75	83	83	86	85	86	83	67	74	68	72	78	84	83	87	81	88	85	85	80	..	78.6
	Minimum ...	62	60	57	52	52	47	44	50	59	66	61	58	68	68	72	68	67	54	52	59	59	53	60	65	70	65	65	67	64	69	..	60.4
Trenton	Maximum...	76	75	79	77	73	70	68	72	78	88	82	85	84	88	89	84	80	72	72	74	72	76	83	81	85	80	86	86	84	84	..	79.4
	Minimum ...	61	60	56	52	49	54	47	52	52	66	65	56	64	66	70	68	68	56	50	57	58	52	55	62	70	65	60	65	67	68	..	59.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 7-25-35—945.

IMS

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CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX JULY 1935 No. 7

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

A rather sudden change in temperature conditions occurred with the approach of July, and the unusual coolness of June was followed by a spell of unusual warmth. July was remarkably hot in the western half of the State and some central parts, while the eastern third escaped extreme heat but was nevertheless considerably warmer than normal. At Kansas City, the average temperature was only 1.2° lower than in the record-breaking month of July 1934 and at St. Joseph it was only 2.2° lower than in 1934, while Columbia average was 6.2° lower than in 1934 and St. Louis 5.0° lower. In the Northeast Plain the temperature averaged 3.4° above normal; in the Southeast Lowlands, 2.2° above; in the Ozark Plateau, 2.1° above; in the Southwest Plain, 4.6° above; in the Northwest Plateau, 5.9° above. It is thus seen that the northwestern and west-central parts of the State were decidedly warmer than other sections. Although abnormal heat was almost continuous, there were no such great extremes of daily maximum temperatures as in 1934. In July 1934 the highest temperature recorded was 117°, while the highest in July 1935 was 104°.

Rainfall was very light over most of the western third of the State, being about one-fourth of normal amount in the Northwest Plateau, less than one-half in the Southwest Plains, and considerably less than normal in the Southeast Lowlands and most of the Ozark Plateau. In the Northeastern quarter it averaged considerably more than normal.

Conditions were mostly favorable for crops during the first ten days, but thereafter the heat and drought increased in severity in the western third of the State and became injurious in most of the central section. In the eastern third the weather continued rather favorable through the month. At the end of the month the condition of corn was poor to fair over much of the western half, due to late planting, heat, and drought, while in the eastern third it was fairly good except for late planting. There were some small areas where corn was fortunately planted at a normal date and where rainfall was sufficient, and in these areas the crop was in very good condition. Wheat threshing was in progress and the yields were proving only fair as a rule. Oats were turning out fairly good. Hay crops, pastures, garden truck, etc., were poor in the dry areas and fair to very good where moisture was sufficient. Apple and peach crops were generally good.

The principal rivers were at high stages at the beginning of the month, but receding from the June floods, and they continued to fall almost steadily during the month, to below normal.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 80.8°, or 3.0° above normal. The highest monthly mean was 86.8° at Kansas City, and the lowest monthly mean was 76.4° at Seymour. The highest temperature recorded was 104° at Chillicothe on the 26th, Kansas City on the 27th, Oregon on the 28th, and Clinton on the 30th, and the lowest was 53° at Greenville on the 14th, and Louisiana on the 17th. The greatest daily range was 40° at Dean on the 15th.

PRECIPITATION

The average precipitation for the State, 120 stations reporting, was 3.12 inches, or 0.65 inch less than normal. The greatest local monthly amount was 8.82 inches at Greenville, and the least local monthly amount was trace at Nevada. The greatest amount in any twenty-four hours was 4.04 inches at Farber on the 22d. The average number of days with 0.01 inch or more of precipitation was 6.

(Continued on page 34)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.98	30.19	19	29.78	23	6.2	32	nw.	12	84	61	70	74
Kansas City.....	29.95	30.17	13	29.72	31	8.5	37	nw.	12	76	44	46	88
St. Joseph.....	29.94	30.19	13	29.68	31	7.3	27	nw.	12	77	46	48	91
St. Louis.....	29.99	30.23	19	29.82	31	8.7	33	nw.	6	75	58	64	69
Springfield.....	30.00	30.18	19	29.81	31	7.4	26	se.	18	81	55	61	83
Cairo, Ill.....	29.99	30.24	19	29.81	7	6.2	30	nw.	6	85	64	69	80
Keokuk, Iowa..	30.00	30.22	19	29.75	23	6.2	26	nw.	23	77	54	62	81

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	79.3	+ 1.5	111	50	3.31	−0.46	10.48	0.50	0	7	..	..	..
1889....	77.1	− 0.7	107	46	3.75	−0.02	6.65	1.02	0	8	..	..	..
1890....	79.6	+ 1.8	110	42	2.98	−0.79	6.85	0.20	0	5	..	..	..
1891....	72.7	− 5.1	103	45	3.55	−0.22	7.30	0.10	0	8	..	..	..
1892....	75.8	− 2.0	102	45	4.99	+1.22	9.05	2.06	0	9	12	10	9
1893....	77.3	− 0.5	103	51	4.91	+1.14	18.30	0.30	0	8	14	12	5
1894....	76.5	− 1.3	109	42	2.48	−1.29	8.15	0.15	0	5	18	10	3
1895....	74.4	− 3.4	106	45	6.79	+3.02	14.51	2.92	0	10	10	12	9
1896....	77.3	− 0.5	108	48	5.87	+2.10	14.98	1.51	0	9	15	11	5
1897....	78.7	+ 0.9	106	48	3.22	−0.55	9.97	0.60	0	6	19	9	3
1898....	76.1	− 1.7	104	42	5.58	+1.81	15.06	1.97	0	9	16	10	5
1899....	76.0	− 1.8	102	43	4.51	+0.74	9.39	1.69	0	9	15	11	5
1900....	76.9	− 0.9	102	46	4.11	+0.34	9.75	0.77	0	8	17	10	4
1901....	85.4	+ 7.6	116	46	2.02	−1.75	4.90	0.05	0	5	19	10	2
1902....	77.0	− 0.8	103	50	4.59	+0.82	10.77	0.15	0	8	17	11	3
1903....	77.4	− 0.4	102	51	3.22	−0.55	8.56	0.78	0	8	17	10	4
1904....	74.2	− 3.6	100	47	4.65	+0.88	10.81	1.63	0	10	15	11	5
1905....	73.4	− 4.4	101	48	7.45	+3.68	17.98	2.35	0	12	12	10	9
1906....	74.7	− 3.1	100	48	3.53	−0.24	8.18	0.40	0	8	17	9	5
1907....	78.4	+ 0.6	105	51	4.57	+0.80	12.37	0.71	0	8	19	8	4
1908....	76.5	− 1.3	101	49	3.23	−0.54	5.60	1.10	0	8	18	9	4
1909....	76.7	− 1.1	102	41	6.41	+2.64	15.25	2.14	0	10	17	8	6
1910....	76.8	− 1.0	109	46	6.70	+2.93	12.69	0.20	0	9	16	9	6
1911....	78.0	+ 0.2	113	43	3.95	+0.18	11.82	0.64	0	8	16	9	6
1912....	78.8	+ 1.0	104	52	2.74	−1.03	6.22	0.18	0	7	18	9	4
1913....	80.2	+ 2.4	108	47	3.13	−0.64	7.68	0.03	0	7	18	9	4
1914....	80.5	+ 2.7	109	45	2.67	−1.10	7.61	0.34	0	7	17	9	5
1915....	74.6	− 3.2	102	42	6.05	+2.28	20.22	0.58	0	12	14	9	8
1916....	81.6	+ 3.8	109	52	1.25	−2.52	5.99	T.	0	3	25	5	1
1917....	77.5	− 0.3	107	42	2.96	−0.81	7.73	0.13	0	8	20	8	3
1918....	77.1	− 0.7	110	41	1.76	−2.01	4.94	0.21	0	6	19	8	4
1919....	80.0	+ 2.2	105	50	2.33	−1.44	8.52	0.32	0	5	23	6	2
1920....	76.3	− 1.5	105	47	3.25	−0.52	9.78	0.73	0	7	18	8	5
1921....	80.3	+ 2.5	109	46	2.32	−1.45	5.60	0.41	0	5	20	8	3
1922....	76.8	− 1.0	103	46	5.85	+2.08	17.68	1.92	0	8	17	9	5
1923....	78.2	+ 0.4	105	50	3.07	−0.70	10.29	0.24	0	6	18	8	5
1924....	73.3	− 4.5	103	40	5.39	+1.62	14.52	1.70	0	10	15	11	5
1925....	77.9	+ 0.1	106	46	2.71	−1.06	8.60	0.57	0	7	16	10	5
1926....	78.0	+ 0.2	108	40	3.14	−0.63	8.65	0.50	0	7	17	9	5
1927....	75.8	− 2.0	101	48	4.13	+0.36	10.95	0.88	0	8	18	9	4
1928....	77.2	− 0.6	102	48	2.97	−0.80	7.02	0.34	0	7	17	10	4
1929....	77.8	0.0	104	50	4.12	+0.35	11.35	0.55	0	8	16	10	5
1930....	81.2	+ 3.4	113	42	0.97	−2.80	3.42	T.	0	3	22	7	2
1931....	80.3	+ 2.5	110	49	3.23	−0.54	8.66	0.43	0	7	18	9	4
1932....	79.8	+ 2.0	109	48	3.67	−0.10	8.07	0.52	0	7	19	8	4
1933....	79.3	+ 1.5	108	49	2.49	−1.28	7.26	0.12	0	5	18	9	4
1934....	86.2	+ 8.4	117	48	1.11	−2.66	5.22	0.00	0	4	20	9	2
1935....	80.8	+ 3.0	104	53	3.12	−0.65	8.82	T.	0	6	20	9	2
.....	....	.....	...	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	...	..	....	.....	....	....	..	..	..	..	..
Period.	77.8	.....	117	40	3.77	.....	20.22	0.00	0	7	17	9	5

Climatological Data for July 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	83.1	+ 7.0	101	28†	65	13†	30	4.13	−0.22	1.63	0	9	23	5	3	se.	O. K. Benecke
Clifton Hill	Randolph	731	36	81.7	+ 5.3	100	30	62	13	32	3.59	+0.19	1.80	0	8	22	6	3	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	80.6	+ 3.7	97	30	63	14	26	3.89	+0.40	1.95	0	7	18	9	4	se.	U. S. Weather Bureau
Downing	Schuyler	876	14	80.4	+ 4.0	99	30	58	14	33	4.73	+0.24	2.90	0	7	19	11	1	se.	James Taylor
Elsberry	Lincoln	449	4	79.0	.....	97	30†	56	17	34	3.24	.....	1.63	0	6	17	12	2	sw.	Ray E. Mills
Fayette	Howard	680	55	81.4	+ 4.2	101	28	62	14†	33	4.43	+0.83	2.35	0	4	18	11	2	s.	Harry P. Mason
Fulton	Callaway	818	47	80.0	+ 2.3	97	30	61	14†	30	6.14	+2.29	1.97	0	8	20	9	2	sw.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	4.87	+0.96	1.75	0	9	24	7	0	se.	W. L. Harker
Hannibal	Marion	759	43	79.0	+ 2.2	95	18†	62	13†	28	5.95	+2.86	2.38	0	11	19	5	7	se.	Hannibal Water Dept.
Jefferson City	Cole	557	45	79.5	+ 1.4	97	30	64	13†	25	2.14	−1.31	0.65	0	9	17	10	4	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	80.4	+ 4.4	98	28	61	13	32	4.23	+0.16	2.32	0	5	22	9	0	sw.	Prof. J S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	6.80	.....	3.56	0	9	19	10	2	sw.	J. Robert Hall
Louisiana	Pike	469	41	78.8	+ 2.4	97	30	53	17	36	3.82	+0.58	1.50	0	6	18	9	4	s.	Stark Bro's Nurseries
Macon	Macon	875	36	81.6	+ 4.4	102	28	61	17	34	2.87	−0.50	1.11	0	7	20	9	2	w.	W. C. Brown
Mexico	Audrain	800	46	80.4	+ 3.1	99	30	60	13	30	2.99	−0.61	1.12	0	7	27	1	3	sw.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	4.60	+0.87	2.67	0	5	20	6	5	n.	J. S. Conway
St. Charles	St. Charles	520	47	81.2	+ 3.1	102	30	61	17	33	3.80	+0.68	1.11	0	9	22	7	2	se.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	82.2	+ 3.4	100	30	68	8	22	3.13	+0.15	1.68	0	6	15	11	5	sw.	**Section Center**
St. Louis University	St. Louis City	578	23	81.8	+ 1.7	97	30†	68	8	21	4.13	+1.66	2.08	0	5	23	6	2	se.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	5.02	+1.14	2.55	0	9	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	80.0	+ 2.2	98	30	59	13	32	4.64	+0.37	1.78	0	7	21	10	0	s.	Frank Hall
Unionville	Putnam	1,062	42	80.4	+ 3.9	98	28†	62	13†	33	5.75	+1.69	3.20	0	8	20	5	6	s.	John H. Schick
Warrenton	Warren	816	53	79.2	+ 1.4	96	30	63	13	25	7.60	+4.34	2.05	0	10	17	7	7	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	81.0	+ 4.1	97	28	65	16	25	4.85	+1.44	2.42	0	9	13	9	9	sw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**80.6**	**+ 3.4**	**102**	**28†**	**53**	**17**	**36**	**4.93**	**+1.22**	**4.04**	**0**	**8**	**20**	**8**	**3**	**sw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	80.9	+ 0.5	98	6†	62	10	32	1.88	−1.60	0.94	0	8	19	11	1	s.	Jeff. King
Caruthersville	Pemiscot	265	39	83.5	+ 2.2	103	6	66	15	31	2.78	−0.61	1.00	0	6	16	9	6	s.	Sam Smith
Doniphan	Ripley	344	31	80.8	+ 2.2	100	31	59	14	31	3.75	−0.36	1.20	0	8	20	3	8	sw.	W. W. Martin
Jackson	Cape Girardeau	428	44	81.6	+ 4.0	102	31	61	14	34	2.33	−1.15	1.57	0	7	9	8	14	s.	John G. Putz
Marble Hill	Bollinger	470	40	80.6	+ 2.8	101	31	59	14	36	3.58	−0.82	1.90	0	9	20	10	1	e.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	1.26	−1.76	0.61	0	5	21	6	4	n.	John A. Spence
Poplar Bluff	Butler	339	30	81.4	+ 2.2	101	30	62	14	32	1.77	−1.71	0.62	0	8	22	8	1	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	80.9	+ 2.3	102	31	62	14	31	2.24	−2.13	1.50	0	6	13	17	1	n.	John A. LaFont
Cairo, Ill	Alexander, Ill	356	63	81.2	+ 1.6	100	31	67	14	23	1.86	−1.21	0.89	0	7	4	17	10	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**81.4**	**+ 2.2**	**103**	**6**	**59**	**14**	**36**	**2.27**	**−1.27**	**2.42**	**0**	**7**	**16**	**10**	**5**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	76.8	+ 1.0	95	30	58	14	26	7.30	+3.16	1.72	0	12	14	8	9	e.	Arcadia College
Birch Tree(near)	Shannon	1,000	40	77.4	+ 0.8	98	30	58	14	32	4.39	+0.53	2.00	0	5	23	7	1	.....	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	1.54	.....	0.86	0	3	26	5	0	.....	C. M McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	1.00	−1.52	0.38	0	5	18	13	0	sw.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	79.8	.....	98	30†	59	14	31	7.31	....	2.32	0	13	6	14	11	s.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	31	80.4	+ 3.1	102	31	56	15	40	1.87	−2.32	0.95	0	6	23	8	0	sw.	H. E. Dean
Eldon	Miller	934	40	80.3	+ 3.1	97	30	63	13†	29	7.41	+3.87	2.45	0	10	15	12	4	s.	E. H. Shepherd
Farmington	St. Francois	918	24	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	H. O. Miller
Garber	Taney	950	0	80.6	.....	102	30	58	14	35	0.91	.....	0.50	0	5	19	9	3	e.	William H. Durham
Goodland	Iron	1,000	42	76.7	+ 1.1	97	30	54	14	35	6.25	+2.37	3.15	0	6	19	7	5	e.	F. M. Adams
Greenville	Wayne	381	26	78.0	+ 0.6	99	30	53	14	36	8.82	+5.05	3.27	0	10	17	11	3	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	1.35	−2.34	0.92	0	3	23	8	0	ne.	A. W. Madison
Koshkonong	Oregon	958	34	79.6[b]	+ 0.8	98	30	64	14	26	2.51	−1.16	0.95	0	7	15[b]	12[b]	2[b]	sw.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	80.4	+ 3.5	98	20	61	1	31	1.65	−2.32	1.65	0	1	27	3	1	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	82.4	+ 4.8	98	27†	63	13	28	1.67	−3.04	0.99	0	3	22	9	0	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	78.4	+ 2.0	96	30	58	14	30	3.73	−0.10	1.79	0	7	18	11	2	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	80.0	+ 2.5	97	7‡	57	15	35	0.08	−4.23	0.05	0	2	18	13	0	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	78.8	+ 1.1	93	31	63	14	23	3.10	−0.78	2.04	0	7	12	6	13	se.	F. H. Lane
Salem	Dent	1,173	31	78.8	+ 2.0	98	30	61	13	28	3.43	+0.07	1.14	0	11	16	14	1	s.	E. E. Martin
Seligman	Barry	1,542	34	79.8[c]	+ 3.1	94	9	61	14†	27	0.65	−3.66	0.35	0	3	20[c]	8[c]	0[c]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	76.4	+ 0.9	95	30	55	14	30	1.10	−3.14	0.47	0	4	20	7	4	sw.	A. L. Hailey
Springfield	Greene	1,324	47	80.6	+ 3.8	96	30	65	13	22	1.62	−2.59	1.35	0	5	25	6	0	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	80.8	.....	98	30	60	13	25	3.36	−0.97	1.47	0	8	20	8	3	sw.	I. M. Wilson
Division means	**and extremes**	.....	..	**79.3**	**+ 2.1**	**102**	**30†**	**53**	**14**	**40**	**3.44**	**−0.41**	**3.50**	**0**	**6**	**19**	**9**	**3**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	82.6	+ 4.4	99	26†	65	13	26	0.13	−4.38	0.04	0	4	12	19	0	sw.	W. G. Bigelow
Clinton	Henry	765	42	84.1	+ 5.8	104	30	63	13	35	0.50	−3.33	0.25	0	5	20	11	0	ne.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	1.90	−2.00	0.54	0	6	23	6	2	s.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	83.4	+ 5.7	100	10	66	1†	30	2.44	−1.32	1.08	0	4	15	12	4	sw	John H. Patterson
Lamar	Barton	980	47	82.9	+ 4.5	100	26	64	13	29	1.49	−2.69	1.10	0	3	27	3	1	sw.	Jesse A. Mann
Lamonte	Pettis	867	34	82.4	+ 3.3	102	27	60	13	33	1.16	−2.79	0.65	0	6	22	9	0	sw.	J. E. Wheeler
Marshall	Saline	779	48	81.5	+ 4.0	97	30	64	13	27	4.48	+0.64	1.95	0	8	22	8	1	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	83.0	+ 3.4	100	26†	63	13	29	T.	−3.94	T.	0	0	25	5	1	s.	George A. Kaupp
Warrensburg	Johnson	878	48	83.6	+ 4.8	100	27†	65	13†	29	0.44	−3.41	0.17	0	4	21	8	2	se.	E. A. Markey
Warsaw	Benton	687	34	84.1	+ 5.8	103	31	62	13	33	0.58	−3.51	0.36	0	6	22	7	2	s.	Everett Martin
Division means	**and extremes**	.....	..	**83.1**	**+ 4.6**	**104**	**30**	**60**	**13**	**35**	**1.66**	**−2.33**	**1.95**	**0**	**5**	**21**	**9**	**1**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	81.8	+ 5.5	102	28	60	13†	29	0.66	−3.57	0.48	0	3	23	8	0	s.	A. S. Cumming
Chillicothe	Livingston	779	26	82.2	+ 3.3	104	26	59	13†	35	2.66	−1.50	1.50	0	9	22	7	2	sw.	Wm. J. Olenhouse
Conception	Nodaway	980	46	82.2	+ 5.6	102	28	63	13	30	1.82	−2.51	1.33	0	4	21	10	0	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	82.4[a]	+ 6.3	100	27†	60	13	29	1.46	−2.42	0.75	0	4	28	2	1	s.	Fred L. Stiff
Grant City	Worth	1,134	31	79.9	+ 3.7	100	27	57	13	28	0.69	−4.14	0.47	0	5	13	17	1	se.	Howard Rybolt
Kansas City	Jackson	963	46	86.8	+ 8.7	104	27	67	14	27	0.51	−3.62	0.22	0	4	20	9	2	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	82.2	+ 5.6	103	28	60	13	33	0.22	−3.70	0.16	0	3	19	12	0	sw.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	0.35	−3.50	0.27	0	3	2	29	0	s.	John M. Martin
Lexington	Lafayette	688	50	83.8	+ 6.4	102	27	63	13	27	2.05	−2.63	0.76	0	8	20	11	0	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	82.2	+ 6.5	102	27†	60	13	32	1.49	−3.64	0.74	0	3	24	6	1	s.	R. B. Montgomery
Oregon	Holt	1,048	79	83.8	+ 8.2	104	28	60	13	30	0.46	−3.80	0.26	0	3	29	2	0	sw.	Mina Wright
St. Joseph	Buchanan	967	25	85.1	+ 5.9	102	28†	64	13	28	0.11	−2.92	0.11	0	1	27	4	0	se	U. S. Weather Bureau
Tarkio	Atchison	916	32	82.4	+ 5.6	102	27	61	13	30	1.13	−2.61	0.95	0	4	25	6	0	sw.	Albert Volker
Trenton	Grundy	822	39	82.0	+ 5.2	102	28	60	13	33	1.56	−2.50	1.22	0	7	21	10	0	s.	W. H. Estes
Division means	**and extremes**	.....	..	**82.8**	**+ 5.9**	**104**	**26†**	**57**	**13**	**35**	**1.08**	**−3.09**	**1.50**	**0**	**4**	**21**	**10**	**0**	**s.**	
State means	**and extremes**	.....	..	**80.8**	**+ 3.0**	**104**	**26†**	**53**	**14†**	**40**	**3.12**	**−0.65**	**4.04**	**0**	**5**	**20**	**9**	**2**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated, ‡ Partially estimated.

Daily Precipitation for July 1935

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri	.06	1.05	T.	.07								T.	.32							.01	.12	T.		.24	.68							2.55
Bowling Green	Mississippi	.13	.24		.15									.05							.17	**	4.35	1.20	1.06	.09	.09						7.53
Brunswick	Grand	.52	1.63					.02			.20			.12							.07	.09			1.38	.10							4.13
Canton	Mississippi	.13	.26	1.81												.19					.05	.25	.83		1.09		.44			.08			5.13
Clifton Hill	Chariton	1.80	.24	.03			.01			T.											.38	.07	.01		1.05								3.59
Columbia***	Missouri	.26	.20	.01			T.						1.18							.03	T.	T.	.26		1.95								3.89
Downing	Mississippi	.42	.50		.01							T.									.30		.60		1.10	1.80							4.73
Edina	do	.12	.74	.07																	T.		1.09		2.02		.07						4.11
Elsberry	do	T.		T.									1.06							.04	.19		1.63		.24					.08			3.24
Farber	do	.38	.08																				4.04		2.38	.49							7.37
Fayette	Missouri	.90	T.	.23			T.			T.			.95							T.	T.				2.35								4.43
Fulton	do		.52					T.						1.30						.04	.14	.55	.50	1.97	1.12							6.14
Gorin	Mississippi	.10	.10		.25														.36		1.07		.46		1.75		.28			.50			4.87
Hannibal	do	.02	.47	.10	.17											.02					.04	.52	.95		2.38	T.	1.05			.23			5.95
Hermann	Missouri	.10		.78	.64									1.53							.22	.05	.28	.06	.12	.12							3.90
Jefferson City	do	.06	.40	.02										.34							.06	.03	.65	.43		.15							2.14
Kahoka	Mississippi		.40																		.40		.70		1.60		.45			.62			4.17
Kirksville	do	.38																			1.10	.24		2.32			.19						4.23
LaBelle	do		.96	.40																		1.59			1.34		.12			.11			4.52
Linneus	Grand	3.56	.91	T.	.05		.03				.04										T.	.79	.01		1.33	T.	.08						6.80
Louisiana	Mississippi	.15											.20								.67		1.50		1.10	.20							3.82
Lucerne	Grand	.02	1.60	1.20																	.02	.03	.45	.09	.24		.74						4.39
Macon	Chariton	T.	.45																		.15	.48	1.11	.31	.35	T.	.02						2.87
Madison	Mississippi		.48																			.39	.22	1.75	.41	.62							3.87
Memphis	do		.26	.36	.20															2.00	T.	.34	.56		2.44		1.03						7.19
Mexico	do	.16	.40											.15									1.12	.35	.56	.25							2.99
Milan	Grand	.83	2.30	.12							.18											2.45	.61		.20		.46						7.15
Monroe City	Mississippi	.06	T.																		.33		1.44		2.67	.10							4.60
New London	do	.14																				2.03	2.93		2.49								7.59
Palmyra	do		.90	.35												.35						.14	1.84		1.40		.80			.44			6.22
Paris	do	1.31	.55																		.10		1.05		.62	.13							3.76
Perry	do	T.	.03																		T.	T.	1.67	.33	2.65	.09							4.77
Philadelphia	do		1.05																		.15	.89	1.75		1.70					.35			5.89
St. Charles	Missouri		.48	.46									.37	.74								.72	.15	.29	.02	.57							3.80
St. Louis*	Mississippi	T.	T										1.68							.08	.84	T.	.34	.05	.14								3.13
St. Louis University*	do	T.	T.				T.						2.08							T.	1.40		.41	.03	.21								4.13
Shelbina	do	.29	.34	.39																	.13	.03	1.02	.24	2.55	T.	.03						5.02
Shelbyville	do	.55	.43	.67																	.30	**	1.30		1.00								4.00
Steffenville	do	.37	.30		T.																.25	.03	1.78		1.75		.16						4.64
Troy	do		.35	.05	.42									1.36							T.	.41	1.69	.55	.75	.05							5.63
Union	Meramec							.40					.50	3.75			.02			.20	.19	1.07	.77	1.48	T.	.17	T.	.10		.05			8.70
Unionville	Chariton		2.40	.80																	.05	.15	.53	.29	.23		1.30						5.75
Valley Park	Meramec		.15					.04					T.	3.72							T.	.67	.05	.80	T.	.19	T.	.04		.04			5.70
Warrenton	Mississippi	.05	.02	.76			.70						2.02								.05	2.05	1.07		.80	.08							7.60
Keokuk, Ia.***	do	.18	.86		T.						T.				T.					T.	.57	.42	.01	2.33	.09	.06			.33				4.85
Southeast Lowlands																																	
Bragg City	St. Francis	.21		.08																		.05		1.25									1.59
Campbell	do						.04												.11	.15	.25	.22	.94	.02		.15							1.88
Cape Girardeau	Mississippi							.32												.36	T.	.32	T.	.24		.15	.07	.18					1.64
Caruthersville	do		T.			.64																1.00	.14	.67			.13				.20		2.78
Dexter	St. Francis																				T.	.01		.77		T.	.27				.14		1.19
Doniphan	Black		.56		T.								1.20						.03	.48	T.	.09	.07	T.	1.00	.32							3.75
Fisk	St. Francis	.02																		.56	.42	T.	T.	T.	T.	T.	.72	.42					2.14
Jackson	Mississippi	.28					.11												.06		.07	.07	1.57			.17							2.33
Marble Hill	do				.25		.20						.07								.65	.17	.20			1.90	.05	.09					3.58
Morehouse	do	.01						T.													.18	T.	.61			.10	.36						1.26
New Madrid	do																					T.	1.02	1.40	.04		.60				.15		3.21
Parma	St. Francis							.25														.35		.78			1.28				.13		2.79
Poplar Bluff	Black													.03							T.	.46	.16		.15	.27	T.	.62	.05		.03		1.77
Sikeston	Mississippi		.17					.50																1.20	.30	.01		.06					2.24
Cairo, Ill.***	do	.03	T	.01	T.		.29												T.		.89	T.	.49	.03		.12							1.86
Ozark Plateau																																	
Arcadia	St. Francis		.01	.07	.02	.02		.73						1.64	T.						.40	.07	1.63	1.72	T.	.44	.55						7.30
Birch Tree (near)	Black		.07										.41									.86			1.05		2.00						4.39
Buffalo	Osage			.43																	.25					.86							1.54
Caplinger Mills*	do		.17	T.										.14		.26				.38	T.			T.	.05	T.							1.00
Crystal City	Mississippi			.03		.25		.28						1.56						.02	.34	.39	.12	.79	.02	1.17	2.32	.02					7.31
Cuba	Meramec			.57										.50							.93				1.45	1.20							4.65
Dean	Neosho										.72		.02						.02	.04	.12			.95									1.87
Eldon	Missouri	.17	1.87	1.05	.31			2.45						.14							.20	.02				1.18	.02						7.41
Farmington	St. Francis																																
Fredericktown	do		T.			2.20		.21						.59							.68	.08	.20	.70	.38	.23	.18	T					5.45
Galena	White			2.32	T.																		1.38										3.70
Garber	do	.06	.07	.43																.23	.12												0.91
Goodland	Black		.88				.08						3.15								.20					1.68	.26						6.25
Greenville	St. Francis	T.					.18						.13						.26	.06	2.21	1.40	1.27		1.27	2.00	.04						8.82
Hailey	White		.23																.20														1.35
Koshkonong	Black																							92									
Lakeside	Osage	.11	.17	.33				.31					.90	.02						.10	.95	.10		.18		.15	.13						2.51
Lebanon	do			T.																	.20	.14			.25	1.25							2.78
Leeper	Black			.04				.05						.26												1.65							1.65
Lockwood	Osage	.63									.05									1.10	.44	.33		.34		.35		.36					3.27
Mountain Grove	White	.22	.16	.87									T.							.99	T.	T.		T.	T.								1.67
Neosho	Neosho			T.							T.									T.	T	T.	T.	.12	.32	1.79	.25						3.73
Owensville	Gasconade	.72	.98	.14	T.									.12					.03		.05				T.								0.08
Rolla	Meramec	.13												.10							.30		.16		.61	.16		.36					3.55
St. Thomas (near)	Osage			.34																T.			.10		.64	2.04	.04	.05					3.10
Salem	Meramec	.15	.17		.04								.77									.26			.05	3.50							4.15
Seligman	Neosho			.02							T								T.	.19	.10	.20	.40		.19	1.14	.08						3.43
Seymour (near)	White			T													16			.35				28									0.65
Springfield***	do	.14	1.32	.03					.03										T.	.13	T.		.47			.34								1.10
Stover	Missouri	.59	.21	.03				.40																.10	T.			T.					1.62
Versailles	Osage	.35	.79	.05			.60						.02								.07	.03				.67							2.00
Williamsville	Black		.01											.10							.08				1.23	.24							3.36
Willow Sprgs. (near)	White		.91	.15	.01									.06						.03	.68	.29	1.14	.69	.04	1.01	.02	.01					4.02
Southwest Plain																				.75		1.29			1.93	.10	.21						5.41
Appleton City	Osage		.01																T.	.04	.04				.04								0.13
Clinton	do	.25											.02						.03	T.	.05				.15								0.50
Concordia	Missouri	.48		.54									.40							.15	.02				.31								1.90

Continued on next page

Daily Precipitation for July 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																	
Harrisonville‖	Osage	1.08																			.48	.23				.65							2.44
Joplin‖‖	Neosho									T.	.36									.20													0.56
Lamar‖	Neosho	.34	T.									1.10									.05												1.49
Lamonte	Missouri	.33	.06	T.									.65					T.		.05	.02	T.			.05	T.							1.16
Marshall	do	.24	.12	.01									.86							T.	.81	.03			1.95		.46						4.48
Nevada	Osage										T.																						T.
Warrensburg	Missouri	.03											.15								.17				.09								0.44
Warsaw‖‖	Osage		.02	.36			T.						.01								.08	.05				.06							0.58
Waverly‖	Missouri	.76	.10	1.90	.60									1.50						.30	.66	.18			.08	.14							6.22
Northwest Plateau																																	
Amity‖‖	Grand	.79		.09				T.		.10				.09							.19				.09								1.35
Bethany	do		.08	.48			T.														.10			T.								0.66
Chillicothe‖‖	do	.12		T.	.09		T	1.50	.08		.05										.03	T.	.13	.58	.08								2.66
Conception	Missouri				T.		.23			1.33			T.							.06	T.			.20	T.								1.82
Edgerton	do				T.								.75							.08		.05			.58								1.46
Gallatin‖	Grand	.17		.02				.65																									0.84
Grant City	do		.03	.03						.47		T.								.11					.05								0.69
Kansas City***	Missouri	T	T.				.13		T.				.22							T.	T.	.12		T.	.04								0.51
Kidder‖‖	Grand	.02												.04							T.	T.			.16								0.22
King City	Missouri		.03				T.			.27										.05				T.									0.35
Lexington‖	do	T.		.60									.25	.11						T.	.76	.05	.02		.15	.11							2.05
Maryville	do		T.				.65			.74			T.												.10								1.49
Oregon	do				.06		T.			T.			.26							T.	T.				.14								0.46
St. Joseph***	do			T.	T.								.11							T.				T.	T.								0.11
Tarkio	do				.10					.95		T.	.03							T.					.05								1.13
Trenton	Grand	T.	.06				.03		.01	1.22		T.									.07	T.			.05	.12							1.56

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for July 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.133	.224	.170	.152	.277	.306	.314	.268	.294	.299	.332	.314	.099	.299	.297	.337	.332	.297	.328	.191	.123	.314	.330	.312	.242	.229	.250	.295	.278	.215	.302	8.153
	Mean temperature	80	78	81	80	80	83	82	82	80	82	82	80	74	76	80	80	82	82	79	80	85	86	86	83	82	86	85	82	84	85	85	81.7
	Wind movement	45	45	33	31	32	43	29	39	28	51	36	51	42	47	38	40	51	34	41	35	36	30	45	60	41	36	30	35	30	27	35	1,196

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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MISCELLANEOUS PHENOMENA

Floods.—In Grand River continued from June to July 6th; in the Missouri, continued from June to July 8th; in the Mississippi, continued from June to July 9th.

Fog.—Dense, 2d, 3d, 4th, 21st, 22d.

Hail.—Light at Versailles on 6th, at Warrenton on 24th; moderate, north of Fulton on 6th.

Halos.—Solar, 1st, 2d, 3d, 8th, 9th, 19th; lunar, 22d.

Thunderstorms.—Local, 3d, 4th, 7th, 8th, 9th, 10th, 17th, 18th, 25th, 26th, 28th, 29th, 31st; more or less general, 1st, 2d, 6th, 12th, 19th, 20th, 21st, 22d, 23d, 24th.

Windstorms.—6th, 12th. On the 6th, minor damage at Crystal City. On the 12th, strong winds swept across the central portion of the State from west to east, accompanied by downpours of rain and severe lightning, with damage reported at Lexington, Concordia, Sedalia, Columbia, Jefferson City, Montgomery City, New Haven, St. Charles, and St. Louis. Damages estimated at Jefferson City, $25,000, Montgomery City $10,000, St. Louis $2,000.

Daily Temperatures for July 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	86	88	94	94	94	91	95	92	87	94	97	92	89	91	95	91	96	97	92	92	95	99	97	94	95	99	100	101	99	101	99	94.4
	Minimum ...	70	70	72	73	75	66	71	72	70	72	75	72	65	65	67	67	66	72	73	73	75	72	78	71	71	72	76	75	77	77	77	71.8
Columbia.	Maximum...	87	85	90	92	92	89	92	86	88	91	93	82	85	87	91	85	91	93	90	89	94	95	94	90	91	94	92	95	94	97	96	90.6
	Minimum ...	69	69	71	71	75	73	68	70	69	71	71	69	64	63	66	68	65	73	69	72	73	71	73	70	70	76	74	72	76	76	76	70.7
Fayette	Maximum...	86	89	95	95	95	93	94	89	94	95	97	87	86	90	96	88	95	97	92	93	97	99	99	92	95	98	97	101	99	100	100	94.3
	Minimum ...	69	66	69	68	70	72	66	69	68	70	71	69	64	62	63	64	62	68	68	71	71	69	73	69	67	71	73	69	73	73	70	68.6
Hannibal	Maximum...	87	81	90	85	92	89	88	85	87	89	93	86	85	87	88	87	89	95	91	83	82	84	92	88	92	91	92	94	91	95	95	88.8
	Minimum ...	69	68	71	71	74	76	71	65	67	69	71	76	62	65	67	64	62	70	63	72	70	67	70	63	69	68	73	73	74	75	72	69.3
Jefferson City §§	Maximum...	89	84	89	89	90	90	90	86	88	88	89	90	80	86	91	85	90	92	89	85	92	92	92	89	90	93	89	91	92	97	96	89.5
	Minimum ...	67	67	68	68	73	74	69	71	67	68	67	74	64	64	66	67	65	68	67	71	70	70	70	70	70	74	73	70	74	74	75	69.5
Kirksville.	Maximum...	82	87	91	90	91	95	91	91	87	92	96	88	89	91	90	86	93	96	94	89	92	94	94	93	94	95	97	98	97	97	96	92.1
	Minimum ...	68	67	69	72	72	72	69	67	67	68	71	75	61	63	66	62	62	71	69	71	69	68	72	70	67	66	66	66	74	75	76	68.7
Louisiana	Maximum...	85	90	90	92	94	95	90	84	85	91	91	85	88	88	90	83	89	95	94	88	82	85	90	88	94	92	91	93	93	97	95	89.9
	Minimum ...	67	70	65	73	76	70	70	64	62	62	66	78	59	57	66	56	53	65	67	72	70	69	72	70	69	70	68	70	75	73	77	67.8
Macon §§	Maximum...	78	91	94	95	94	95	93	88	89	92	96	85	88	92	93	87	95	98	94	93	96	98	98	90	96	96	96	102	101	101	99	93.6
	Minimum ...	68	67	69	72	74	75	71	67	66	66	71	77	62	64	66	62	61	70	69	71	72	67	69	68	69	69	74	72	76	75	74	69.5
Mexico §§	Maximum...	85	88	91	93	94	92	91	87	88	91	93	83	88	89	93	87	91	95	90	91	96	92	94	95	94	93	94	96	96	99	98	91.8
	Minimum ...	67	66	69	70	73	75	70	67	66	67	70	75	60	62	63	64	62	70	68	71	72	67	70	67	68	70	72	71	76	74	75	68.9
St. Louis	Maximum...	91	91	93	95	95	95	92	86	86	91	92	80	86	88	90	85	91	95	91	90	89	78	83	94	93	93	91	94	94	100	98	90.6
	Minimum ...	73	73	74	76	78	78	76	68	70	74	75	71	70	72	72	69	70	76	74	69	71	72	72	72	72	77	76	78	79	79	82	73.8
Unionville §§	Maximum...	85	84	88	90	92	95	91	87	87	92	94	86	89	91	90	89	92	96	93	89	94	94	93	86	94	95	97	98	98	98	97	91.7
	Minimum ...	69	66	66	72	74	75	69	68	69	70	73	72	62	62	66	64	62	69	69	70	70	69	72	68	70	62	67	74	75	75	75	69.2
Warrenton	Maximum...	85	89	92	91	92	90	90	83	85	89	90	84	84	83	89	86	89	93	90	89	86	78	89	89	89	87	87	92	92	96	94	88.5
	Minimum ...	70	70	68	70	73	71	71	66	66	68	69	70	63	64	68	66	64	71	68	71	70	68	71	69	70	72	73	73	76	76	78	69.8
Southeast Lowlands																																	
Campbell	Maximum...	90	95	93	92	93	98	95	89	83	87	92	92	90	89	95	97	95	93	93	96	98	94	90	95	90	92	92	96	95	95	98	93.0
	Minimum ...	67	67	67	68	71	72	69	70	63	62	65	68	68	63	65	65	68	69	69	71	70	70	69	70	73	69	73	70	73	75	75	68.8
Caruthersville	Maximum...	92	94	90	91	97	103	98	92	86	91	95	93	89	90	97	94	97	92	92	97	94	94	91	95	94	94	95	93	98	99	99	94.1
	Minimum ...	72	70	72	73	73	74	73	72	69	70	72	74	72	68	66	71	72	76	73	75	73	73	73	74	75	72	76	75	76	76	79	72.9
Doniphan	Maximum...	93	92	93	93	93	97	96	92	89	90	93	93	88	88	94	92	94	94	92	92	94	95	91	93	91	92	94	92	96	99	100	93.1
	Minimum ...	66	70	67	71	70	71	70	68	64	62	65	62	65	59	63	66	67	68	70	70	73	70	72	70	70	71	73	69	73	75	74	68.5
Jackson	Maximum...	91	96	95	94	96	98	93	93	87	92	97	96	90	92	96	94	97	96	94	86	95	84	91	92	91	94	94	95	98	101	102	93.9
	Minimum ...	68	68	71	73	72	71	69	78	63	62	66	68	69	61	63	63	63	67	68	71	71	68	70	72	72	72	71	70	75	74	75	69.2
Poplar Bluff	Maximum...	92	92	93	94	94	98	97	93	90	90	93	88	89	91	96	91	95	93	91	88	94	91	90	92	89	91	93	93	97	101	100	92.9
	Minimum ...	68	70	68	73	73	72	70	69	66	64	67	68	69	62	64	68	67	69	69	71	72	72	71	72	70	70	73	71	74	77	75	69.8
Sikeston	Maximum...	88	95	94	96	93	97	90	89	80	88	94	88	88	89	91	89	98	98	92	86	91	86	89	94	91	93	89	93	96	100	102	91.8
	Minimum ...	70	69	71	72	73	74	68	68	65	64	68	70	70	62	65	68	67	70	70	73	71	67	71	73	73	70	73	72	72	75	77	70.0
Cairo, Ill.	Maximum...	88	92	89	91	93	94	92	82	81	87	91	88	86	87	92	87	92	92	89	85	91	86	85	91	87	90	89	93	93	96	100	89.6
	Minimum ...	72	73	74	74	75	72	72	72	68	70	72	74	73	67	69	70	69	74	74	75	74	69	72	75	75	73	75	74	78	78	79	72.9
Ozark Plateau																																	
Arcadia §§	Maximum...	81	84	88	89	90	90	90	85	83	85	87	79	83	80	78	82	87	89	86	87	88	80	84	88	87	90	88	89	92	95	94	86.4
	Minimum ...	66	65	64	68	71	69	69	67	63	61	63	65	65	58	62	64	61	65	66	68	71	71	69	72	70	70	69	68	73	74	73	67.1
Birch Tree	Maximum...	89	87	90	91	93	93	89	87	88	88	88	84	79	86	92	92	92	91	90	93	90	90	86	87	87	90	89	90	94	98	95	89.6
	Minimum ...	60	64	63	64	63	72	68	64	65	62	62	65	59	58	60	68	65	64	65	64	65	60	66	67	68	68	69	68	70	72	72	65.2
Crystal City §§	Maximum...	91	92	94	94	94	95	93	87	88	91	93	85	88	88	91	86	91	95	90	90	91	79	86	91	91	93	92	93	95	98	98	91.1
	Minimum ...	68	69	68	71	72	72	68	69	64	64	65	68	62	59	65	70	60	67	67	69	69	71	69	73	70	71	71	70	70	75	73	68.4
Eldon §§	Maximum...	90	87	92	93	90	93	94	89	88	90	93	83	86	88	94	87	93	94	89	90	95	95	94	92	91	96	94	94	95	97	95	91.6
	Minimum ...	66	67	68	66	67	73	65	69	68	69	67	71	63	63	69	67	66	67	66	69	69	72	72	71	71	73	74	72	72	75	72	69.0
Farmington	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Garber	Maximum...	92	93	89	94	94	97	96	91	94	90	95	93	87	89	95	98	94	93	88	93	99	96	93	94	97	99	96	95	99	102	101	94.4
	Minimum ...	64	65	65	65	66	67	70	69	67	71	65	70	62	58	60	64	65	65	65	68	71	68	68	68	69	70	68	69	67	69	70	66.7
Koshkonong	Maximum...	91	85	..	89	89	92	93	90	92	87	90	85	83	85	92	92	90	90	89	90	90	92	86	89	90	87	89	..	90	98	97	[b]89.7
	Minimum..	67	67	..	66	75	73	75	72	66	66	67	67	67	64	68	71	66	70	67	69	69	71	68	71	68	71	73	..	70	76	75	[b]69.5
Lebanon §§	Maximum...	92	86	89	90	94	94	90	90	91	94	84	85	86	85	93	94	94	93	96	98	95	95	90	94	93	94	96	94	95	97	94	92.1
	Minimum ...	61	72	62	66	69	72	70	69	69	65	69	69	69	68	62	63	65	65	69	72	70	69	72	71	75	70	69	71	71	72	73	68.7
Mountain Grove	Maximum...	89	87	86	88	89	92	93	91	89	87	87	85	85	87	92	90	90	89	84	90	92	93	92	87	87	91	91	88	92	96	94	89.5
	Minimum ...	67	66	66	66	69	69	71	69	67	66	66	68	61	58	62	66	67	68	65	69	69	70	66	70	67	71	69	66	71	73	71	67.4
Neosho	Maximum...	90	90	93	90	90	95	97	97	97	97	95	95	86	90	92	93	93	92	91	88	95	96	95	91	93	97	97	96	97	97	97	93.6
	Minimum ...	65	65	65	66	67	66	67	69	68	71	68	73	59	59	57	65	63	66	66	68	70	69	73	68	67	66	68	63	65	68	69	66.4
Rolla	Maximum...	84	84	85	87	87	90	90	88	84	86	88	90	88	84	89	88	89	91	86	88	92	91	90	87	85	89	89	88	89	92	93	88.1
	Minimum ...	69	67	68	68	72	72	69	71	66	68	68	68	66	63	66	70	67	68	67	70	71	73	70	69	69	73	72	70	74	75	75	69.5
Springfield	Maximum...	85	85	86	87	88	91	93	91	91	88	90	84	84	86	89	89	91	90	84	88	93	93	88	89	91	94	91	91	93	96	95	89.5
	Minimum ...	69	68	69	68	73	74	76	72	72	72	70	69	65	66	68	72	69	70	68	72	73	74	73	73	72	75	77	76	74	76	75	71.6
Southwest Plain																																	
Appleton City	Maximum...	91	82	91	90	91	95	95	97	96	94	95	87	86	87	88	90	94	91	84	90	89	95	96	90	92	99	96	96	97	99	98	92.3
	Minimum ...	70	71	71	71	73	76	76	77	76	77	74	75	65	69	67	71	70	73	71	73	74	75	75	74	72	75	78	73	71	74	73	72.9
Clinton	Maximum...	90	95	95	93	94	96	101	95	95	97	98	88	93	95	99	93	100	98	94	95	102	101	102	98	98	101	103	102	102	104	103	97.4
	Minimum ...	68	68	72	70	70	76	76	75	73	73	70	72	63	65	64	68	68	69	68	70	73	75	76	73	70	73	75	70	70	71	72	70.8
Harrisonville §§	Maximum...	96	92	97	91	95	97	97	95	97	100	99	84	88	91	96	90	98	96	90	92	95	96	96	87	95	97	99	98	99	99	98	94.8
	Minimum ...	66	70	72	70	71	73	74	75	75	75	74	75	67	66	68	69	70	71	71	71	74	75	75	74	70	72	75	73	70	74	74	71.9
Lamar §§	Maximum...	90	91	91	92	90	95	96	96	98	97	95	85	87	89	94	94	96	96	91	92	96	97	95	95	93	100	99	99	99	98	97	94.3
	Minimum ...	70	71	72	71	72	71	74	75	73	75	72	75	64	66	65	66	69	70	70	72	74	75	75	73	73	73	74	70	71	72	74	71.5
Lamonte	Maximum...	91	90	92	91	91	98	99	95	91	96	95	84	89	92	98	90	99	96	93	91	96	97	96	92	95	100	102	101	99	100	98	94.7
	Minimum ...	69	69	70	70	72	73	70	73	70	72	72	67	60	64	65	65	66	70	68	72	73	74	75	72	70	73	74	71	72	73	72	70.2
Marshall	Maximum...	86	86	91	90	91	91	94	89	88	92	95	93	86	85	92	91	92	92	91	90	93	95	94	93	91	93	95	96	95	97	96	91.7
	Minimum ...	69	68	71	70	72	75	70	77	70	72	73	66	64	68	68	68	71	72	71	72	74	72	76	70	70	71	76	72	73	75	74	71.3
Nevada	Maximum...	92	91	90	90	90	94	95	95	95	94	93	90	87	89	94	90	94	93	88	91	96	98	96	91	94	100	99	97	99	99	100	93.7
	Minimum ...	71	72	71	71	72	74	75	75	73	78	73	73	63	66	69	67	71	70	73	74	76	76	73	74	76	75	70	70	76	75	70	72.3
Warrensburg	Maximum...	92	92	93	92	92	96	98	95	94	95	96	89	87	90	96	97	96	96	93	91	97	97	96	98	94	96	100	99	100	100	98	95.0
	Minimum ...	69	71	72	72	73	74	78	78	72	74	74	68	65	65	67	68	68	71	70	73	74	77	77	71	73	75	72	74	72	75	75	72.2
Warsaw	Maximum...	94	91	94	94	94	99	100	95	92	95	98	90	89	92	99	91	99	97	93	92	100	100	99	96	98	101	101	100	101	102	103	96.4
	Minimum ...	70	69	70	69	73	72	73	75	72	75	72	76	62	63	66	70	68	70	69	73	74	78	75	75	72	75	75	70	76	74	76	71.8
Northwest Plateau																																	
Chillicothe §§	Maximum...	88	93	93	93	96	93	95	89	83	95	98	86	90	92	95	90	98	98	94	94	96	101	98	88	95	104	102	103	102	103	101	95.0
	Minimum ...	68	69	71	70	72	75	67	70	69	70	72	74	59	59	64	60	64	68	71	71	72	71	73	70	69	69	74	73	74	73	75	69.5
Grant City	Maximum...	87	89	89	84	93	94	90	88	85	91	88	86	84	89	83	85	92	88	84	91	92	96	90	93	91	93	100	99	96	96	90	90.2
	Minimum ...	67	69	72	72	73	74	71	70	67	71	75	68	57	61	63	64	65	68	70	70	72	76	70	68	68	69	75	75	72	72	73	69.6
Kansas City	Maximum...	95	91	97	97	97	98	101	97	98	101	102	88	91	92	97	90	100	99	93	96	100	100	100	91	98	101	104	103	102	102	102	97.5
	Minimum ...	72	75	77	77	76	79	75	78	76	79	79	68	68	67	72	71	73	76	77	76	77	82	81	76	76	78	78	80	78	82	80	76.1
Kidder	Maximum...	88	92	91	91	93	94	94	93	91	95	97	96	89	91	94	89	96	96	93	93	98	97	96	91	95	100	101	103	101	101	101	94.8
	Minimum ...	65	69	71	71	71	70	69	70	70	70	74	67	60	64	66	62	63	70	70	70	70	71	75	70	69	70	74	74	74	73	73	69.5
Lexington §§	Maximum...	95	88	92	91	95	98	98	96	92	96	98	85	89	93	96	92	95	96	89	91	95	97	98	91	95	99	102	101	100	101	100	95.0
	Minimum ...	70	72	70	70	75	77	74	74	73	74	76	67	63	66	69	67	68	73	72	72	76	77	77	73	72	74	77	75	76	76	78	72.7
Maryville	Maximum...	90	91	94	91	95	94	94	91	88	94	98	96	90	91	93	87	97	95	92	93	99	101	99	94	97	99	102	102	100	100	102	95.1
	Minimum ...	65	69	71	72	74	67	70	71	68	72	73	69	60	62	64	64	65	66	68	69	72	70	76	69	68	70	73	74	71	74	73	69.3
Oregon	Maximum...	93	97	95	93	96	95	98	96	96	99	102	89	90	92	94	91	97	97	93	96	100	100	100	93	97	100	102	104	102	102	103	96.8
	Minimum ...	68	72	72	70	74	72	72	73	71	75	74	64	60	65	67	65	67	68	70	70	70	75	76	69	70	75	75	74	72	73	75	70.7
St. Joseph..	Maximum...	93	93	94	94	97	96	98	96	95	98	100	89	90	92	95	90	98	95	90	94	99	99	99	92	97	99	101	102	101	102	102	96.1
	Minimum ...	69	74	75	75	76	77	73	75	74	76	77	69	64	65	70	68	70	76	75	72	77	78	77	73	74	76	78	77	78	79	79	74.1
Trenton	Maximum...	87	91	85	93	94	91	93	91	90	93	94	86	88	89	90	88	96	94	93	92	92	97	99	90	95	95	98	102	96	101	100	93.0
	Minimum ...	70	69	72	70	72	75	78	73	68	69	73	72	60	64	66	63	63	70	71	72	73	73	76	71	70	68	75	76	74	76	75	70.9

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 8-22-35—945.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX AUGUST 1935 No. 8

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GENERAL SUMMARY

The hot weather that began in July continued during the first ten or twelve days of August. It was more severe in the western third and the lower southeastern parts of the State than in the remaining portions. Extremely high temperatures occurred about the 8th to 11th at the more western stations, with a maximum of 104° at St. Joseph, Kansas City, and Warrensburg, 105° at Oregon, 106° at Warsaw, 107° at Clinton, 109° at Garber, 110° at Dean. In the Southeast, 105° occurred at Caruthersville, and 103° at Doniphan, Jackson, and Poplar Bluff. Temperatures continued rather high during the middle of the month. But the last ten days were much cooler than normal.

Rainfall, although totalling much less than normal, was well distributed through the month. The principal dates of rain were the 2-3d, 10-13th, 17-20th, 26-27th, and 30th-31st. Large areas in the northern half of the State received less than 1 inch and few localities as much as 2 inches. In the southern half, the rainfall was greater, with considerable areas receiving between 3 and 4 inches and other large areas between 2 and 3 inches, but some localities less than 2 inches and as little as 1 inch. The average for the State, 2.26 inches, is only 58 per cent of normal. Very heavy local rains occurred at a few stations, especially at Marshall on the 17th, when 4.35 inches fell, mostly within two hours, flooding streets and basements, and bottom lands, drowning some livestock, and damaging crops and bridges.

The drought that began in July in the western third of the State extended to central counties by the first of August and it was severe the first two weeks over the western half of the State, especially in the north, and was extending into the northeastern quarter in a lesser degree. The third and fourth weeks brought little improvement except in limited areas. But the last few days of August brought good rains in northern and western sections, with subnormal temperatures, and crops were benefited decidedly. At the end of the month, corn was showing improvement pretty generally, but as yet was mostly in only poor to fair condition, except the early planted in the southeastern counties and in lowlands of some other sections, where some was very good. The bulk of the corn crop was very late. Alfalfa, third cutting, was poor to fair; pastures and gardens generally rather poor, but starting to revive; apple and peach crops, better than usual.

Rivers were falling almost steadily and were much lower than normal by the end of the month. Small streams dried up in western sections and some central counties.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 77.7°, or 1.5° above normal. The highest monthly mean was 82.0° at Caruthersville, and the lowest monthly mean was 74.6° at Goodland. The highest temperature recorded was 110° at Dean on the 8th and 11th, and the lowest was 45° at Downing, Elsberry, Kirksville, Louisiana, Unionville, Bethany, and Grant City on the 28th. The greatest daily range was 48° at Dean on the 11th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 2.26 inches, or 1.65 inches less than normal. The greatest local monthly amount was 5.01 inches at Garber, and the least local monthly amount was 0.18 inch at Brunswick. The greatest amount in any twenty-four hours was 4.35 inches at Marshall on the 17th. The average number of days with 0.01 inch or more of precipitation was 6.

(Continued on page 39)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	29.96	30.18	21	29.74	1	6.5	18	s.	19	81	51	60	72
Kansas City.....	29.94	30.20	21	29.65	1	8.4	28	nw.	2	74	48	50	71
St. Joseph.....	29.94	30.23	21	29.62	1	7.3	51	nw.	2	76	49	53	69
St. Louis.....	29.97	30.19	31	29.77	1	9.5	27	sw.	2	77	58	60	65
Springfield.....	29.97	30.18	19	29.76	1	8.2	30	nw.	12	78	53	52	74
Cairo, Ill.....	29.96	30.20	31	29.82	1	6.7	22	nw.	12	86	62	66	78
Keokuk, Iowa..	29.99	30.23	22	29.73	2	5.9	29	n.	9	78	54	61	77

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	74.0	− 2.2	110	45	7.25	+3.34	11.53	2.07	0	11	..	..	..
1889....	73.5	− 2.7	101	52	1.96	−1.95	5.25	0.10	0	14	..	..	..
1890....	73.3	− 2.9	106	47	4.84	+0.93	15.39	1.10	0	9	..	..	..
1891....	73.2	− 3.0	102	38	5.34	+1.43	13.10	2.37	0	8	..	..	..
1892....	74.3	− 1.9	102	44	2.42	−1.49	7.00	0.29	0	6	17	8	6
1893....	72 8	− 3.4	100	40	2.20	−1.71	6.63	0.20	0	4	18	10	3
1894....	77.0	+ 0.8	111	39	1.58	−2.33	5.64	0.04	0	5	14	16	1
1895....	75.3	− 0.9	104	46	4.23	+0.32	9.92	1.17	0	8	15	11	5
1896....	76.6	+ 0.4	108	41	3.25	−0.66	8.45	0.38	0	6	17	10	4
1897....	74.1	− 2.1	108	41	2.39	−1.52	7.87	0.56	0	6	19	9	3
1898....	75.8	− 0.4	103	44	3.03	−0.88	7.20	0.40	0	5	17	10	4
1899....	78.8	+ 2.6	107	49	3.25	−0.66	7.33	0.20	0	7	18	10	3
1900....	80.3	+ 4.1	105	52	3.51	−0.40	8.37	0.34	0	6	19	9	3
1901....	78.4	+ 2.2	109	47	1.88	−2.03	6.98	0.12	0	5	19	9	3
1902....	75.0	− 1.2	103	47	6.16	+2.25	11.49	0.96	0	10	14	11	6
1903....	74.5	− 1.7	102	43	5.40	+1.49	11.63	1.17	0	10	16	11	4
1904....	73.7	− 2.5	100	43	5.46	+1.55	9.51	1.98	0	8	16	10	5
1905....	76.4	+ 0.2	99	48	4.69	+0.78	9.32	1.35	0	8	19	7	5
1906....	76.6	+ 0.4	101	40	4.72	+0.81	12.43	1.28	0	11	14	10	7
1907....	77.3	+ 1.1	109	47	3.71	−0.20	7.07	1.56	0	9	17	8	6
1908....	76.4	+ 0.2	102	46	3.87	−0.04	7.28	0.78	0	8	17	9	5
1909....	79.5	+ 3.3	110	40	0.55	−3.36	4.30	0.00	0	2	24	6	1
1910....	74.7	− 1.5	103	40	2.77	−1.14	10.07	0.91	0	6	15	9	7
1911....	75.4	− 0.8	109	41	4.20	+0.29	12.04	1.39	0	7	15	8	8
1912....	76.2	0.0	104	41	4.19	+0.28	8.70	1.40	0	9	17	8	6
1913....	82.8	+ 6.6	110	41	1.06	−2.85	3.51	0.00	0	3	22	7	2
1914....	78.0	+ 1.8	106	49	4.25	+0.34	8.31	1.16	0	9	15	9	7
1915....	69.8	− 6.4	98	37	7.86	+3.95	15.14	1.78	0	12	12	9	10
1916....	79.2	+ 3.0	107	41	4.05	+0.14	14.86	0.30	0	7	19	7	5
1917....	73.3	− 2.9	104	38	4.45	+0.54	11.46	0.98	0	9	16	8	7
1918....	81.8	+ 5.6	111	45	3.34	−0.57	7.83	0.68	0	8	17	9	5
1919....	75.7	− 0.5	106	44	4.29	+0.38	11.27	0.53	0	8	17	9	5
1920....	73.1	− 3.1	102	43	4.78	+0.87	10.47	0.96	0	9	15	8	8
1921....	76.8	+ 0.6	109	48	5.27	+1.36	10.04	1.79	0	9	14	10	7
1922....	77.5	+ 1.3	107	46	2.40	−1.51	6.22	0.13	0	6	18	8	5
1923....	77.3	+ 1.1	108	42	3.99	+0.08	9.80	0.24	0	8	16	9	6
1924....	77.2	+ 1.0	106	48	4.14	+0.23	9.51	0.99	0	7	19	8	4
1925....	76.5	+ 0.3	107	45	3.45	−0.46	11.24	0.68	0	6	19	8	4
1926....	77.5	+ 1.3	106	50	5.63	+1.72	13.55	1.83	0	10	15	9	7
1927....	71.1	− 5.1	97	39	5.06	+1.15	13.87	1.94	0	9	14	10	7
1928....	76.4	+ 0.2	99	45	5.35	+1.44	11.24	0.96	0	9	15	10	6
1929....	76.0	− 0.2	105	43	2.50	−1.41	8.57	0.32	0	6	18	9	4
1930....	78.5	+ 2.3	114	47	2.02	−1.89	4.81	0.04	0	6	16	10	5
1931....	74.9	− 1.3	106	44	4.77	+0.86	11.00	0.54	0	9	15	9	7
1932....	77.2	+ 1.0	106	46	5.98	+2.07	13.96	0.61	0	9	18	9	4
1933....	75.4	− 0.8	103	48	3.91	0.00	10.62	0.36	0	9	13	10	8
1934....	80.6	+ 4.4	115	41	3.90	−0.01	10.47	0.07	0	9	14	11	6
1935....	77.7	+ 1.5	110	45	2.26	−1.65	5.01	0.18	0	6	17	9	5
.....	....	.....	...	....	....	.....	....	....	..	..	..	..	..
.....	....	.....	...	....	....	.....	....	....	..	..	..	..	..
Period.	76.2	.....	115	37	3.91	.....	15.39	0.00	0	8	17	9	5

Climatological Data for August 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	79.8	+ 5.6	102	9†	54	28†	33	0.18	−3.66	0.12	0	3	22	3	6	se.	O. K. Benecke
Clifton Hill	Randolph	731	36	78.6	+ 2.6	103	9†	51	28	35	0.29	−3.72	0.16	0	3	25	2	4	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	77.6	+ 2.0	100	11	54	30	32	0.27	−3.33	0.16	0	4	15	12	4	sw.	U. S. Weather Bureau
Downing	Schuyler	876	14	75.2	+ 0.3	97	1	45	28	34	1.68	−2.04	0.70	0	6	17	12	2	s.	James Taylor
Elsberry	Lincoln	449	4	76.3	.....	99	6	45	28	36	1.11	.....	0.48	0	4	13	13	5	sw.	Ray E. Mills
Fayette	Howard	680	55	77.4	+ 1.5	102	11	51	28	37	1.14	−2.12	0.77	0	3	10	19	2	s.	Harry P. Mason
Fulton	Callaway	818	47	76.8	+ 0.4	99	11†	50	28†	35	1.02	−2.45	0.52	0	3	19	5	7	ne.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	3.33	+0.21	1.36	0	6	25	6	0	se.	W. L. Harker
Hannibal	Marion	759	43	76.0	+ 1.0	96	6†	49	28	27	1.98	−1.36	1.50	0	4	17	7	7	n.	Hannibal Water Dept.
Jefferson City	Cole	557	45	76.6	− 0.1	101	9	53	31	34	1.81	−1.44	0.52	0	8	15	15	1	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	75.7	+ 1.7	98	9	45	28	33	1.66	−1.85	0.70	0	4	17	12	2	nw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	0.73	.....	0.56	0	5	19	10	2	e.	J. Robert Hall
Louisiana	Pike	469	41	75.9	+ 1.0	98	6	45	28	36	1.87	−1.95	1.10	0	5	15	12	4	w.	Stark Bro's Nurseries
Macon	Macon	875	36	77.6	+ 1.5	103	9	48	28	37	0.22	−3.32	0.12	0	2	19	10	2	ne.	W. C. Brown
Mexico	Audrain	800	46	76.6	+ 0.6	100	6†	49	28†	36	0.66	−2.58	0.27	0	4	28	1	2	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	0.57	−4.00	0.18	0	5	19	8	4	n.	J. S. Conway
St. Charles	St. Charles	520	47	77.9	+ 1.1	100	11	49	30	33	0.67	−2.81	0.38	0	5	22	7	2	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	78.6	+ 1.1	98	1	56	30	28	1.82	−1.17	0.61	0	6	13	13	5	s.	**Section Center**
St. Louis University	St. Louis City	578	23	78.6	+ 1.4	98	1	56	30	25	1.55	−2.70	0.64	0	6	22	5	4	se.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	0.75	−2.27	0.29	0	7	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	76.3	− 0.2	98	1†	48	28	35	2.75	−0.96	1.30	0	7	16	10	5	s.	Frank Hall
Unionville	Putnam	1,062	42	75.6	+ 0.8	97	9	45	28	33	2.71	−1.36	1.67	0	6	20	4	7	s.	John H. Schick
Warrenton	Warren	816	53	76.6	+ 0.1	94	6†	52	30	30	1.45	−2.95	1.10	0	4	13	12	6	sw	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	75.8	+ 0.8	95	6	50	28	26	1.90	−1.30	0.80	0	9	16	9	6	s.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**77.0**	**+ 1.2**	**103**	**9†**	**45**	**28**	**37**	**1.59**	**−2.26**	**2.20**	**0**	**5**	**18**	**9**	**4**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	77.5	+ 0.3	102	11	48	31	34	1.98	−4.00	1.55	0	3	24	4	3	e.	Jeff. King
Caruthersville	Pemiscot	265	39	82.0	+ 1.7	105	7	55	31	29	0.92	−2.46	0.70	0	3	22	4	5	s.	Sam Smith
Doniphan	Ripley	344	31	79.7	+ 2.1	103	11	49	31	35	1.13	−3.15	0.65	0	4	21	4	6	s.	W. W. Martin
Jackson	Cape Girardeau	428	44	79.6	+ 3.5	103	7	48	31	36	1.27	−2.34	0.63	0	5	7	15	9	s.	John G. Putz
Marble Hill	Bollinger	470	40	79.0	+ 2.0	102	11	47	31	38	2.25	−1.35	1.45	0	4	19	10	2	w.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	2.05	−1.93	0.72	0	4	21	8	2	sw.	John A. Spence
Poplar Bluff	Butler	329	30	79.8	+ 1.8	103	7	50	31	30	1.26	−3.11	0.48	0	4	21	5	5	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	80.0	+ 2.4	102	1†	51	31	32	2.06	−1.80	0.98	0	5	18	9	4	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	63	79.6	+ 1.8	98	11	58	31	25	5.99	+2.97	3.77	0	5	9	13	9	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**79.6**	**+ 2.0**	**105**	**7**	**47**	**31**	**38**	**1.95**	**−1.99**	**1.55**	**0**	**4**	**18**	**8**	**5**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	75.2	+ 0.9	96	7	48	31	33	2.57	−1.25	1.30	0	7	18	4	9	e	Arcadia College
Birch Tree(near)	Shannon	1,000	40	76.2	+ 0.1	99	11	52	28†	34	1.41	−3.17	0.41	0	6	23	4	4	.....	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	4.09	.....	2.40	0	6	19	7	5	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	2.90	−1.65	1.19	0	4	16	13	2	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	77.6[a]	.....	98	11	50	28†	30	1.84	.....	0.93	0	4	3	17	11	sw.	Pittsburgh Plate Glass Co.
Dean ‡‡	McDonald	1,000	31	79.7	+ 2.0	110	8†	49	31	48	0.99	−3.17	0.45	0	4	19	11	1	sw.	H. E. Dean
Eldon	Miller	934	40	76.6	+ 0.2	100	11	50	28	33	3.99	+0.17	1.59	0	6	13	14	4	ne.	E. H. Shepherd
Farmington	St. Francois	918	24	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	.....
Garber	Taney	950	0	79.4	.....	109	11	51	31	44	5.01	.....	4.05	0	7	16	7	8	e.	William H. Durham
Goodland	Iron	1,000	42	74.6	+ 0.1	95	7†	47	31	32	4.81	+0.83	1.98	0	6	16	11	4	e.	F. M. Adams
Greenville	Wayne	381	26	75.8	− 0.9	99	7	46	31	35	3.06	−0.29	2.00	0	7	19	9	3	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	3.42	−1.52	1.26	0	7	19	7	5	sw.	A. W. Madison
Koshkonong	Oregon	958	34	78.0[b]	+ 0.1	101	11	51	29	30	2.45	−1.89	1.57	0	6	22[a]	6[a]	2[a]	ne.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	77.4	+ 1.3	103	9	51	30	39	2.94	−0.94	1.48	0	5	21	8	2	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	79.6	+ 2.4	103	9†	54	28†	34	3.09	−1.27	1.55	0	6	21	8	2	sw	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	77.2	+ 1.7	101	11	52	29	32	4.62	+0.30	2.37	0	7	18	10	3	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	79.0	+ 1.9	104	8†	50	24	41	3.63	−0.51	1.10	0	8	15	12	4	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	77.3	+ 1.1	99	11	54	28†	34	1.35	−2.73	0.48	0	6	9	4	18	sw.	F. H. Lane
Salem	Dent	1,173	31	76.4	+ 0.5	98	6†	50	31	35	3.42	−1.06	1.31	0	9	16	11	4	s.	E. E. Martin
Seligman	Barry	1,542	34	79.2[b]	+ 3.0	101	9	54	29†	31	3.02	−1.02	2.43	0	4	15[b]	12[b]	2[b]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	75.8	+ 0.8	99	7†	49	31	35	2.53	−1.43	0.90	0	6	17	10	4	se.	A. L. Hailey
Springfield	Greene	1,324	47	78.6	+ 2.9	102	11	53	29	32	3.93	−0.16	1.82	0	5	20	8	3	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	77.8	.....	100	11	48	28	36	1.51	−1.47	0.72	0	6	16	9	6	s.	I. M. Wilson
Division means	**and extremes**	.....	..	**77.4**	**+ 1.1**	**110**	**8†**	**46**	**31**	**48**	**2.88**	**−1.29**	**4.05**	**0**	**6**	**17**	**9**	**5**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	78.6	+ 0.8	102	9	54	30	34	3.82	+0.14	2.75	0	5	10	19	2	sw.	W. G. Bigelow
Clinton	Henry	765	42	80.4	+ 2.8	107	11	52	30	37	1.54	−1.83	0.75	0	6	18	12	1	ne.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	1.65	−1.04	0.93	0	6	18	11	2	se.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	78.1	+ 2.2	102	9†	53	29†	31	1.50	−2.55	0.64	0	7	16	7	8	sw.	John H. Patterson
Lamar	Barton	980	47	78.8	+ 1.1	101	9†	55	28†	33	2.71	−1.52	0.95	0	5	24	5	2	sw.	Jesse A. Mann
Lamonte	Pettis	867	34	78.2	+ 1.1	102	8†	51	28†	37	1.74	−1.99	0.65	0	6	22	5	4	sw	J. E. Wheeler
Marshall	Saline	779	48	77.6	+ 1.6	100	11	52	28	30	4.65	+1.01	4.35	0	3	19	10	2	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	79.6	+ 2.5	103	9†	54	29	37	3.59	−0.05	2.04	0	5	18	5	8	ne.	George A. Kaupp
Warrensburg	Johnson	878	48	80.1[a]	+ 3.0	104	9	53	28†	34	1.08	−2.41	0.50	0	4	18[a]	8[a]	4[a]	sw.	E. A. Markey
Warsaw	Benton	687	34	80.8	+ 3.2	106	11	54	30†	36	2.49	−1.80	1.67	0	6	17	11	3	s.	Everett Martin
Division means	**and extremes**	.....	..	**79.1**	**+ 2.0**	**107**	**11**	**51**	**28†**	**37**	**2.47**	**−1.26**	**4.35**	**0**	**5**	**18**	**9**	**4**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	77.2	+ 2.2	103	9	45	28	36	1.55	−2.40	0.79	0	5	20	8	3	se.	A. S. Cumming
Chillicothe	Livingston	779	26	77.6	+ 1.9	102	9	49	28	34	2.78	−1.68	2.27	0	6	19	9	3	e.	Wm. J. Olenhouse
Conception	Nodaway	980	46	76.1[b]	+ 1.4	..	..	49	30	..	0.98	−2.72	0.38	0	5	17	10	4	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	77.2	+ 2.1	102	9	52	13†	38	1.49	−1.73	0.42	0	7	18	6	7	s.	Fred L. Stiff
Grant City	Worth	1,134	31	75.4	+ 0.5	101	11	45	28	37	1.78	−1.96	1.06	0	8	8	17	6	se	Howard Rybolt
Kansas City	Jackson	963	46	80.3	+ 3.7	104	9	55	28	32	2.28	−1.81	1.04	0	9	14	10	7	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	77.0	+ 1.6	103	9	50	28	34	1.89	−1.98	0.84	0	7	16	13	2	se.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	1.23	−2.48	0.47	0	4	5	25	1	se.	John M. Martin
Lexington	Lafayette	688	50	79.2	+ 3.0	103	9†	53	28	32	1.46	−1.99	0.87	0	6	22	7	2	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	75.8	+ 2.0	104	9	48	30	35	2.17	−1.79	0.95	0	8	17	9	5	se.	R. B. Montgomery
Oregon	Holt	1,048	79	77.3	+ 2.1	105	9	47	30	35	1.68	−2.33	0.65	0	9	23	4	4	se.	Mina Wright
St. Joseph	Buchanan	987	25	78.4	+ 1.6	104	9	52	30	31	1.57	−2.09	0.53	0	10	15	9	7	se.	U. S. Weather Bureau
Tarkio	Atchison	916	32	75.4	+ 0.2	103	9	48	30	35	2.24	−1.81	0.73	0	6	16	8	7	se	Albert Volker
Trenton	Grundy	822	39	77.0	+ 1.8	103	9	49	28	35	1.68	−2.01	1.26	0	5	20	10	1	s.	W. H. Estes
Division means	**and extremes**	.....	..	**77.2**	**+ 1.9**	**105**	**9**	**45**	**28**	**38**	**1.72**	**−2.09**	**2.27**	**0**	**7**	**17**	**10**	**4**	**se.**	
State means	**and extremes**	.....	..	**77.7**	**+ 1.5**	**110**	**8†**	**45**	**28**	**48**	**2.26**	**−1.65**	**4.35**	**0**	**6**	**17**	**9**	**5**	**s.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for August 1935

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri																	.15	.31									.10				.07	0.63
Bowling Green	Mississippi										.40									.78												.05	1.23
Brunswick	Grand			.12														.02														.04	0.18
Canton	Mississippi			.10							.88							.07		.50	.06										.07	.07	1.75
Clifton Hill	Chariton			.16																	.04											.09	0.29
Columbia***	Missouri			T.							T.		T.					.02									.15	.01	T.			.09	0.27
Downing	Mississippi			.70							.06						T.		.65		.12										.05	.10	1.68
Edina	do			1.41							.48						T.			.87	T.											.11	2.87
Elsberry	do										.48			.11			.05		.47								T.			T.	T.	1.11
Farber	do										.37							T		1.05	.49											1.91
Fayette	Missouri			.28														.77									T.					.09	1.14
Fulton	do				T.						.52			T.				.42														.08	1.02
Gorin	Mississippi			1.16							.56								1.36		.05							T.		.10		.10	3.33
Hannibal	do										.06							T.		.41	1.50									T.	T.	.01	1 98
Hermann	Missouri										.03	.60		.18						.08								T.				.09	0.98
Jefferson City	do				.16						.46			.25				.16		.52	.16							.04				.06	1.81
Kahoka	Mississippi			1.52							.50									.98	.30												3.30
Kirksville	do			.70							.43								.38													.15	1.66
LaBelle	do			.45							.10							.34	.10	.82													1.81
Linneus	Grand			.56							.05										.01			T.							.02	.09	0.73
Louisiana	Mississippi										.15								1.10	.07	.25										.30		1.87
Lucerne	Grand			.72							.07							.16			.14									.09	.05	.09	1.32
Macon	Chariton			T.							.12										T.										T.	.10	0.22
Madison	Mississippi										.46										.74											.61	1.81
Memphis	do			1.77															.40	2.20	.10									T.		.20	4.67
Mexico	do										.27							.16			.20											.03	0.66
Milan	Grand			.41								.03									.10											T.	0.54
Monroe City	Mississippi										.09						.12		.12		.18									T.		.06	0.57
New London	do																		.42	.46													0.88
Palmyra	do			.01														.43		.39	.10												0.93
Paris	do			.04							.75										.35											.10	1.24
Perry	do										.79							1.08	.13		.38									T.		.06	2.44
Philadelphia	do																			1.15	.30												1.45
St. Charles	Missouri										.05	.03		.38						.01								.20			T.	0.67
St. Louis**	Mississippi				.52						.07		.59	.02	T					.12							.50			T.		T	1.82
St. Louis University*	do				.08						.13		.63	.01						.34							.36			T.		T.	1.55
Shelbina	do			.08							.21			.02				.03		.29	.04									T.		.08	0.75
Shelbyville	do			.30							.32									1.10													1.72
Steffenville	do			.14							.50						.32		1.30	.24	.05									T.		.20	2.75
Troy	do										.34	.54		.22				.65		.86												.02	2.63
Union	Meramec				.08						T.	.35		.74				.56		.06								.75				.05	2.59
Unionville	Chariton			1.67							.21										.61										.07	.05	.10	2.71
Valley Park	Meramec				T.						T.	.13		1.03	T.			.02	.86	.05							.53			T.		.07	2.69
Warrenton	Mississippi										.13			.17					1.10								T.					.05	1.45
Keokuk, Ia.***	do		.22	.10					.48	.02							.02		.80	T.	.17								T.	.04		.05	1.90
Southeast Lowlands																																	
Bragg City	St. Francis														T	1.04												T.					1.04
Campbell	do													1.55	.04												.39						1.98
Cape Girardeau	Mississippi													1.12	.44	.02											.39						1.97
Caruthersville	do													.70		.12													.10				0.92
Dexter	St. Francis													.72	1.50	.02											.74				.05		3.03
Douiphan	Black						T.						T.	.65	.15			T.									.03						1.13
Fisk	St. Francis										.03		.03	.63	.50												.23	.83		T.	.09		1.94
Jackson	Mississippi													.56	.06	.17										T.		.08					1.27
Marble Hill	do													1.45	.40													.35		.05			2.25
Morehouse	do													.62	.72												.08	.63		T.			2.05
New Madrid	do													.50	.20	.55												.02	.01				1.28
Parma	St. Francis													.25	.59	.17												.08					1.09
Poplar Bluff	Black													.36	.37												T.	.48			.05		1.26
Sikeston	Mississippi													.48	.18	.40												.98			.02		2.06
Cairo, Ill.***	do					T.					T.		3.68	.11	.63	T.			T.								1.44	.13		T.			5.99
Ozark Plateau																																	
Arcadia	St. Francis				.17							.10		1.30	.02	T.			.59		T	T.						.36		T.	.03	T.	2.57
Birch Tree (near)	Black													.31			.33	.08			.35							.27		.07			1.41
Buffalo	Osage				2.40									.36				.03										1.00		.14	.16		4.09
Caplinger Mills*	do			.21									1.19														1.12			.38		T.	2.90
Crystal City	Mississippi				.39							.11		.93														.41					1.84
Cuba	Meramec				1.10									.96				1.03															3.09
Dean	Neosho												.08	.03							T.						.43		.45				0.99
Eldon	Missouri				.60									1.41					1.59								.05	.31			.03		3.99
Farmington	St. Francis																																
Fredericktown	do				T.									.82	.38			T.										.12			T.		1.32
Galena	White													1.08				.48									2.15			.12	.12		3.95
Garber	do												.36	.22			.06				.07						.38	3.67		.25			5.01
Goodland	Black				1.15						.88			1.98				.10		.14							.56						4.81
Greenville	St. Francis										.12			.36	2.00			.04								.15	.13	.26		T.			3.06
Hailey	White												.89	.11						.10	.10						.75	.21		1.26			3.42
Koshkonong	Black													1.57	.05			.14			.26						.08			.35			2.45
Lakeside	Osage				1.61									.38				.21	1.21								.05	.40		.05		.01	3.92
Lebanon	do				.32									.49	T.												.54	1.48		.11	T.		2.94
Leeper	Black					T.								1.38	.69				.03			T.						.63	.02	.01	.10		2.86
Lockwood	Osage				.60								.60	.17													.77	.78		.17			3.09
Mountain Grove	White				.63								.50	.78			T.	T.		T.	.14						.07	2.37		.13			4.62
Neosho	Neosho			T.									.72	.20			.13				.55	.05		T			1.10	.40		.48			3.63
Owensville	Gasconade				.63							.14		.63						1.46								.35					3.21
Ozark Beach	White													.56														1.79		T.	.23		2.58
Rolla	Meramec	.03			.12									.48				.22									.15	.35					1.35
St. Thomas (near)	Osage				.32						T.			.34													.05	.22					0.93
Salem	Meramec			.15	.34						.07		1.04	.27				.84		.02							.59			.10			3.42
Seligman	Neosho												2.19	.24							.11									.48			3.02
Seymour (near)	White													.90						.54	.05						.33	.52		.19			2.53
Springfield***	do			T.	.02			T.					1.82	T.			T.	T.			.02						1.82	T		.25			3.93
Stover	Missouri				.34									.08				1.12	.03									.46		.06			2.09
Versailles	Osage			.41	.31									.17				.25									.33			.04		T.	1.51
Williamsville	Black	.11								.08				.42	.98	.20												.47		.03	.05		2.34
Willow Sprgs. (near)	White					.01								.93	.02			.27										.90			.08		2.21
Southwest Plain																																	
Appleton City	Osage			2.75							.10		.28										T.				.65			.04		T.	3.82
Clinton	do			.41							.08		.05	.05													.75		.20				1.54
Concordia	Missouri				T.						.32							**	.93			T.	T.					.24		.12	.04		1.65

Continued on next page

Daily Precipitation for August 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain—Concluded																															
Harrisonville‖	Osage			.64							.02												.07				.12	.19		.45	.01		1.50
Joplin*	Neosho			.02	.09			.02					1 41								.06			.32			.58			.53			3.03
Lamar‖	Neosho				.95									.85													.04	.75		.12	T.		2.71
Lamonte	Missouri			.22	.54													.12									.20		.01			.65	1.74
Marshall	do			.22									T.					4.35									T.			T.		.08	4.65
Nevada	Osage			.75	.11								T.	.22													2.04			.47			3.59
Warrensburg	Missouri			.03	.50								T.										T.				.30		T.		.25		1.08
Warsaw ‖‖	Osage				1.67									.23													.01	.43		.13		.02	2.49
Waverly ‖	Missouri			.28															1.45													.09	1.87
Northwest Plateau																																	
Amity ‖‖	Grand			.94									T.					.05			.15	T		.18					.04			1.36
Bethany	do			.30														.79					.03								.23	.20	1.55
Chillicothe ‖‖	do			2.27														.15	.15		.03									T.	.07	.11	2.78
Conception	Missouri			T.									T.								.20	.12		.25			T.			T.	.03		.38	0.98
Edgerton	do			.17	T.								T.								.42		.08	.30						.20	.10		.22	1.49
Gallatin ‖	Grand			.21														1.25															1.46
Grant City	do		T.	1.06									.06					.13		.04	.03		.24							.08		.14	1.78
Kansas City***	Missouri		.09	.60			T.				T.		.03					.07		T.		.01	.15			.02	T.		.27	T	T.	1.04	2.28
Kidder ‖‖	Grand			.84		T.								T.				.77		T.	.04			.07						.08	.02	.07	1.89
King City	Missouri			.47																.02			.35						T.		T.	.39	1.23
Lexington ‖	do			.45														.57	.30		T.									.07	.02	.05	1.46
Maryville	do		T	.95									.04					.19	.04	.10	.10		.28						T.	T.		.47	2.17
Oregon	do		.20	.20									.11						.03	.17	.07	T.	.65						.05			.20	1.68
St. Joseph***	do		.26	.21									.02						T.	.12	.06	.01	.53			T.			.07	.07	T.	.22	1.57
Tarkio	do		.73							.13										.10	.34		.42									.52	2.24
Trenton	Grand			1.26	T								T.				T.	.11		T.	.02									T.	.13	.16	1.68

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. •• Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for August 1935
(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.321	.352	.392	.273	.211	.330	.343	.300	.284	.290	.265	.322	.233	.151	.145	.160	.261	.182	.274	.276	.261	.237	.241	.238	.258	.156	.043	.276	.149	.058	.160	7.442
	Mean temperature	85	84	84	82	83	84	86	81	82	84	86	84	74	71	76	82	80	82	84	84	78	76	74	73	74	73	76	64	60	65	68	78.2
	Wind movement	30	56	60	44	36	48	41	33	34	50	37	35	43	35	33	35	39	33	35	35	32	34	43	40	40	26	32	42	36	38	34	1,189

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.

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MISCELLANEOUS PHENOMENA

Fog.—Dense, 4th, 8th, 9th, 10th, 14th, 15th, 17th, 27th, 30th.

Hail.—Light, 10th at Gorin, 12th at Springfield.

Halos.—Solar, 1st, 17th, 18th, 20th, 21st, 22d, 25th, 26th, 28th; lunar, 12th.

Thunderstorms.—Local, 4th, 9th, 13th, 14th, 16th, 20th, 21st, 22d, 26th, 31st; more or less general, 2d, 3d, 10th, 12th, 17th, 18th, 19th.

Windstorms.—12th, 17th, 18th. Damage from the storms was slight on the 17th, principally in Worth County, and on the 18th in Lewis County, but on the 12th considerable damage was done in Jasper and Barton counties by wind and rain to crops, trees, outbuildings, and communication lines, with estimated losses around Carthage about $10,000 and around Golden City about $3,000.

Daily Temperatures for August 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	100	101	94	94	96	99	98	98	102	96	102	94	91	89	95	99	95	100	100	91	84	83	91	91	92	86	85	81	68	78	72	91.8
	Minimum	76	75	73	71	74	78	76	69	70	74	71	74	61	59	66	72	73	74	76	76	61	61	61	60	59	72	65	54	59	54	56	67.7
Columbia	Maximum	96	96	84	92	95	99	95	93	99	94	100	88	82	84	89	95	93	91	98	92	82	81	84	86	91	77	83	72	66	74	70	87.8
	Minimum	76	76	73	71	76	76	75	69	70	72	71	70	64	59	67	73	72	74	73	73	63	64	63	59	59	68	59	54	59	54	56	67.4
Fayette	Maximum	98	99	87	95	96	98	96	95	101	97	102	95	87	89	94	98	93	98	101	94	84	84	86	88	92	83	84	75	68	79	67	90.4
	Minimum	70	69	71	68	70	69	73	64	64	71	66	70	61	56	61	68	78	70	69	74	60	59	59	55	57	69	64	51	57	52	52	64.4
Hannibal	Maximum	94	94	90	91	92	96	90	87	93	91	96	90	83	84	86	90	95	84	94	90	79	79	82	83	85	83	78	71	67	72	67	85.7
	Minimum	76	75	73	71	76	76	76	68	70	68	70	75	62	61	65	69	69	71	70	72	62	61	60	60	58	70	63	49	56	52	55	66.4
Jefferson City §§	Maximum	95	95	90	85	94	94	96	92	101	93	99	93	81	81	90	97	90	96	93	92	85	82	85	82	91	77	83	72	66	68	69	87.3
	Minimum	75	75	75	70	74	75	74	68	67	67	68	75	65	58	60	66	70	72	69	74	65	63	61	57	57	62	64	54	58	54	53	66.0
Kirksville	Maximum	97	95	92	92	93	96	93	89	98	93	96	90	85	84	88	89	96	89	91	88	80	78	82	83	88	91	86	76	65	78	74	87.6
	Minimum	75	75	71	70	75	75	73	68	68	68	69	69	57	58	61	69	67	67	68	70	57	57	54	55	55	68	56	45	55	50	54	63.8
Louisiana	Maximum	94	95	90	90	94	98	93	90	95	94	97	90	82	83	87	90	90	85	92	90	80	80	83	85	89	90	87	80	70	75	69	87.3
	Minimum	77	75	75	70	75	77	75	65	70	68	65	75	64	53	64	64	66	66	66	75	60	55	57	53	53	67	66	45	57	54	49	64.5
Macon §§	Maximum	98	99	92	94	97	100	96	93	103	98	101	88	88	87	91	97	100	92	98	94	81	82	85	86	90	90	86	75	66	78	66	90.0
	Minimum	76	76	72	71	75	77	75	67	66	68	70	73	59	56	61	67	69	71	72	73	57	58	56	56	55	70	63	48	55	53	54	65.1
Mexico §§	Maximum	99	99	91	93	92	100	96	92	97	99	100	88	83	85	90	96	95	88	99	95	82	82	83	86	91	82	82	74	66	76	69	88.7
	Minimum	74	73	74	69	73	74	74	62	67	68	67	74	65	55	62	64	69	72	70	70	59	60	58	56	55	66	62	49	56	49	55	64.5
St. Louis	Maximum	98	95	93	91	94	97	97	91	94	92	97	96	78	80	87	89	94	91	90	93	82	83	84	85	89	79	82	75	67	73	73	87.4
	Minimum	81	80	76	74	77	79	78	71	75	72	76	68	67	68	69	74	74	73	72	73	67	63	63	62	65	69	66	59	60	56	58	69.8
Unionville §§	Maximum	95	95	87	92	93	94	94	91	97	94	96	85	87	86	90	95	95	92	92	84	81	78	84	86	90	90	82	71	64	75	65	87.1
	Minimum	75	73	68	69	73	75	70	68	69	69	71	68	59	59	63	67	69	72	74	73	58	59	57	57	57	63	53	45	53	51	54	64.2
Warrenton	Maximum	93	93	88	91	93	94	92	88	94	90	94	91	81	78	87	91	92	90	93	91	89	77	82	84	87	83	80	77	67	71	71	86.2
	Minimum	77	76	76	70	74	76	77	68	70	68	72	77	65	60	66	70	71	71	71	73	62	60	59	57	57	71	65	53	57	52	57	67.0
Southeast Lowlands																																	
Campbell	Maximum	99	95	94	93	99	92	98	98	98	97	102	100	90	84	87	93	94	93	91	91	91	90	84	83	84	80	78	78	68	73	79	89.5
	Minimum	73	71	71	70	70	69	71	73	68	65	68	73	66	68	68	67	67	67	69	68	67	63	61	60	60	63	65	55	54	51	48	65.5
Caruthersville	Maximum	100	97	98	97	102	103	105	96	98	97	102	99	89	87	93	93	96	95	90	94	90	87	84	88	93	93	87	81	75	79	79	92.5
	Minimum	77	77	76	75	78	78	76	78	73	75	75	76	69	72	72	73	73	70	74	73	76	66	67	66	66	72	73	64	60	60	55	71.5
Doniphan	Maximum	99	98	98	98	99	101	101	99	98	99	103	102	89	85	90	94	95	97	93	95	93	89	87	90	96	79	93	84	72	81	84	92.9
	Minimum	70	72	71	72	70	69	72	73	65	65	68	75	69	70	70	67	70	65	69	68	72	61	61	57	63	70	71	51	58	58	49	66.5
Jackson	Maximum	101	100	96	95	101	101	103	95	100	94	102	99	95	79	89	94	95	96	92	92	88	86	86	89	96	96	87	80	72	79	80	92.2
	Minimum	72	77	74	73	72	72	74	69	67	68	66	75	67	67	68	68	71	69	71	69	73	62	60	59	61	68	71	54	57	56	48	67.0
Poplar Bluff	Maximum	99	96	96	98	99	100	103	96	96	95	100	101	88	84	90	93	93	94	90	93	92	89	85	87	90	92	91	82	67	80	77	91.5
	Minimum	74	75	74	75	72	70	75	73	68	68	70	77	69	69	70	69	71	68	71	69	74	62	61	60	65	68	72	55	57	57	50	68.0
Sikeston	Maximum	102	98	94	93	101	102	101	94	98	97	102	98	90	87	89	95	97	95	92	95	89	85	85	85	96	84	83	78	76	76	77	91.4
	Minimum	76	76	75	72	74	74	76	71	69	70	70	75	66	69	70	71	71	70	70	71	74	63	65	60	65	71	71	57	58	57	51	68.6
Cairo, Ill	Maximum	96	93	95	90	96	97	96	90	93	92	98	94	82	81	87	92	93	92	87	90	85	82	82	83	88	86	86	76	66	73	75	87.6
	Minimum	79	80	78	76	78	79	79	73	73	76	74	69	69	71	73	75	74	73	74	73	72	67	65	64	68	73	71	61	59	61	58	71.5
Ozark Plateau																																	
Arcadia §§	Maximum	94	92	92	88	92	94	96	89	92	86	95	94	75	78	83	89	89	89	85	88	84	81	80	81	89	79	79	75	63	74	75	85.2
	Minimum	72	74	74	70	72	73	73	67	65	68	66	73	66	67	66	66	68	65	69	68	71	61	56	54	56	64	68	52	55	53	48	65.2
Birch Tree	Maximum	93	92	90	93	94	96	97	94	94	97	99	94	81	83	89	92	92	93	93	92	87	85	89	90	92	84	83	78	70	76	79	89.1
	Minimum	70	72	68	69	68	66	69	68	64	64	67	76	63	62	63	63	66	64	66	67	59	60	57	56	58	66	59	52	52	56	56	63.4
Crystal City §§	Maximum	98	98	97	97	95	97	97	92	94	94	97	96	78	81	91	93	95	93	93	87	85	86	87	86	90	78	83	77	67	69	..	[b]89.0
	Minimum	73	73	76	71	74	73	73	68	66	69	69	77	67	67	67	67	70	66	72	70	66	62	61	60	60	65	65	50	57	50	50	66.3
Eldon §§	Maximum	96	95	92	92	92	96	99	96	98	94	100	95	81	83	89	94	88	95	98	95	85	85	83	86	90	75	84	72	65	72	78	88.5
	Minimum	73	71	71	70	70	71	76	67	65	67	70	74	64	57	59	64	69	69	70	70	67	61	60	56	57	64	65	50	52	54	55	64.8
Farmington	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Garber	Maximum	100	101	97	101	100	104	108	103	104	102	109	102	79	85	92	94	99	101	100	100	93	93	86	91	96	91	85	84	76	78	81	94.7
	Minimum	68	66	67	70	67	67	74	67	65	65	65	71	64	65	65	66	67	66	68	68	68	63	62	54	57	62	68	53	55	57	51	64.2
Koshkonong	Maximum	97	94	93	94	98	97	99	95	94	94	101	..	90	80	85	91	..	94	94	92	86	83	80	84	91	83	86	79	69	74	78	[b]88.8
	Minimum	74	72	71	70	73	73	75	73	68	70	71	..	67	67	67	75	..	65	70	69	70	67	61	58	63	75	68	58	51	56	52	[b]67.2
Lebanon §§	Maximum	99	97	94	91	94	98	99	95	103	95	100	99	81	81	93	97	96	98	100	97	81	86	85	89	95	75	81	77	62	75	76	90.0
	Minimum	71	71	72	70	71	71	76	67	64	66	61	70	61	61	65	68	69	64	70	70	69	61	61	55	60	69	63	53	54	51	52	64.7
Mountain Grove	Maximum	92	94	92	90	92	97	99	96	97	92	101	97	75	83	87	89	93	94	93	94	89	86	81	85	89	95	85	84	79	74	76	88.8
	Minimum	73	71	70	69	72	70	74	69	67	72	72	65	65	65	66	68	69	68	70	69	66	59	60	55	63	69	66	53	52	54	54	65.6
Neosho	Maximum	97	97	94	96	95	98	103	104	104	98	102	101	83	90	94	94	98	99	99	98	85	92	91	90	91	91	83	85	77	77	84	93.2
	Minimum	70	67	70	68	69	72	71	63	69	68	63	76	65	60	64	64	68	69	68	70	67	63	67	50	55	68	68	58	55	54	51	64.8
Rolla	Maximum	93	92	91	90	92	97	93	92	94	91	99	95	84	76	88	91	86	93	92	92	88	81	84	87	92	89	81	79	68	74	72	87.6
	Minimum	75	73	72	71	73	74	76	69	68	67	72	76	65	63	64	70	70	70	72	73	69	62	61	59	58	70	64	54	57	57	54	67.0
Springfield	Maximum	95	95	90	94	93	98	99	98	100	96	102	98	75	80	88	89	92	95	94	93	85	85	80	86	90	77	79	76	63	72	76	88.2
	Minimum	75	74	73	72	75	75	78	73	72	75	75	66	66	65	69	72	73	73	75	75	69	65	66	60	66	67	66	59	53	56	57	68.9
Southwest Plain																																	
Appleton City	Maximum	98	98	89	92	93	96	97	95	102	97	101	90	83	85	93	95	90	98	98	94	84	85	86	89	89	82	84	75	66	67	72	89.1
	Minimum	75	76	71	72	72	78	78	70	68	77	70	72	65	60	66	70	75	72	74	75	70	65	67	60	61	69	66	56	56	54	55	68.2
Clinton	Maximum	103	102	95	96	97	102	102	102	105	101	107	93	86	90	99	100	94	105	103	102	86	90	91	93	95	83	83	83	73	73	83	94.1
	Minimum	72	74	72	70	71	75	73	70	68	74	70	70	64	59	65	68	72	70	72	74	69	64	62	58	60	68	65	55	54	52	54	66.6
Harrisonville §§	Maximum	98	99	90	95	92	97	98	97	102	94	102	85	86	88	94	98	93	101	97	86	81	80	82	89	88	82	82	69	65	71	65	88.6
	Minimum	74	74	70	71	71	76	75	70	71	71	72	75	62	61	75	70	74	72	73	75	66	64	62	60	62	68	65	56	53	53	55	67.6
Lamar §§	Maximum	97	98	94	93	93	97	97	100	101	97	101	95	82	82	91	95	96	96	100	88	85	89	83	90	91	70	81	79	63	67	78	89.3
	Minimum	75	74	75	72	74	75	76	71	73	74	69	77	66	64	65	70	73	73	73	73	71	66	67	57	60	69	65	55	55	55	55	68.3
Lamonte	Maximum	98	99	87	95	93	98	100	102	102	100	102	90	89	90	97	99	94	100	102	98	83	85	89	91	94	80	84	70	65	78	78	91.4
	Minimum	74	73	71	69	72	77	73	65	67	75	68	67	59	56	64	70	70	71	73	73	63	59	60	55	57	67	59	51	55	51	54	65.1
Marshall	Maximum	95	97	95	93	93	96	94	94	99	97	100	96	86	84	88	95	91	95	94	90	84	79	83	83	83	83	82	78	67	72	71	88.3
	Minimum	74	73	71	69	74	77	76	69	69	74	70	74	60	60	65	70	66	72	74	76	60	61	59	58	63	70	67	52	58	56	56	66.9
Nevada	Maximum	99	99	96	94	96	100	98	99	103	97	103	94	84	87	94	98	100	98	99	97	87	90	87	90	92	83	81	75	64	69	80	91.4
	Minimum	76	74	71	71	74	76	75	70	74	76	66	71	64	60	69	72	74	74	73	75	69	64	65	56	64	67	65	55	54	55	55	67.9
Warrensburg	Maximum	98	100	94	95	97	99	98	102	104	102	102	96	88	91	95	99	95	102	101	96	82	82	86	92	89	81	83	75	63	78	..	[a]92.2
	Minimum	76	76	72	71	73	74	78	70	71	78	72	73	64	59	65	72	73	73	75	77	64	61	59	58	62	69	63	53	56	53	..	[a]68.0
Warsaw	Maximum	101	103	98	96	95	99	102	98	101	99	106	96	86	88	96	99	94	103	102	100	89	91	89	91	95	88	86	79	67	77	82	93.4
	Minimum	76	71	73	73	74	77	75	71	69	76	70	75	67	60	67	71	73	72	74	75	70	66	64	59	60	71	67	56	56	54	54	68.3
Northwest Plateau																																	
Chillicothe §§	Maximum	101	101	91	93	95	101	101	98	102	96	100	87	88	91	93	101	92	97	95	88	83	80	88	90	91	89	86	72	65	77	65	90.2
	Minimum	75	73	69	71	73	75	72	67	68	71	67	70	56	58	64	69	69	68	74	75	56	59	58	57	65	68	58	49	56	51	53	65.0
Grant City	Maximum	91	91	85	85	94	91	98	92	91	97	101	97	89	84	92	89	93	97	85	83	81	89	78	86	89	80	80	65	63	70	69	86.3
	Minimum	74	77	67	67	73	75	70	68	69	66	68	67	52	60	64	69	72	72	75	71	59	61	57	59	56	63	63	45	54	51	54	64.5
Kansas City	Maximum	101	102	93	96	95	100	100	100	104	97	104	90	88	90	96	102	94	102	99	87	82	82	85	95	89	87	83	69	66	73	70	90.9
	Minimum	81	75	73	73	79	81	76	73	79	78	72	70	61	65	68	75	76	78	78	69	65	68	63	63	65	68	66	55	56	56	57	69.7
Kidder	Maximum	96	100	89	94	95	97	98	98	103	95	102	95	89	87	92	99	91	99	93	85	81	79	84	88	90	89	83	74	65	72	71	89.5
	Minimum	76	73	69	70	71	77	72	67	69	69	69	69	57	60	63	67	69	71	74	72	57	58	57	56	56	68	56	50	52	52	53	64.5
Lexington §§	Maximum	100	100	87	95	95	96	100	99	103	98	103	91	89	89	94	100	89	101	98	89	82	81	87	88	92	86	86	71	68	80	74	90.7
	Minimum	77	77	72	71	75	78	76	70	71	76	73	75	61	62	66	69	72	70	75	76	63	63	62	58	61	63	64	53	56	56	55	67.6
Maryville	Maximum	97	95	87	92	95	97	96	95	104	95	101	93	90	87	92	96	94	100	84	83	82	78	82	87	80	89	82	73	63	70	65	87.9
	Minimum	75	72	67	69	73	74	71	70	70	68	66	65	56	58	63	68	62	70	74	69	60	61	58	58	58	64	53	51	55	48	53	63.8
Oregon	Maximum	101	98	89	95	97	97	100	99	105	97	103	89	93	90	95	100	97	100	82	85	85	80	85	88	84	87	83	67	65	71	62	89.3
	Minimum	76	70	68	72	73	75	76	70	73	71	70	67	58	59	64	69	74	75	73	69	60	63	59	58	60	65	53	52	52	47	52	65.3
St. Joseph	Maximum	98	98	90	93	95	98	99	99	104	97	102	85	90	88	94	98	95	99	85	85	82	80	85	88	85	87	83	68	65	70	61	88.6
	Minimum	81	70	73	73	77	81	75	74	76	75	72	66	59	65	66	72	75	78	76	69	63	65	62	62	63	68	59	56	54	52	55	68.1
Trenton	Maximum	99	98	94	92	93	98	93	95	103	95	96	90	86	87	89	94	92	96	94	89	83	83	85	82	87	87	84	82	78	76	72	89.4
	Minimum	76	76	69	71	74	76	73	67	68	69	68	70	58	57	58	64	72	73	76	75	59	58	58	59	57	59	56	49	52	54	52	64.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 9-20-35—945.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX SEPTEMBER 1935 No. 9

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GENERAL SUMMARY

A period of unusually cool weather began about August 28th and continued through the first six days of September, and temperatures were more or less subnormal until the 13th. From the 14th to the 25th, inclusive, very warm weather prevailed, with maximum temperatures reaching 90° or above almost daily at most stations. A sharp reaction to cooler began on the 26th and cool weather continued through the 30th, the lowest temperatures of the month occurring generally on the 28th. Some of the warm days in the third week had average temperatures about 20° higher than the cool days of the first week and the last week. No killing frost occurred, but light frost first struck the northern half of the State and parts of the Ozark region on the 27th, 28th, or 29th, and it was reported heavy in some lowland places on the 28th. There was no damage of consequence from frost.

There was a considerable deficiency in rainfall, except in the northwestern counties. The smaller amounts—less than 2.00 inches for the month—were received principally in the southern portions of the State. Elsewhere the monthly totals were generally more than 3.00 inches, and in the Northwest Plateau the average was 5.62 inches, or 1.15 inches more than normal. Rainfall having been much less than normal in August, the September shortage in southern and eastern sections, although generally not severe, was unfortunate for late growing crops, which were in need of favorable weather conditions to reach full growth and maturity. The good rains of the 26-27th, which were the first of importance since the 9th, were very helpful. At the end of the month much corn—the bulk of the crop having been planted very late this year—needed two or three weeks more of mild weather to mature. Seeding of wheat was well under way in northern counties, and some was up to good stands. A good crop of apples was being harvested. Pastures were fairly good, as a rule.

The month was unusually free from storms or high winds, with no damaging winds reported. River stages were considerably below normal throughout the month.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 68.1°, or 1.0° below normal. The highest monthly mean was 72.8° at Caruthersville, and the lowest monthly mean was 65.0° at Grant City. The highest temperature recorded was 98° at Warsaw on the 24th, and the lowest was 33° at Louisiana and Edgerton on the 28th. The greatest daily range was 47° at Greenville on the 8th.

PRECIPITATION

The average precipitation for the State, 121 stations reporting, was 3.63 inches, or 0.50 inch less than normal. The greatest local monthly amount was 8.47 inches at Gallatin, and the least local monthly amount was 1.09 inches at New London. The greatest amount in any twenty-four hours was 3.10 inches at Kirksville on the 8th. The average number of days with 0.01 inch or more of precipitation was 6.

MISCELLANEOUS PHENOMENA

Fog.—Dense, 3d, 5th, 6th, 10th, 11th, 22d.

Frost.—Light, 27th, 28th, 29th. General over northern half of the State and locally in parts of the Ozark and Southwest Plateaus on the 28th; heavy, locally on 28th in lowlands; killing, none.

Halos.—Solar, 14th, 16th, 18th; lunar, 8th, 9th.

Thunderstorms.—Local, 2d, 3d, 9th, 16th, 17th, 21st, 22d, 24th, 25th, 26th; more or less general, 1st, 8th, 23d.

Windstorms.—No damaging winds reported.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.03	30.29	27	29.75	30	7.0	21	n.	26	84	51	63	72
Kansas City.....	30.01	30.35	27	29.79	30	8.9	30	sw.	16	82	51	56	74
St. Joseph.....	30.01	30.39	27	29.81	30	7.5	21	nw.	30	82	52	59	74
St. Louis.....	30.02	30.19	27	29.74	30	10.3	25	sw.	25	75	49	57	73
Springfield.....	30.04	30.21	27	29.87	30	8.4	20	n.	26	76	51	54	74
Cairo, Ill.....	30.02	30.18	15	29.83	30	6.2	21	n.	27	63	77	74	79
Keokuk, Iowa..	30.04	30.36	27	29.74	30	6.8	21	sw.	30	79	53	61	71

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	65.2	− 3.9	97	28	1.11	−3.02	2.59	0.20	0	4	..	..	..
1889....	64.7	− 4.4	94	32	4.66	+0.53	9.28	0.93	0	11	..	..	..
1890....	63.7	− 5.4	98	30	3.98	−0.15	14.41	1.75	0	9	..	..	..
1891....	70.6	+ 1.5	104	34	0.63	−3.50	1.85	T.	0	6	..	..	..
1892....	67.8	− 1.3	97	32	2.39	−1.74	5.20	0.00	0	4	19	6	5
1893....	69.9	+ 0.8	107	26	3.92	−0.21	8.10	0.89	0	6	17	7	6
1894....	68.5	− 0.6	101	34	4.93	+0.80	9.21	1.90	0	8	13	11	6
1895....	71.8	+ 2.7	104	24	2.45	−1.68	11.24	0.26	0	4	19	8	3
1896....	65.0	− 4.1	101	28	4.17	+0.04	8.17	1.65	0	10	11	10	9
1897....	74.3	+ 5.2	105	27	0.74	−3.39	2.70	0.00	0	2	23	5	2
1898....	70.9	+ 1.8	103	37	6.74	+2.61	14.67	3.60	0	9	15	9	6
1899....	67.4	− 1.7	108	21	2.04	−2.09	4.40	0.50	0	4	20	6	4
1900....	71.1	+ 2.0	100	29	4.81	+0.68	10.57	1.18	0	10	13	10	7
1901....	68.9	− 0.2	103	27	2.31	−1.82	7.31	0.11	0	6	18	8	4
1902....	63.2	− 5.9	95	30	4.78	+0.65	10.92	1.81	0	10	15	6	9
1903....	66.6	− 2.5	98	32	4.41	+0.28	8.58	0.72	0	8	17	6	7
1904....	69.6	+ 0.5	96	34	3.85	−0.28	9.72	0.53	0	7	16	8	6
1905....	69.6	+ 0.5	98	41	7.67	+3.54	16.34	0.55	0	10	15	6	9
1906....	71.9	+ 2.8	98	36	4.15	+0.02	9.81	0.27	0	11	15	8	7
1907....	68.9	− 0.2	101	31	1.93	−2.20	4.05	0.70	0	6	18	7	5
1908....	71.6	+ 2.5	99	28	1.80	−2.33	4.42	T.	T.	4	18	8	4
1909....	68.7	− 0.4	105	28	4.62	+0.49	12.04	0.69	0	8	18	6	6
1910....	69.5	+ 0.4	97	34	5.58	+1.45	11.41	0.88	0	10	14	6	10
1911....	73.7	+ 4.6	105	39	7.13	+3.00	14.95	2.09	0	11	13	7	10
1912....	68.6	− 0.5	105	27	3.06	−1.07	5.93	0.56	0	6	17	5	8
1913....	69.4	+ 0.3	109	27	4.63	+0.50	10.82	1.26	0	9	13	7	10
1914....	69.6	+ 0.5	99	35	6.27	+2.14	16.17	2.20	0	9	15	8	7
1915....	70.6	+ 1.5	98	34	5.25	+1.12	12.24	0.71	0	7	16	7	7
1916....	67.8	− 1.3	101	27	2.94	−1.19	5.69	1.14	0	6	19	7	4
1917....	67.9	− 1.2	101	33	2.78	−1.35	5.23	0.05	0	5	19	6	5
1918....	62.3	− 6.8	96	29	4.73	+0.60	9.69	1.73	0	7	17	6	7
1919....	71.4	+ 2.3	104	38	3.29	−0.84	8.66	0.30	0	5	20	6	4
1920....	70.0	+ 0.9	100	31	4.81	+0.68	9.06	0.96	0	9	17	7	6
1921....	73.4	+ 4.3	104	34	7.03	+2.90	14.95	0.95	0	13	13	9	8
1922....	71.7	+ 2.6	107	31	3.31	−0.82	8.22	0.15	0	5	21	5	4
1923....	68.7	− 0.4	98	33	4.47	+0.34	11.83	1.23	0	11	12	9	9
1924....	64.0	− 5.1	96	29	3.77	−0.36	8.92	1.55	0	8	14	8	8
1925....	74.6	+ 5.5	110	45	6.46	+2.33	14.55	2.39	0	10	14	6	10
1926....	69.3	+ 0.2	97	27	8.79	+4.66	18.04	1.80	0	13	12	7	11
1927....	71.6	+ 2.5	102	29	3.71	−0.42	9.82	1.57	0	8	17	7	6
1928....	65.0	− 4.1	95	28	2.61	−1.52	9.04	0.00	0	5	20	7	3
1929....	67.4	− 1.7	98	33	3.20	−0.93	7.32	0.88	0	8	13	10	7
1930....	71.3	+ 2.2	105	37	4.18	+0.05	12.87	0.74	0	8	16	7	7
1931....	75.0	+ 5.9	104	36	4.16	+0.03	10.80	0.46	0	7	19	7	4
1932....	67.8	− 1.3	99	33	2.36	−1.77	11.06	0.24	0	6	17	8	5
1933....	74.6	+ 5.5	102	36	4.38	+0.25	12.02	0.73	0	9	16	8	6
1934....	65.6	− 3.5	95	32	7.39	+3.26	15.09	4.07	0	12	12	8	10
1935....	68.1	− 1.0	98	33	3.63	−0.50	8.47	1.09	0	6	20	4	6
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
.....	....	.....	..	..	....	.....	....	....	..	..	..	..	..
Period.	69.1	.....	110	21	4.13	.....	18.04	0.00	T.	8	16	7	7

Climatological Data for September 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	69.4	+ 2.4	94	24	38	28	34	3.64	−0.85	1.53	0	7	20	2	8	sw.	O. K. Benecke
Clifton Hill	Randolph	731	36	68.5	− 0.1	95	24	36	27†	38	3.00	−1.45	1.02	0	6	21	4	5	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	68.8	+ 0.6	93	24	38	28	31	2.77	−1.58	1.44	0	6	19	5	6	sw.	U. S. Weather Bureau
Downing	Schuyler	876	14	66.8	− 0.8	92	24	36	28	33	3.92	−1.68	1.28	0	9	19	5	6	s.	James Taylor
Elsberry	Lincoln	449	4	66.8	.....	93	18†	34	28	40	3.48	.....	1.23	0	6	18	5	7	sw.	Ray E. Mills
Fayette	Howard	680	55	67.7	− 0.4	95	24	34	28	43	4.02	−0.73	1.70	0	5	18	7	5	s	Harry P. Mason
Fulton	Callaway	818	47	67.8	− 1.1	95	24	37	28	40	3.96	−0.33	1.76	0	4	23	1	6	sw.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	4.49	−0.17	1.69	0	5	20	5	5	se.	W. L. Harker
Hannibal	Marion	759	43	67.4	− 0.3	92	24	39	28	33	2.80	−1.17	1.40	0	4	20	2	8	s.	Hannibal Water Dept.
Jefferson City	Cole	557	45	67.6	− 1.7	92	24	39	28	37	2.82	−0.71	1.42	0	6	23	3	4	s.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	67.0	+ 0.7	91	24	36	28	35	5.39	+0.93	3.10	0	6	18	6	6	sw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	5.44	.....	1.89	0	7	21	3	6	sw.	J. Robert Hall
Louisiana	Pike	469	41	67.2	− 0.8	94	14†	33	28	42	3.20	−0.88	1.20	0	6	19	4	7	w.	Stark Bro's Nurseries
Macon	Macon	875	36	67.8	− 0.1	95	24	37	28	33	3.42	−0.88	1.32	0	5	20	4	6	w.	W. C. Brown
Mexico	Audrain	800	46	67.6	− 0.9	95	24	36	28	40	2.98	−1.62	1.25	0	4	24	1	5	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	3.54	−0.47	1.44	0	5	19	6	5	n.	J. S. Conway
St. Charles	St. Charles	520	47	69.9	+ 1.6	95	15	39	28	34	3.17	−0.14	1.19	0	4	23	2	5	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	71.4	+ 0.9	93	18	44	28	29	3.35	−0.11	2.42	0	6	21	3	6	sw.	**Section Center**
St. Louis University	St. Louis City	578	23	71.3	+ 1.1	93	18	44	28	29	2.27	−1.97	1.51	0	6	21	5	4	se.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	3.55	−0.53	1.32	0	6	..	..	..	.....	J. C Jewett
Steffenville	Lewis	650	37	67.2	− 1.8	93	24	35	28	36	4.16	−0.21	1.15	0	5	20	3	7	s.	Frank Hall
Unionville	Putnam	1,062	42	66.3	− 0.8	90	24	36	28	42	4.66	−0.27	1.80	0	7	23	2	5	s.	John H. Schick
Warrenton	Warren	816	53	68.6	− 0.4	92	18†	38	28	32	4.02	0.00	1.62	0	6	17	7	6	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	67.8	+ 0.3	91	24	40	28	30	4.46	+0.62	1.48	0	8	18	4	8	s.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**68.1**	**− 0.1**	**95**	**15†**	**33**	**28**	**43**	**3.68**	**−0.64**	**3.10**	**0**	**6**	**20**	**4**	**6**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	68.2	− 3.4	95	17	40	30	39	3.17	−0.70	1.75	0	3	20	4	6	s.	Jeff. King
Caruthersville	Pemiscot	265	39	72.8	− 1.7	93	22†	45	29	33	1.80	−1.34	1.12	0	6	21	5	4	s.	Sam Smith
Doniphan	Ripley	344	31	70.2	− 1.0	96	22†	40	29†	42	3.52	−0.20	1.52	0	3	20	4	6	sw.	W. W. Martin
Jackson	Cape Girardeau	428	44	69.2	− 0.9	94	24	40	30	41	4.37	+0.59	1.92	0	4	17	2	11	s.	John G. Putz
Marble Hill	Bollinger	470	40	69.4	− 1.3	96	21†	39	30	45	3.94	+0.20	1.95	0	3	21	5	4	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	2.23	−2.53	1.42	0	3	24	1	5	n.	John A. Spence
Poplar Bluff	Butler	339	30	69.4	− 2.3	94	21†	42	29†	38	3.00	−0.79	1.72	0	6	24	2	4	w.	Mrs. J. H. Wolpers
Sikeston	Scott.	318	28	70.4	− 0.7	94	16†	42	30	37	1.79	−1.54	1.20	0	6	23	2	5	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	63	71.4	− 0.1	91	17	48	29	27	1.23	−1.66	0.82	0	4	17	6	7	n.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**70.1**	**− 1.4**	**96**	**21†**	**39**	**30**	**45**	**2.78**	**−1.04**	**2.49**	**0**	**4**	**21**	**3**	**6**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	66.7	− 0.9	94	17	41	30	40	3.85	+0.11	1.80	0	7	18	4	8	w.	Arcadia College
Birch Tree(near)	Shannon	1,000	40	67.6	− 2.2	93	24	40	30	40	2.85	−0.78	1.50	0	3	23	2	5	.....	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	1.45	.....	0.60	0	4	23	3	4	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	1.56	−2.16	0.70	0	4	19	5	6	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	67.5[b]	.....	95	17†	39	28‡	41	3.03	.....	1.55	0	5	13[b]	9[b]	6[b]	s.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	31	67.4	− 3.6	96	18†	37	27	44	3.68	−0.25	1.95	0	5	23	2	5	sw.	H. E. Dean
Eldon	Miller	934	40	67.8	− 1.6	94	24	38	28	38	3.16	−0.93	1.37	0	6	18	7	5	sw.	E. H. Shepherd
Farmington	St. Francois	918	24	....	.....	..	..	..	..	..	....	.....	....	..	..	..	..	..	.....	.....
Garber	Taney	950	0	67.8	.....	95	23	40	29	41	3.60	.....	2.24	0	5	18	3	9	e.	William H. Durham
Goodland	Iron	1,000	42	65.2	− 2.6	90	17†	37	30	41	5.44	+1.62	2.78	0	6	19	6	5	n.	F. M. Adams
Greenville	Wayne	381	26	66.2	− 4.6	93	17†	37	29†	47	4.02	+0.88	2.00	0	4	22	2	6	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	3.00	−0.77	1.40	0	4	21	6	3	ne.	A. W. Madison
Koshkonong	Oregon	958	34	70.3	− 1.1	93	22	45	28	32	4.35	+0.67	2.68	0	3	21	1	8	ne.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	68.0[a]	− 1.4	96	23	36	28	36	2.45	−1.80	1.10	0	4	19[a]	2[a]	8[a]	s.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	68.8	− 2.1	93	23	38	28	31	1.28	−3.28	0.53	0	6	22	3	5	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	68.0	− 0.9	93	22	40	28	33	3.09	−1.15	1.98	0	6	24	3	3	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	67.5	− 3.0	92	18†	38	28	37	4.08	−0.31	2.37	0	6	17	6	7	sw.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	69.5	+ 0.8	93	17†	42	28	36	2.96	−0.95	1.35	0	7	16	2	12	se.	F. H. Lane
Salem	Dent	1,173	31	66.8	− 2.4	92	17†	39	28	43	3.13	−0.95	1.96	0	7	19	7	4	n.	E. E. Martin
Seligman	Barry	1,542	34	67.8[b]	− 1.8	90	23†	42	28	30	3.31	−1.06	1.81	0	6	19[b]	1[c]	7[c]	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	65.8	− 3.0	91	23	38	28	36	2.46	−2.01	1.55	0	4	22	1	7	s.	A. L. Hailey
Springfield	Greene	1,324	47	69.0	+ 0.1	91	23	42	28	26	2.64	−0.88	2.12	0	6	22	4	4	s.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	69.6	.....	96	21†	35	28	39	4.01	−0.55	1.96	0	5	19	3	8	sw	I. M. Wilson
Division means	**and extremes**	.....	..	**67.8**	**− 1.9**	**96**	**18†**	**35**	**28**	**47**	**3.11**	**−0.83**	**2.78**	**0**	**5**	**20**	**4**	**6**	**sw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	67.8	− 2.6	93	23	41	28	29	2.51	−1.61	1.05	0	5	18	7	5	sw.	W. G. Bigelow
Clinton	Henry	765	42	69.0	− 1.8	95	23†	38	28	35	3.82	−0.24	2.25	0	5	19	7	4	ne.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	4.43	+0.74	1.75	0	8	21	3	6	s.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	68.5	− 0.0	93	23	37	28	42	3.58	−1.00	1.25	0	5	17	5	8	sw.	John H. Patterson
Lamar	Barton	980	47	67.8	− 3.0	94	23†	40	28†	37	1.75	−2.77	0.70	0	4	21	3	6	se.	Jesse A. Mann
Lamonte	Pettis	867	34	68.4	− 1.8	94	23†	34	28	40	3.67	−0.95	2.00	0	7	17	7	6	sw.	J. E. Wheeler
Marshall	Saline	779	48	68.6	− 0.2	91	24	38	28	29	3.44	−1.70	1.50	0	6	22	2	6	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	68.6	− 0.9	93	23†	38	28	33	3.25	−1.05	1.18	0	5	21	3	6	sw.	George A. Kaupp
Warrensburg	Johnson	878	48	69.5	− 0.7	94	23	36	28	40	4.25	+0.46	2.77	0	7	21	2	7	se.	E. A. Markey
Warsaw	Benton	687	34	70.0	− 0.5	98	24	37	28	38	2.58	−2.14	1.35	0	6	18	5	7	s.	Everett Martin
Division means	**and extremes**	.....	..	**68.7**	**− 1.3**	**98**	**24**	**34**	**28**	**42**	**3.42**	**−0.95**	**2.77**	**0**	**6**	**20**	**4**	**6**	**sw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	66.9	− 0.2	90	15†	36	28	36	6.92	+2.76	2.28	0	7	22	2	6	sw.	A. S. Cumming
Chillicothe	Livingston	779	26	66.9	− 1.7	94	18	35	28	35	5.82	+0.14	1.98	0	8	20	3	7	ne.	Wm. J. Olenhouse
Conception	Nodaway	980	46	67.8	+ 0.6	90	14†	39	28	33	6.06	+1.94	2.21	0	7	19	6	5	sw.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	67.4[b]	− 0.5	91	23	33	28	40	4.14	+0.34	1.34	0	6	22	2	6	s.	Fred L. Stiff
Grant City	Worth	1,134	31	65.0	− 2.0	89	20	34	28	34	4.91	+0.65	1.91	0	5	12	11	7	sw.	Howard Rybolt
Kansas City	Jackson	963	46	70.2	+ 1.3	94	23	40	28	34	4.60	+0.04	1.83	0	8	19	3	8	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	66.2	− 1.1	89	15†	37	28	32	7.36	+2.79	1.94	0	6	21	3	6	s.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	6.05	+1.43	1.83	0	6	17	7	6	sw.	John M. Martin
Lexington	Lafayette	688	50	69.1	+ 0.3	93	23†	40	28	38	4.80	+0.06	1.91	0	7	21	3	6	w.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	66.1	+ 0.5	90	19†	35	28	32	5.89	+1.39	2.55	0	8	22	2	6	sw.	R. B. Montgomery
Oregon	Holt	1,048	79	67.8	+ 0.7	91	19†	37	28	31	5.04	+1.14	2.17	0	6	22	3	5	sw.	Mina Wright
St. Joseph	Buchanan	987	25	68.6	− 0.3	91	23	40	28	30	4.23	−0.79	2.18	0	7	21	3	6	s.	U. S. Weather Bureau
Tarkio	Atchison	916	32	65.1	− 1.2	91	23	36	28	35	4.42	+0.58	2.21	0	5	18	4	8	sw.	Albert Volker
Trenton	Grundy	822	39	65.9	− 1.3	88	24	34	28	33	5.21	+0.68	1.78	0	9	23	1	6	s.	W. H. Estes
Division means	**and extremes**	.....	..	**67.2**	**− 0.4**	**94**	**18†**	**33**	**28**	**40**	**5.62**	**+1.15**	**2.55**	**0**	**7**	**20**	**4**	**6**	**sw.**	
State means	**and extremes**	.....	..	**68.1**	**− 1.0**	**98**	**24**	**33**	**28**	**47**	**3.63**	**−0.50**	**3.10**	**0**	**6**	**20**	**4**	**6**	**sw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for September 1935

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																	
Boonville	Missouri	.20	1.48							.90																	.62						3.20
Bowling Green	Mississippi	**	**	1.11						.84																	**	.78					2.73
Brunswick	Grand	.10	1.53	.05						1.26								.15									.50	.05					3.64
Canton	Mississippi	.12	1.91		.04				.37	1.09																.02	1.24	.02					4.81
Clifton Hill	Chariton	1.02	.32						.89	.12																.09	.56						3.00
Columbia***	Missouri	1.35	.14						.51	.11																.03	.63						2.77
Downing	Mississippi	.89	.86	.02					1.28	.09										.04				.14		.18	.42						3.92
Edina	do	.37	2.03						1.92	.85																	.36						5.53
Elsberry	do	.78	.45						.65	.58													T.				.95	.07					3.48
Farber	do		1.20							1.14																	.70						3.04
Fayette	Missouri	1.31	.19						1.68	.02																T.	.82						4.02
Fulton	do	T.	1.73	.03						1.47																	.73						3.96
Gorin	Mississippi	.72	1.18	..	T.				1.69															T.		.24	.66						4.49
Hannibal	do	.23	1.40							.50												T.					.67	T.					2.80
Hermann	Missouri		1.19							1.28	.03																.80	.79					4.09
Jefferson City	do		1.42	.08						.26																.12	T.	.83	.11					2.82
Kahoka	Mississippi	1.00	1.10		.10				.50	1.20															.05		.85						4.80
Kirksville	do	1.22	.88						3.10	.07							.03									.09							5.39
LaBelle	do	.10	2.00						.25	1.70																	.58						4.63
Linneus	Grand	1.00	1.89	.03					.86	1.00								.28									.38	T.					5.44
Louisiana	Mississippi	1.20	.30						.47	.18																.50	.55						3.20
Lucerne	Grand	.35	1.63	.04					1.42	.19								.07									1.01						4.71
Macon	Chariton	.78	1.32	T.						.85								.05									.42						3.42
Madison	Mississippi	1.20								.93																	.80						2.93
Memphis	do		1.70	.05	T				T.	1.25												T.			.16		.62						3.78
Mexico	do		1.25	.01						1.12																	.60						2.98
Milan	Grand	.82	1.70	.08					1.06	.69								.28									.37						5.00
Monroe City	Mississippi	.45	1.44							.55												.02				1.08							3.54
New London	do		.57																								.40	.12					1.09
Palmyra	do	.35	1.46							.46												.06					96	.02					3.31
Paris	do	.45	1.23	.02						.73																	1.11						3.54
Perry	do	.45	1.22							.59																	.69						2.95
Philadelphia	do	1.93																									.83						2.76
St. Charles	Missouri		.55							.68	T.																.75	1.19					3.17
St. Louis**	Mississippi	.21	.02						.08	.54																T.	2.07	.43					3.35
St. Louis University*	do	.18	.02						.10	.28																T.	1.51	.18					2.27
Shelbina	do	.61	1.32	.01	T.					.64								.01									.96						3.55
Shelbyville	do	.40	1.70							.75												.06	T.				.80						3.71
Steffenville	do	.77	1.07						1.15	.07																T.	1.10						4.16
Troy	do		1.04	.27						1.14	.02																.42	.90					3.79
Union	Meramec		.43							.30															.01		.71	1.21					2.66
Unionville	Chariton	.35	1.80	.05					1.03	.41								.10									.92						4.66
Valley Park	Meramec		.30							1.27	T.																.47	1.85					3.89
Warrenton	Mississippi	1.02	.22						.13	1.00																	1.62	.08					4.02
Keokuk, Ia.***	do	.88	.61	.02	.01				1.47	T.												T.		.01	T.	.26	1.20						4.46
Southeast Lowlands																																	
Bragg City	St. Francis									.80																	.08	1.46	.03				2.37
Campbell	do									.67																	.75	1.75					3.17
Cape Girardeau	Mississippi			.06						2.38	.11																.02	1.43	.17				4.17
Caruthersville	do			.15						.10	.38																.02	1.12	.03				1.80
Dexter	St. Francis									.38																	.01	1.71	.18				2.28
Doniphan	Black									1.35																	1.52	.65					3.52
Fisk	St. Francis			.06						.27	.19																.22	2.04	.14				2.92
Jackson	Mississippi			.15						1.92																	1.40	.90					4.37
Marble Hill	do									1.95																	1.00	.99					3.94
Morehouse	do									.60																	.21	1.42	T.				2.23
New Madrid	do			.15	.02					.25	.30																.10	1.48	.21				2.51
Parma	St. Francis										.55																	1.77	.07				2.39
Poplar Bluff	Black			.13						**	.90																.12	1.72	.13				3.00
Sikeston	Mississippi			.03						.30	.16																.03	1.20	.07				1.79
Cairo, Ill ***	do	T.	T.	.02	T.				T.	.33																	.69	.19					1.23
Ozark Plateau																																	
Arcadia	St. Francis	.05	.29	.95						.47	.03													T.			.26	1.80					3.85
Birch Tree (near)	Black									1.27																	1.50	.08					2.85
Buffalo	Osage			.11						.47																	.27	.60					1.45
Caplinger Mills*	do	.70	T.	T.					T.	.57													T	T.		.13	.16						1.56
Crystal City	Mississippi			.21						.50	.02																.75	1.55					3.03
Cuba	Meramec									.35														.55	.65		1.30	1.29					4.14
Dean	Neosho		.28						.15	.45																.85	1.95						3.68
Eldon	Missouri	.35	1.37	.05						.35																	.80	.24					3.16
Farmington	St. Francis																							.01			1.50	.46					
Fredericktown	do	.08		.06						.44																	.15	1.45					2.18
Galena	White									.92																	.52	1.05					2.49
Garber	do								.20	1.03																.08	2.24	.05					3.60
Goodland	Black		.35	1.35					.19	.52																	2.78	.25					5.44
Greenville	St. Francis		T.	.14						1.53																	2.00	.35					4.02
Hailey	White								.10	1.40																.75	.75						3.00
Koshkonong	Black									2.68																	1.35	.32					4.35
Lakeside	Osage	.31	1.63							.12															T.		.50	.05					2.61
Lebanon	do	T.	T.							.31	.24												T.				1.10	.80					2.45
Leeper	Black	T.			T.					1.55	.13																.31	1.65	T.				3.64
Lockwood	Osage	.10	.25						.07	.53																13	.20						1.28
Meramec Park	Meramec																					.04		.40			1.86	.40					
Mountain Grove	White		.09						.07	.80																.06	1.98	.09					3.09
Neosho	Neosho		.14						.06	1.22																.26	2.37	.03					4.08
Owensville	Gasconade		.62							.10	T.													T.			.62	.90					2.24
Ozark Beach	White									.72																	.38	1.63					2.73
Rolla	Meramec	.15	.16							.10														.03	.19		.98	1.35					2.96
St. Thomas (near)	Osage	.26	1.26							.46															.33		.40	.26					2.97
Salem	Meramec	.17	.15						.05	.40													.08			T.	1.96	.32					3.13
Seligman	Neosho		T.	.08					.13	1.08																.18	1.81	.03					3.31
Seymour (near)	White								.30	.56																T.	1.55	.05					2.46
Springfield***	do	.05	.01						.12	.32																.20	1.94						2.64
Stover	Missouri	.57	2.03							.67															T.		.55						3.82
Versailles	Osage	1.96	.33						.29	.43																T.	1.00						4.01
Williamsville	Black			.45						1.00	.43																.23	1.53	.07				3.73
Willow Sprgs. (near)	White			.06						1.22										.02							.18	1.10					2.56
Southwest Plain																																	
Appleton City	Osage	1.05	.47						T.	.17																.61	.21						2.51
Clinton	do	2.25	1.00						.04																	.25	.28						3.82
Concordia	Missouri	.56	1.75	.07						.46								.28				.53					.40	.38					4.43

Continued on next page

Daily Precipitation for September 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																	
Harrisonville‖‖	Osage	.55	1.25							.23								.75								.80						3.58
Joplin*	Neosho	.39	T						1.02	1.27																.76	.43					3.87
Lamar ‖‖	Neosho	T.	.52							.70																	.45	.08				1.75
Lamonte	Missouri	2.00	.10							.95	.15						.02									.25	.20					3.67
Marshall	do	1.50	.12						.92								.32									.15	.43					3.44
Nevada	Osage	.94	.36							.68																1.18	.09					3.25
Warrensburg	Missouri	2.77	.23						.15								.12							.04		.82	.12					4.25
Warsaw ‖‖	Osage	.37	1.35	.03						.45														T.			.34	.04				2.58
Waverly ‖‖	Missouri	.50	1.53	.05						.70								.40									.70	.02				3.90
Northwest Plateau																																	
Amity ‖‖	Grand	1.15	.54	.03	.03					1.60								1.27									1.33					5.95
Bethany	do	1.98	.60	T.					**	1.47							.59									1.28	1.00					6.92
Chillicothe ‖‖	do	.81	1.98	.01					.21	1.18								1.24									.43	.01				5.82
Conception	Missouri	2.21	.57	T.				T.	.81	.06							1.34									.11	.96					6.06
Edgerton	do	1.34	.10					T.	.86								.91									.90	.03					4.14
Gallatin ‖	Grand	1.25	1.65						.97	.49								3.00									1.11					8.47
Grant City	do	1.91	.11	T.					.68								.55									T.	1.66					4.91
Kansas City***	Missouri	1.83	.06	T.					.44	.01							1.74						.05			.35	.12					4.60
Kidder ‖‖	Grand	.75	1.75						.98	1.94								.87									1.07					7.36
King City	Missouri	1.83	.20						1.51								1.15									.30	1.06					6.05
Lexington ‖	do	.57	1.91							.55								.62					.20				.93	.02				4.80
Maryville	do	1.87	.10	.01					.80	.02							.54									.15	2.40					5.89
Oregon	do	2.17	.07						.77	.03							T.									.20	1.80					5.04
St. Joseph***	do	2.18	.01	T.				.02	1.02								.08									.63	.29					4.23
Tarkio	do	2.21							.49							.03										.19	1.50					4.42
Trenton	Grand	1.78	1.20	.02	.01				.98	.17							.25									.56	.24					5.21

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for September 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																													Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.120	.086	.042	.108	.202	.183	.181	.168	.073	.156	.181	.183	.201	.231	.225	.214	.240	.233	.207	.206	.264	.193	.166	.172	.206	.084	.095	.053	.148	.163	....	4.984
	Mean temperature	62	64	66	66	62	64	68	70	69	66	66	68	72	74	76	74	75	76	76	74	74	74	78	78	74	56	54	54	60	64	..	68.5
	Wind movement	27	63	33	53	26	33	39	31	34	39	28	38	36	29	48	29	33	41	31	31	42	31	28	32	36	47	69	40	37	36	..	1,120

Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.

Daily Temperatures for September 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick..	Maximum...	67	64	75	73	78	79	86	80	78	82	82	85	81	91	91	83	90	92	92	92	87	88	88	94	82	70	65	70	74	85	..	81.5
	Minimum ...	57	57	59	52	49	52	54	65	57	54	53	55	61	63	63	66	62	66	66	63	63	59	65	64	68	52	42	38	44	51	..	57.3
Columbia.	Maximum...	62	68	72	75	72	76	84	71	72	78	80	82	86	88	90	87	89	92	90	91	87	86	87	93	81	71	61	67	68	83	..	79.6
	Minimum ...	56	58	59	54	49	47	57	63	57	54	50	56	62	62	65	65	64	66	68	66	63	65	67	66	71	51	46	38	44	52	..	58.0
Fayette	Maximum...	64	67	75	75	76	82	87	70	75	81	84	86	89	92	93	89	91	94	93	92	88	89	85	95	81	70	62	71	73	85	..	81.8
	Minimum ...	56	56	56	51	44	60	48	59	56	51	47	47	55	56	57	59	60	56	59	56	58	61	62	59	66	50	42	34	44	42	..	53.6
Hannibal	Maximum...	64	65	70	71	70	74	81	74	73	77	80	81	85	87	89	88	88	90	89	90	80	84	77	92	81	72	61	68	65	82	..	78.3
	Minimum ...	55	55	58	51	48	48	54	62	54	52	53	56	61	62	65	66	66	65	67	64	62	56	58	63	70	52	46	39	40	49	..	56.6
Jefferson City §§	Maximum...	62	66	74	74	74	75	84	70	76	79	80	82	83	88	84	87	89	91	90	91	89	89	91	92	80	59	55	68	70	83	..	78.4
	Minimum ...	56	56	58	53	49	47	51	60	58	51	53	55	59	62	64	65	64	65	66	64	61	64	63	64	69	59	47	39	40	46	..	56.9
Kirksville.	Maximum...	64	62	76	73	75	78	85	82	79	80	80	81	86	88	89	80	87	79	82	89	85	83	80	91	81	69	63	69	72	83	..	79.0
	Minimum ...	53	54	57	68	45	45	54	60	50	50	54	54	53	53	64	64	63	64	62	62	63	52	60	62	67	49	41	36	43	51	..	55.1
Louisiana	Maximum...	60	66	70	70	70	80	83	72	73	77	80	82	84	94	92	90	90	92	93	94	90	92	80	94	90	70	65	67	65	83	..	80.3
	Minimum ...	55	56	60	55	44	42	47	57	58	49	47	50	58	57	60	60	63	60	58	64	60	50	50	63	70	65	45	33	42	47	..	54.2
Macon§§	Maximum...	58	64	76	75	75	79	87	70	76	79	82	83	88	89	91	86	89	92	92	91	81	85	83	95	80	60	63	70	70	84	..	79.8
	Minimum ...	55	55	56	49	49	50	54	60	53	50	55	54	61	61	65	66	64	65	65	63	64	53	61	62	64	54	41	37	41	51	..	55.9
Mexico §§	Maximum...	62	69	71	76	77	77	85	75	75	81	82	83	88	89	93	91	90	93	91	92	88	85	86	95	84	60	62	69	68	84	..	80.7
	Minimum ...	56	54	56	51	46	44	50	57	55	51	48	53	56	59	60	63	63	62	63	64	62	57	61	64	62	55	44	36	38	44	..	54.5
St. Louis	Maximum...	66	77	76	76	75	77	83	85	73	79	81	82	87	88	92	91	93	93	92	92	91	86	88	92	84	74	57	68	64	79	..	81.4
	Minimum ...	58	58	62	59	58	57	60	63	59	60	60	62	64	67	69	70	69	69	70	69	70	67	68	69	68	47	47	44	52	50	..	61.5
Unionville §§	Maximum...	58	62	74	73	76	78	84	65	79	80	80	81	88	89	89	74	86	87	88	88	83	86	80	90	76	53	61	68	71	83	..	77.7
	Minimum ...	55	54	56	47	46	50	55	59	52	50	54	55	59	62	64	65	62	62	65	62	61	54	59	63	66	51	40	36	41	41	..	54.9
Warrenton	Maximum...	70	69	72	73	72	76	82	78	71	78	79	81	84	88	90	89	90	92	90	90	87	82	85	92	86	74	56	67	65	79	..	79.6
	Minimum ...	56	56	59	53	50	50	55	59	58	56	56	56	59	61	65	65	64	66	68	66	65	63	62	67	67	51	46	38	46	47	..	57.7
Southeast Lowlands																																	
Campbell	Maximum...	88	83	80	81	79	75	81	86	72	77	79	83	88	90	91	90	95	87	86	92	90	88	89	91	91	77	64	61	69	73	..	82.5
	Minimum ...	53	59	65	59	51	50	45	48	62	53	48	48	50	55	55	54	56	56	55	55	58	58	59	57	57	60	49	49	49	40	..	53.8
Caruthersville	Maximum...	86	92	79	82	78	76	81	90	81	78	80	84	89	90	88	90	91	88	87	90	91	93	91	93	87	84	72	67	76	77	..	81.4
	Minimum ...	59	64	70	66	57	57	56	57	65	60	58	61	60	65	63	64	64	67	66	64	67	68	68	65	69	63	53	52	45	47	..	61.3
Doniphan	Maximum...	88	81	78	81	80	79	87	91	78	79	81	87	90	93	92	93	93	89	91	92	94	96	96	96	93	81	69	71	77	80	..	85.9
	Minimum ...	56	65	67	56	47	50	45	49	65	51	48	45	51	55	56	55	56	59	59	55	55	58	60	58	63	64	55	48	40	40	..	54.4
Jackson	Maximum...	83	84	80	79	79	80	85	88	83	79	82	84	88	90	92	92	93	91	91	92	93	91	89	94	92	81	66	67	69	75	..	84.4
	Minimum ...	57	64	64	55	47	47	45	47	63	50	48	49	51	56	57	57	57	59	59	55	57	62	61	56	62	61	49	45	41	40	..	54.0
Poplar Bluff	Maximum...	83	83	77	81	82	78	84	89	80	78	81	85	89	90	92	92	92	90	91	92	94	89	91	94	83	73	59	72	79	79	..	84.1
	Minimum ...	54	62	66	55	50	51	49	51	56	52	50	50	51	56	57	57	57	60	59	59	58	57	62	63	62	54	50	46	42	42	..	54.6
Sikeston	Maximum...	77	83	83	79	77	77	86	84	76	79	79	85	91	89	88	94	94	92	89	93	93	92	91	92	92	83	68	67	68	78	..	84.0
	Minimum ...	61	64	64	58	51	50	49	49	65	52	50	52	55	60	60	60	64	61	59	61	62	64	60	66	61	51	50	43	42	..	..	56.8
Cairo, Ill.	Maximum...	80	79	79	76	75	74	80	86	72	75	78	80	86	88	89	89	91	88	88	89	91	88	88	90	84	75	59	68	69	74	..	80.9
	Minimum ...	60	64	68	63	56	57	58	59	61	57	59	58	64	67	66	69	68	70	69	67	69	66	66	64	70	59	51	52	48	51	..	61.8
Ozark Plateau																																	
Arcadia §§	Maximum...	74	81	67	75	76	77	83	81	65	77	81	82	85	89	92	91	94	91	91	91	92	88	92	91	80	67	53	71	72	78	..	80.9
	Minimum ...	53	59	59	53	46	46	46	52	62	45	45	47	51	53	55	54	54	56	57	54	55	58	61	57	59	63	47	43	44	41	..	52.5
Birch Tree	Maximum...	84	81	76	76	77	77	86	86	77	75	80	83	87	89	90	91	92	91	89	90	92	91	92	93	81	74	55	68	73	75	..	82.4
	Minimum ...	56	60	61	50	47	46	46	51	61	50	47	48	52	54	55	54	55	58	58	58	55	58	60	60	59	54	45	42	43	40	..	52.8
Crystal City §§	Maximum...	..	80	74	77	76	78	83	89	74	79	81	84	88	91	93	92	95	95	93	94	92	88	87	94	85	67	57	70	68	80	..	[a]82.9
	Minimum ...	..	..	49	52	45	44	46	50	61	47	47	48	51	55	56	55	54	55	58	56	57	63	62	57	58	64	48	39	42	39	..	[b]52.1
Eldon §§	Maximum...	61	68	75	76	76	79	83	78	75	80	80	84	87	89	91	89	90	92	91	91	92	88	93	94	79	67	59	70	73	83	..	81.1
	Minimum ...	57	56	57	53	48	48	50	50	59	49	50	52	53	55	59	60	60	60	60	59	60	62	61	62	63	67	45	38	40	45	..	54.6
Farmington	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Garber	Maximum...	86	82	77	78	81	81	86	84	73	78	79	86	88	90	90	90	92	91	88	90	92	93	95	93	83	70	56	69	76	82	..	83.3
	Minimum ...	53	64	60	52	48	48	50	50	61	48	47	48	52	54	56	52	52	54	55	50	55	55	56	57	63	54	48	42	40	41	..	52.2
Koshkonong	Maximum...	84	80	75	75	75	77	81	86	74	74	77	81	85	88	90	89	91	90	88	89	88	93	92	92	81	76	68	67	73	78	..	81.9
	Minimum..	57	67	64	55	52	52	52	57	61	53	53	54	57	68	72	64	64	64	62	64	64	63	65	65	66	56	46	45	52	46	..	58.7
Lebanon §§	Maximum...	76	74	71	75	74	78	84	82	75	77	82	84	86	90	93	91	94	93	93	91	90	91	96	95	75	68	53	56	72	..	..	[a]81.3
	Minimum ...	57	57	54	52	44	45	52	59	60	45	49	52	56	59	65	59	59	60	60	58	59	58	60	60	69	54	45	36	41	..	..	[a]54.6
Mountain Grove	Maximum...	78	78	73	76	76	79	84	81	75	77	79	82	85	88	88	87	89	90	88	87	91	93	92	90	75	69	51	69	74	78	..	80.7
	Minimum ...	55	59	53	51	45	47	52	58	59	47	48	55	58	61	62	61	61	63	62	61	62	60	65	65	65	49	44	40	43	48	..	55.3
Neosho	Maximum...	83	85	75	77	78	84	84	82	77	75	79	83	85	89	89	87	89	92	89	89	87	89	92	92	86	75	55	67	75	78	..	82.2
	Minimum ...	55	60	58	50	44	47	50	63	60	44	44	50	55	58	59	58	54	55	57	55	56	55	55	56	65	52	42	38	44	44	..	52.8
Rolla	Maximum...	72	79	71	74	73	80	86	81	76	78	82	85	88	91	92	91	93	93	92	92	91	88	93	92	84	72	54	64	69	78	..	81.8
	Minimum ...	58	58	61	55	50	48	51	59	61	49	52	54	59	55	64	62	62	67	66	63	64	65	64	67	68	53	46	42	45	48	..	57.2
Springfield	Maximum...	80	71	70	73	74	77	81	81	68	72	76	81	83	86	87	85	88	88	86	87	88	89	91	89	75	67	52	65	72	78	..	78.7
	Minimum ...	60	59	58	55	55	55	57	63	58	55	56	57	61	64	65	64	64	66	65	64	65	69	68	70	67	48	47	42	50	52	..	59.3
Southwest Plain																																	
Appleton City	Maximum...	70	63	68	70	70	77	78	76	70	75	75	83	80	88	85	80	88	90	89	90	90	91	93	91	84	67	57	60	68	76	..	78.1
	Minimum ...	58	60	56	54	51	54	55	65	61	55	51	54	60	60	64	65	61	61	63	61	67	65	64	65	65	53	42	41	44	48	..	57.4
Clinton	Maximum...	67	63	76	80	77	80	87	80	80	82	83	86	89	91	91	90	90	93	93	93	93	93	95	95	80	68	60	72	76	83	..	82.9
	Minimum ...	54	60	54	54	47	50	53	53	52	52	50	52	57	60	61	62	60	58	60	58	60	65	62	60	66	52	41	38	42	56	..	55.0
Harrisonville §§	Maximum...	63	62	75	72	77	81	85	72	75	82	82	87	89	90	91	78	90	91	90	92	91	92	93	90	70	65	63	67	81	85	..	80.7
	Minimum ...	56	56	53	50	49	51	55	59	59	54	54	54	57	59	63	63	60	61	60	60	62	65	65	66	67	65	40	37	39	49	..	56.3
Lamar §§	Maximum...	67	65	69	74	74	80	80	82	73	78	79	81	85	87	87	84	82	91	91	90	91	89	94	94	75	67	62	68	74	81	..	79.8
	Minimum ...	58	59	57	56	49	49	52	57	62	50	50	50	55	61	61	64	60	60	60	60	60	61	63	63	65	66	43	40	40	44	..	55.8
Lamonte	Maximum...	78	65	76	79	78	80	82	82	83	78	82	92	92	90	91	87	89	90	91	90	92	89	94	94	92	68	63	72	77	86	..	83.4
	Minimum ...	54	55	58	49	49	46	47	50	53	50	53	52	52	52	52	64	62	60	63	59	58	65	63	63	64	49	39	34	41	48	..	53.5
Marshall	Maximum...	65	63	71	72	73	75	83	79	75	77	79	83	86	87	89	82	87	90	89	90	85	84	86	91	86	68	69	66	68	82	..	79.3
	Minimum ...	55	56	57	51	48	51	54	56	59	55	55	58	61	64	65	65	64	63	65	62	63	62	64	65	68	51	40	38	55	65	..	57.8
Nevada	Maximum...	77	65	72	74	75	77	82	82	73	76	77	83	85	89	89	87	88	90	88	89	88	90	93	93	81	68	58	65	73	83	..	80.3
	Minimum ...	55	59	58	54	47	52	56	66	61	48	49	56	62	63	65	66	62	63	63	62	61	60	65	64	65	50	42	38	44	50	..	56.9
Warrensburg	Maximum...	78	65	74	76	78	80	84	77	75	82	80	84	85	88	90	82	90	90	91	92	90	87	94	93	82	68	69	70	76	86	..	81.9
	Minimum ...	56	59	54	52	47	51	56	65	58	55	55	58	63	64	66	65	63	66	65	52	58	66	65	67	63	51	41	36	45	52	..	57.1
Warsaw	Maximum...	67	68	75	78	78	80	87	81	76	82	83	86	89	91	94	92	92	95	94	95	94	93	96	98	83	71	59	70	77	85	..	83.6
	Minimum ...	58	57	56	53	49	51	55	62	60	51	50	52	59	60	61	63	63	59	64	60	59	64	64	66	71	53	42	37	42	47	..	56.3
Northwest Plateau																																	
Chillicothe §§	Maximum...	61	63	78	74	78	79	86	71	79	83	82	85	89	91	93	77	91	94	91	90	84	86	85	92	74	58	62	70	75	83	..	80.1
	Minimum ...	55	55	57	49	44	49	53	54	52	48	49	51	60	61	62	65	60	60	62	60	63	51	52	62	63	51	39	35	42	48	..	53.7
Grant City	Maximum...	60	61	61	63	73	77	74	74	68	68	74	82	86	88	82	77	83	86	88	89	85	82	83	85	88	74	58	68	71	76	..	76.1
	Minimum ...	57	55	57	47	43	53	56	61	53	45	50	54	59	60	64	64	60	62	61	63	60	48	58	60	55	47	40	34	38	52	..	53.9
Kansas City	Maximum...	62	64	76	73	76	82	84	73	75	82	82	87	90	91	91	78	90	91	91	92	84	92	94	92	78	70	62	69	80	85	..	81.2
	Minimum ...	57	57	53	54	50	57	57	62	58	52	51	61	66	69	70	62	64	69	70	70	66	65	70	68	67	46	43	40	46	54	..	59.1
Kidder	Maximum...	61	63	73	70	74	73	83	75	76	78	79	81	86	88	89	79	86	87	87	87	82	83	82	89	77	67	60	66	71	79	..	77.7
	Minimum ...	54	54	54	47	46	50	51	63	52	49	54	52	60	63	63	64	59	59	62	64	63	54	62	62	63	46	39	37	43	50	..	54.6
Lexington §§	Maximum...	60	60	76	76	79	80	86	70	79	84	81	85	89	92	91	78	90	91	91	91	89	86	93	93	71	56	66	70	77	85	..	80.5
	Minimum ...	58	56	58	53	50	53	56	59	56	56	55	58	60	65	67	68	61	63	65	67	64	63	65	66	66	54	42	40	41	47	..	57.7
Maryville	Maximum...	61	63	74	69	77	78	83	73	77	79	79	83	87	88	88	76	86	88	90	90	80	82	85	89	78	68	59	67	73	78	..	78.3
	Minimum ...	55	55	55	46	46	53	55	60	52	49	49	51	58	60	60	65	58	59	62	64	59	53	61	60	62	47	39	35	42	48	..	53.9
Oregon	Maximum...	61	65	76	70	78	81	80	73	77	80	80	85	88	90	89	77	89	90	91	90	83	87	91	88	77	70	62	68	74	79	..	79.6
	Minimum ...	55	54	53	47	48	55	58	60	52	50	52	58	61	66	65	66	60	63	64	64	61	56	65	64	65	46	39	37	43	54	..	56.0
St. Joseph..	Maximum...	60	64	75	70	77	80	82	69	78	79	79	85	88	90	90	77	88	89	89	90	83	86	91	89	77	61	63	68	75	81	..	79.1
	Minimum ...	56	56	55	50	48	58	59	60	56	51	56	60	65	67	69	66	65	67	68	68	66	56	68	68	61	45	42	40	47	53	..	58.2
Trenton	Maximum...	65	64	66	69	72	76	81	70	78	76	81	82	83	87	85	78	86	85	86	87	80	85	84	88	80	67	58	64	68	72	..	76.8
	Minimum ...	56	56	58	50	45	50	54	62	50	49	52	54	58	61	65	66	59	60	60	62	64	54	63	63	67	50	40	34	35	54	..	55.0

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 10-18-35—945.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

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GENERAL SUMMARY

The month was characterized by a very early cold period, with killing frost, during the first ten days, and again about the 22d-24th, and unusual warmth during the third week, and also by a large number of cloudy days and by frequency of days with rain. On the whole, it was in some respects quite an abnormal October, although both temperature and precipitation averaged not far from normal. The killing frosts on the 4th to 6th were the earliest for several years past, and were general, except in the lower southern portions, where killing frost did not occur at all during the month.

The rainfall was much less than normal in some northeastern counties, where it averaged considerably less than 2.00 inches, and much more than normal in the southwestern counties including Bates, Henry, and Benton, thence south-southwestward to McDonald and Barry counties. Over most of the State rainfall was not far from normal, and the moisture situation continued satisfactory, except rather dry in parts of the northern third of the State and too wet in a few southwestern counties.

Considerable damage to corn and other late-growing crops resulted from the early frosts. A large part of the corn having been planted late due to very wet weather in the late spring, a considerable portion was unusually late in reaching maturity, and the frosts of the first week of October caused it to remain soft and of little value except for stock feed. Wheat, rye, and barley were mostly seeded at normal time, and by the end of the month were generally up to good stands and making good progress, except that wet weather delayed seeding in several of the more southwestern counties. The prevailing cloudiness and frequency of rains were unfavorable for drying of corn and husking and cribbing were generally behindhand at the end of the month. Pastures were fairly good. An unusually good crop of apples was harvested.

No destructive storms occurred. River stages were much lower than usual for the time of year in the principal streams.

TEMPERATURE

The monthly mean temperature for the State, 69 stations reporting, was 57.1°, or 0.3° below normal. The highest monthly mean was 63.7° at Caruthersville, and the lowest monthly mean was 51.9° at Tarkio. The highest temperature recorded was 90° at Marble Hill on the 14th and at Lamar on the 15th, and the lowest was 21° at Elsberry on the 24th. The greatest daily range was 47° at Greenville on the 30th.

PRECIPITATION

The average precipitation for the State, 123 stations reporting, was 3.52 inches, or 0 65 inch more than normal. The greatest local monthly amount was 7.29 inches at Nevada, and the least local monthly amount was 0.83 inch at Palmyra. The greatest amount in any twenty-four hours was 2.40 inches at Warsaw on the 17th. The average number of days with 0.01 inch or more of precipitation was 10. Snow flurries were recorded at only two stations, on the 7th.

MISCELLANEOUS PHENOMENA

Aurora.—24th.

Fog.—Dense, 9th, 10th, 11th, 12th, 15th, 18th, 19th, 20th, 21st, 22d, 24th, 27th, 28th, 29th.

Frost.—Light, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 23d, 24th, 25th; heavy, 4th, 6th, 7th, 23d, 24th; killing, 3d, 4th, 6th, 7th, 24th, 31st.

Hail.—Light, 13th at Appleton City; moderate, 8th at St. Louis University.

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PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.13	30.65	6	29.66	21	6.8	21	sw.	31	87	60	68	44
Kansas City.....	30.12	30.65	23	29.64	21	8.0	34	nw.	31	84	59	67	51
St. Joseph.....	30.12	30.67	23	29.63	20	7.7	26	nw.	31	83	58	66	54
St. Louis.....	30.14	30.64	6	29.70	2	10.3	36	sw.	31	81	62	67	49
Springfield.	30.12	30.57	24	29.71	21	9.2	29	s.	31	87	65	69	49
Cairo, Ill.....	30.15	30.58	6	29.78	28	7.0	27	n.	23	90	64	70	60
Keokuk, Iowa..	30.18	30.71	6	29.70	2	6.8	24	sw.	2	82	56	60	52

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	53.6	− 3.8	89	24	2.65	−0.22	5.07	0.57	....	6	..	..	.
1889....	53.8	− 3.6	91	22	2.50	−0.37	6.03	0.73	....	5	..	..	..
1890....	54.8	− 2.6	91	20	2.24	−0.63	5.19	0.40	....	7	..	..	..
1891....	55.7	− 1.7	92	20	1.11	−1.76	1.98	0.30	....	5	..	..	..
1892....	57.5	+ 0.1	95	16	2.28	−0.59	5.15	0.21	0	5	16	7	8
1893....	56.7	− 0.7	95	16	0.99	−1.88	6.26	0.00	....	3	20	8	3
1894....	57.6	+ 0.2	94	18	1.74	−1.13	5.18	0.45	T.	6	17	8	6
1895....	51.2	− 6.2	89	14	0.35	−2.52	1.56	0.00	T.	2	21	6	4
1896....	54.1	− 3.3	90	19	2.48	−0.39	4.51	1.20	0	5	19	6	6
1897....	62.5	+ 5.1	99	23	0.71	−2.16	1.84	0.00	0	3	22	6	3
1898....	53.5	− 3.9	95	19	4.23	+1.36	8.73	2.22	1.4	8	11	7	13
1899....	62.4	+ 5.0	100	24	2.93	+0.06	6.33	0.47	0	5	20	6	5
1900....	62.4	+ 5.0	92	25	4.18	+1.31	8.38	1.33	0	7	17	7	7
1901....	60.1	+ 2.7	96	24	1.64	−1.23	3.93	0.47	0	6	18	8	5
1902....	59.5	+ 2.1	88	23	2.52	−0.35	4.72	0.87	0	5	21	5	5
1903....	57.3	− 0.1	90	19	2.85	−0.02	6.38	1.11	0	6	19	6	6
1904....	57.6	+ 0.2	90	19	0.90	−1.97	2.20	T.	0	3	20	7	4
1905....	55.1	− 2.3	90	20	4.64	+1.77	10.81	1.24	0.3	10	15	7	9
1906....	56.3	− 1.1	94	17	0.87	−2.00	2.99	0.19	0	5	17	6	8
1907....	56.7	− 0.7	94	18	2.90	+0.03	6.44	0.99	0	7	17	6	8
1908....	56.3	− 1.1	92	21	2.74	−0.13	9.33	0.00	0.8	5	18	6	7
1909....	57.2	− 0.2	96	20	2.77	−0.10	6.69	0.37	T.	6	19	5	7
1910....	59.4	+ 2.0	94	15	2.71	−0.16	14.03	T.	0	5	22	4	5
1911....	56.9	− 0.5	96	25	3.30	+0.43	7.47	0.30	0.2	8	11	7	13
1912....	59.1	+ 1.7	97	21	3.83	+0.96	8.67	2.09	0.7	6	20	5	6
1913....	54.7	− 2.7	93	11	4.46	+1.59	8.84	0.63	3.3	9	15	6	10
1914....	59.2	+ 1.8	88	19	4.54	+1.67	10.68	1.20	0	7	14	6	11
1915....	59.8	+ 2.4	95	22	1.19	−1.68	3.05	0.10	0	3	23	5	3
1916....	58.0	+ 0.6	95	20	2.17	−0.70	4.86	0.48	0.3	6	18	5	8
1917....	49.8	− 7.6	93	12	1.16	−1.71	2.50	0.04	0.2	6	16	8	7
1918....	60.6	+ 3.2	95	28	3.37	+0.50	7.95	0.80	0	7	14	6	11
1919....	58.4	+ 1.0	98	17	6.74	+3.87	14.87	1.15	0	11	10	7	14
1920....	61.3	+ 3.9	93	18	2.89	+0.02	6.09	0.90	T	7	17	6	8
1921....	57.9	+ 0.5	92	24	2.19	−0.68	5.28	0.36	0	5	21	5	5
1922....	59.9	+ 2.5	97	18	2.00	−0.87	5.12	0.51	0	5	20	5	6
1923....	53.0	− 4.4	89	17	3.39	+0.52	9.54	0.94	0.1	9	15	5	11
1924....	61.8	+ 4.4	92	21	1.22	−1.65	4.17	0.00	0	4	22	5	4
1925....	48.6	− 8.8	92	− 3	4.85	+1.98	11.44	1.56	2.4	10	8	8	15
1926....	57.3	− 0.1	93	21	4.67	+1.80	8.66	1.35	0	9	14	6	11
1927....	60.9	+ 3.5	93	26	4.72	+1.85	10.59	1.49	0	5	22	5	4
1928....	60.9	+ 3.5	94	22	3.83	+0.96	8.97	0.79	0	8	15	8	8
1929....	57.2	− 0.2	91	23	5.54	+2.67	8.58	0.90	T.	10	15	6	10
1930....	55.3	− 2.1	92	11	3.06	+0.19	7.09	0.48	T.	6	16	6	9
1931....	61.7	+ 4.3	95	27	3.45	+0.58	6.82	0.99	0	8	15	7	9
1932....	55.7	− 1.7	90	22	3.45	+0.58	7.32	0 99	0	5	18	5	8
1933....	56.4	− 1.0	86	23	2.68	−0.19	6.59	0.74	0	7	17	8	6
1934....	61.1	+ 3.7	90	24	2.45	−0.42	5.51	0.65	0	4	22	5	4
1935....	57.1	− 0.3	90	21	3.52	+0.65	7.29	0.83	T.	10	12	7	12
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	**57.4**	.....	**100**	**− 3**	**2.87**	.....	**14.87**	**0.00**	**0.2**	**6**	**17**	**6**	**8**

Climatological Data for October 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	57.3	+ 2.0	86	16	29	24	40	1.60	−1.32	0.73	0	8	11	5	15	se.	O. K. Benecke
Clifton Hill	Randolph	731	36	56.4	− 0.3	88	16	25	24	39	1.79	−0.77	0.47	0	12	13	7	11	.....	Dr. A. J. Bradsher
Columbia	Boone	784	45	56.4	− 0.2	84	16	27	24	43	3.81	+1.20	1.17	0	12	8	6	17	nw	U. S. Weather Bureau
Downing	Schuyler	876	14	54.8	− 1.1	85	16	23	6	39	1.65	−1.20	0.70	0	8	14	7	10	sw.	James Taylor
Elsberry	Lincoln	449	4	55.8	.....	87	13	21	24	43	2 67	.....	1.51	0	7	13	7	11	sw.	Ray E. Mills
Fayette	Howard	680	55	56.2	− 0.2	86	16	28	4†	44	3.84	+1.16	1.88	0	8	11	8	12	s.	Harry P. Mason
Fulton	Callaway	818	47	56.5	− 0.9	87	16	25	24	42	1.81	−1.28	0.45	0	12	15	5	11	s.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	1.43	−1.37	0.43	0	5	14	11	6	nw.	W. L. Harker
Hannibal	Marion	759	43	56.0	0.0	85	16	27	6	36	2.33	−0.06	0.50	0	10	9	5	17	se.	Hannibal Water Dept.
Jefferson City	Cole	557	45	55.4	− 1.4	84	16†	27	24	37	1.86	−0.93	0.52	0	10	9	14	8	se.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	55.8	+ 1.1	86	16	24	6	37	2.16	−0.82	1.15	0	5	16	7	8	sw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	1 04	.....	0.35	0	7	15	8	8	e.	J. Robert Hall
Louisiana	Pike	469	41	57.6	+ 1.4	87	13	23	6†	42	3.34	+0.45	0.70	0	10	16	7	8	w.	Stark Bro's Nurseries
Macon	Macon	875	36	54.8	− 1.5	86	16	24	6	37	1.19	−1.81	0.34	0	9	11	10	10	nw.	W. C. Brown
Mexico	Audrain	800	46	55.2	− 1.1	85	16	25	6	40	2.00	−0.67	0.50	0	9	16	6¶	9¶	s	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	1.33	−1.35	0.54	0	5	13	7	11	s.	J. S. Conway
St. Charles	St. Charles	520	47	57.1	− 1 1	87	13†	29	24†	39	2.65	−0.07	1.09	0	10	15	7	9	s.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	58.6	− 0.2	84	13	34	6	36	2.56	−0.16	1.06	0	11	13	5	13	s.	**Section Center**
St. Louis University	St. Louis City	578	23	58.8	− 0.1	84	13	34	6	37	2.42	−0.93	1.07	0	12	13	4	14	se.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	1.21	−1.69	0.32	0	7	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	56.4	− 1.0	86	16	23	6	42	1.60	−0.84	0.32	T.	10	12	11	8	s.	Frank Hall
Unionville	Putnam	1,062	42	53.6	− 1.6	85	16	26	4†	39	1.14	−1.69	0.64	0	5	13	5	13	s.	John H. Schick
Warrenton	Warren	816	53	57.8	+ 1.8	84	13†	28	6	34	2.35	−0.65	0.95	0	11	10	8	13	sw.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	54.5	− 0.9	82	16	29	4	44	1.66	−0.60	0.52	0	7	10	9	12	s.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**56.2**	**− 0.3**	**88**	**16**	**21**	**24**	**44**	**1.93**	**−0.79**	**1.96**	**T.**	**9**	**13**	**7**	**11**	**s.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	59.8	− 0.3	84	16	31	7†	41	3.61	+0.51	1.00	0	12	15	7	9	s.	Jeff. King
Caruthersville	Pemiscot	265	39	63.7	+ 1.5	86	13	37	7	31	2.79	−0.31	0.70	0	10	18	7	6	n.	Sam Smith
Doniphan	Ripley	344	31	60.2	+ 1.7	87	14†	29	7	41	5.58	+2.46	1.23	0	11	17	6	8	s.	W. W. Martin
Jackson	Cape Girardeau	428	44	60.1	+ 2.2	86	13	28	7	37	4.37	+1.13	1.00	0	12	9	5	17	s.	John G. Putz
Marble Hill	Bollinger	470	40	60.8	+ 2.6	90	14	26	7	44	4.27	+1.35	0.90	0	11	17	7	7	se.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	....	..	..	4.07	+0.55	0.87	0	11	14	9	8	n.	John A. Spence
Poplar Bluff	Butler	329	30	59.8	− 0.3	88	14	32	7	39	4.82	+1.68	1 45	0	10	18	2	11	s.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	62 0	+ 2.7	86	15	32	7	38	3.59	+0.77	0.80	0	12	13	12	6	s.	John A. LaFont
Cairo, Ill.	Alexander, Ill	356	63	61.6	+ 1.2	84	16	37	7	28	5.00	+2.24	1.72	0	14	7	11	13	se.	U. S. Weather Bureau
Division means	**and extremes**	....	..	**61.0**	**+ 1.4**	**90**	**14**	**26**	**7**	**44**	**4.13**	**+0.91**	**1.45**	**0**	**11**	**14**	**7**	**10**	**s.**	
Ozark Plateau																				
Arcadia	Iron	926	54	56.8	+ 0.8	89	14	27	7†	41	3.74	+0.62	0.90	0	15	13	4	14	n.	Arcadia College
Birch Tree(near)	Shannon	1,000	40	58.0	− 0.4	85	13	27	7†	42	3.90	+0.91	0.82	0	9	17	5	9	s.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	..	..	4.08	.....	0.92	0	7	15	5	11	.....	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.....	..	..	..	..	..	5.15	+1.27	0.92	0	12	10	9	12	sw	Ozark Utilities Co.
Crystal City	Jefferson	420	0	57.8[a]	.....	87	13	26	7	42	2.44	....	0.55	0	12	4[a]	8[a]	18[a]	s.	Pittsburgh Plate Glass Co.
Dean ††	McDonald	1,000	31	57.6	− 1.1	85	15	28	23	42	7.10	+3.29	1.30	0	14	14	7	10	e.	H. E. Dean
Eldon	Miller	931	40	56.4[a]	− 1.0	87	12†	29	6†	43	2.44	−0.82	0.60	0	10	7[a]	12[a]	11[a]	sw.	E. H. Shepherd
Farmington	St. Francois	960	24	....	.....	..	..	..	..	..	2.41	−0.53	0.76	T.	11	7	14	10	.....	Mrs. Edna P. Bleeck
Garber	Taney	950	0	58.4	.....	85	16	31	24	43	4.04		0.85	0	13	11	4	16	e.	William H. Durham
Goodland	Iron	1,000	42	57.5	+ 1.6	88	14	26	7†	43	4.64	+1.25	1.31	0	8	15	7	9	n	F. M. Adams
Greenville	Wayne	381	26	57.5	− 0.1	89	13	25	7†	47	4.91	+2.04	1.11	0	11	15	7	9	sw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	6.66	+2.36	1.20	0	12	11	9	11	se.	A. W. Madison
Koshkonong	Oregon	958	34	60.4	+ 0.8	84	14†	31	7	30	4.89	+1.70	1.15	0	11	15	4	12	se.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	57.2	− 0.5	85	15†	26	24	38	3.94	+0.61	1.00	0	8	16	2	13	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	58.6	− 0.1	84	15†	33	24	36	7.06	+3.54	1.62	0	13	12	10	9	sw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	57.8	+ 0.2	85	14	31	6†	35	3.51	+0.26	0.89	0	11	15	7	9	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	58.2	− 1.0	82	15	34	24	38	6.78	+3.30	1.00	0	14	14	6	11	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	59.0	+ 2.5	85	13†	32	6†	30	4.43	+1.38	1.35	0	12	11	5	15	se.	F. H. Lane
Salem	Dent	1,173	31	56.7	− 0.9	84	13	27	24	35	3.77	+0.04	1.32	0	10	11	9	11	s.	E. E. Martin
Seligman	Barry	1,642	34	57.4°	− 1.6	82	15†	33	24†	33	4.77	+1.42	0.99	0	12	10°	9°	9°	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	57.0	− 0.4	82	15	32	5†	41	4.79	+1.49	1.23	0	11	17	4	10	se	A. L. Hailey
Springfield	Greene	1,324	47	58.1	− 0.1	82	15	35	6	38	3.88	+0.83	0.90	0	14	15	3	13	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	57.9	.....	88	15	24	24	45	3.53	+0.13	0.66	0	12	11	3	17	se.	I. M. Wilson
Division means	**and extremes**	.....	..	**57.8**	**− 0.1**	**89**	**13†**	**24**	**24**	**47**	**4.25**	**+1.01**	**1.75**	**T.**	**11**	**12**	**7**	**12**	**se.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	58.6†	− 0.3	..	..	32	6	..	5.76	+3.19	1.27	0	12	9	12	10	sw.	W. G. Bigelow
Clinton	Henry	765	42	57.8	− 1.1	86	15	29	6	42	5.06	+2.01	1.10	0	13	9	15	7	se.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	3.55	+0.98	1.05	0	9	12	6	13	sw.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	55.2	− 0.9	85	15	29	23†	38	4.39	+1.56	1.44	0	7	12	1	18	se.	John H. Patterson
Lamar	Barton	980	47	57.6	− 1.3	90	15	32	24†	36	5.75	+2.59	2.10	0	14	13	9	9	se.	Jesse A. Mann
Lamonte	Pettis	867	34	57.0	− 1.0	89	15	26	6†	44	3.76	+1.08	1.84	0	10	9	13	9	nw.	J. E. Wheeler
Marshall	Saline	779	48	56.6	0.0	84	15	28	6	37	2.73	−0.13	0.72	0	9	14	7	10	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	57.8	+ 0.2	86	16	29	24	39	7.29	+4.30	2.07	0	10	14	5	12	nw.	George A. Kaupp
Warrensburg	Johnson	878	48	57.6	− 0.4	85	15	26	24	37	3.16	+0.44	1.10	0	10	12	3	16	se.	E. A. Markey
Warsaw	Benton	687	34	58.6	− 0.4	88	15	27	24	41	6.16	+2.69	2.40	0	12	8	10	13	s.	Everett Martin
Division means	**and extremes**	.....	..	**57.4**	**− 1.2**	**90**	**15**	**26**	**6†**	**44**	**4.86**	**+1.89**	**2.40**	**0**	**11**	**11**	**8**	**12**	**s.**	
Northwest Plateau																				
Bethany	Harrison	916	40	54.2	− 0.6	84	16	25	6	39	1.64	−0.81	0.60	0	8	16	8	7	se.	A. S. Cumming
Chillicothe	Livingston	779	26	54.8	− 2.0	88	16	24	24	42	1.37	−2.36	0.40	0	8	10	9	12	e.	Wm. J. Olenhouse
Conception	Nodaway	980	46	53.8	− 1.6	84	16	25	6	40	3.03	+0.33	1.25	0	7	10	10	11	se.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	54.6	− 1.7	84	16	23	24	39	3.09	+0.44	0.97	0	13	17	3	11	s.	Fred L. Stiff
Grant City	Worth	1,134	31	52.2	− 2.9	83	16	26	4†	39	2.76	−0.06	1.15	0	9	9	12	10	se.	Howard Rybolt
Kansas City	Jackson	963	46	56.2	− 1.5	85	15	30	31	44	3.69	+0.77	1.72	0	11	7	9	15	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	52.6	− 3.2	84	16	25	6	38	1.32	−1.59	0.44	0	8	14	4	13	se.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	3.71	+0.87	1.75	0	8	6	16	9	se.	John M. Martin
Lexington	Lafayette	688	50	55.9	− 1.6	86	15†	29	6	36	3.37	+0.39	1.30	0	11	14	10	7	s.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	52.4	− 1.1	84	16	25	6†	36	3.33	+0.52	1.44	0	12	11	5	15	s.	R. B. Montgomery
Oregon	Holt	1,048	79	54.1	− 1.0	85	16	26	6†	40	3.20	+0.55	1.07	0	8	16	8	7	se.	Mina Wright
St. Joseph	Buchanan	987	25	55.0	− 1.9	84	16	27	31	43	3.09	+0.40	0.86	0	13	12	7	12	se.	U. S. Weather Bureau
Tarkio	Atchison	916	32	51.9	− 2.9	82	15†	25	6	40	3.96	+1.36	1.74	0	7	14	6	11	se.	Albert Volker
Trenton	Grundy	822	39	54.6	− 1.3	82	16	26	24	34	1.60	−1.32	0.36	0	8	14	9	8	s.	W. H. Estes
Division means	**and extremes**	.....	..	**54.0**	**− 1.8**	**88**	**16**	**23**	**24**	**44**	**2.65**	**−0.15**	**1.75**	**0**	**9**	**12**	**8**	**11**	**se.**	
State means	**and extremes**	.....	..	**57.1**	**− 0.3**	**90**	**14†**	**21**	**24**	**47**	**3.52**	**+0.65**	**2.40**	**T.**	**10**	**12**	**7**	**12**	**se.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson ¶ Estimated, ‡ Partially estimated.

Daily Precipitation for October 1935

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri					T		.10	.02	.65	.82				.08				.03			.48	.01	.01			.24	.24	T.				2.68
Bowling Green	Mississippi									.15	.54								.15			.22					.09	**	.97	.20			2.32
Brunswick	Grand							.06		.10	.14				.20				.07			.73					.08	.22					1.60
Canton	Mississippi								.03		.76	.04			.05							.46					.30	.07	.03				1.74
Clifton Hill	Chariton							.09	.02	.11	.28			.40				.01				.47			.01	.01	.18	.10	.02			.10	1.79
Columbia***	Missouri					.04		.05	.66	.51	.08			.17				.85			.18	.05	T.		T	.34	.14					.74	3.81
Downing	Mississippi							T.			.70		T.	T.				.03				.08			.01	.26	.03			.02	.52	1.65
Edina	....do										.85	T.	T.						.23			.20				.10	.04					1.42
Elsberry	....do					T		T.	T.	.21	.19	T.		T					.15			.17				.15	.29	1.51				2.67
Farber	....do									.22	.59								.22									1.01				2.04
Fayette	Missouri							T.		1.88	.15			.01	.05			T.				.57	T			.28	.13				.77	3.84
Fulton	....do					.06		.04	.01	.29	.02				.23				.45			.33	.01				.13	.17	.07				1.81
Gorin	Mississippi							T			.43							.35				.22				T.	.09	T.				.34	1.43
Hannibal	....do							.01		.17	.09	.04			.09			T.				.45					.28	.26	.44			.50	2.33
Hermann	Missouri					.06	.05		.02	.12	.16		.01			.01			.17			.34		.01			.03	.29	.87	.04			2.18
Jefferson City	....do					.20	.02		.17		.03								.52			.48	.04				.14	.16	.10				1.86
Kahoka	Mississippi										.45				.12				.15								.25			.20			1.17
Kirksville	....do										1.15											.19					.27	.07				.48	2.16
LaBelle	....do										1.00										.20						.18	.15					1.53
Linneus	Grand							.12	T.		.18				.04				.05			.27					.03	.35					1.04
Louisiana	Mississippi								**	.62	.30							**	.50			.20					.05	.32	.70			.65	3.34
Lucerne	Grand							**	.05		.50				.11				.13			.09					.03	.17				.40	1.48
Macon	Chariton							.08		.04	.18				.18				.11			.34					.16	.08	.02				1.19
Madison	Mississippi									.04	.47											.33					.27	.24					1.35
Memphis	....do							T.		.69			T.									.17					T.		T.				0.86
Mexico	....do									.50	.35		.03				.06		.32			.40					.27	.05	.02				2.00
Miland	Grand							.10	.08		.52				.12				.58			.17						.31				.03	1.91
Monroe City	Mississippi							T.			.20				.14													.19				.54	1.33
New London	....do										.42								.05				.12				.17	**	.34	.14			1.24
Palmyra	....do										.23	.05										T.					.32	.09	.06	.08			0.83
Paris	....do								.06	.10	.30				.09							.22					.26	.16					1.19
Perry	....do								.03	.19	.29	T	T.						.26			.32					.25	.08	.09				1.51
Philadelphia	....do											.30										.19					.45						0.94
St. Charles	Missouri									.31	.02								.33			.20	.01	.19			.01	.24	1.09	.25			2.65
St. Louis	Mississippi					.05		T.	.74	.03	T.	T.			T			.27		.01	T.	.18	.05				.01	.89	.28			.05	2.56
St. Louis University*	....do					.05			.32	.01	T.				.06			.17		.04		.14	.13				.02	1.07	.32			.09	2.42
Shelbina	....do								.05	T.	.32	T.			.06				.06			.32					.25	.15					1.21
Shelbyville	....do								.04		.20				.12							.27					**	.32					0.95
Steffenville	....do							.15		.12	.20	.02		.12	.02							.25					.26	.14				.32	1.60
Troy	....do								.02	.22	.04				.10				1.10			.21					.08	.22	1.60	.09			3.68
Union	Meramec					.09	.10			.03					T.	.11			.53		.02	.24	.03	.15			.06	.39	1.95	.15			3.85
Unionville	Chariton							.06			.64								.20			.04						.20					1.14
Valley Park	Meramec					.05	T.		T.	.33		T.			T.				.51		.04	.21	T.	.04			.07	.36	.92	.07			2.60
Warrenton	Mississippi					.05		T.	T.	.17	.02	.02						T.	.23			.31	.04				.16	.30	.95			.10	2.35
Keokuk, Ia.***	....do		T.			T.		T.	T.	T.	.52	T.		.01				T.				.30				T.	.28	.12	.01			.42	1.66
Southeast Lowlands																																
Bragg City	St. Francis						.23				.17								.56	.45			.06	1.30	.26			.03	.65	.05			3.76
Campbell	....do					.24			.29	.10	.13							.20	1.00	.31		.18	.27	.34			.35	.20					3.61
Cape Girardeau	Mississippi						.11		.02	.14	.05					1.28			.26	.55	.26	.38	.05	.91	.02		.27	.65					4.95
Caruthersville	....do								.28		.25								.02	.30	.15	.20	.01	.50	.38				.70				2.79
Dexter	St. Francis					.07	.21			.15	.17					.16			.25	.80		.31		.32	.02			.60	.76					3.82
Doniphan	Black					.35			.07	.33	.08								1.13	1.23		.32	.61	.30			.93	.23					5.58
Fisk	St. Francis					.16	.45			.13	.21								.63	1.08	.07	.25	.01	.63			.29	.33					4.24
Jackson	Mississippi					.11				.60	.06			.20	.31				.05	1.00		.23	.17	.60			.76	.28					4.37
Marble Hill	....do	.30				.15										.90		.07	.05	.80		.15		.37			.71	.37	.40				4.27
Morehouse	....do					.22			T.		.22					.87		T.	.27	.74		.23	.11	.51			.46	.42				.02	4.07
New Madrid	....do					.03	.13		.06	.01	.26					.45			.25	.70	.25	.22	.05	.54	.11		.04	.75	.01				3.86
Parma	St. Francis						.22				.21				.07				.36	.87		.10		.27				1.14					3.24
Poplar Bluff	Black					.35			.08	.11	.23								.27	1.45		.30	.20	1.15			.68						4.82
Sikeston	Mississippi						.19				.21					.63			.06	.80	.20	.22		.44	.06			.16	.60	.02			3.59
Cairo, Ill.***	...do					.09		T.	.01	.02	.15			.02	.84			.01	.45	.51		.56	1.30	.07			T.	.20	.77			T.	5.00
Ozark Plateau																																
Arcadia	St. Francis					.20	.20		.01	.15	.06	.02	.02			T			.33	.90	.05	.47	T.				.09	.31	.88	.05	T.		3.74
Birch Tree (near)	Black					.82				.35	.11								.56	.32		.31		.11				.82	.50				3.90
Buffalo	Osage					.92			.09	.15										.88		.63						.88	.53				4.08
Caplinger Mills*	....do				T.	.83		.10	T.	T.	T.			.03	.84			.30	.02	.92	.58	.08			.05	.58	T.				.82	5.15
Crystal City	Mississippi					.24	.08			.21	.04								.30		.06	.15	.06	.34				.39	.55	.02			2.44
Cuba	Meramec																		.55								.70	1.27				2.52
Dean	Neosho					.15		.82		1.30	.04				.23			.12	.76	.82	T.	.78	.02			T.	.65	.35	.36			.70	7.10
Eldon	Missouri					.60				.32	.08								.37	.03		.36	.03		.14			.33	.18				2.44
Farmington	St. Francis					.35		T.		.11						.31		T.	.10	.76		.19	.02	.04			.01	.48	.04				2.41
Fredericktown	....do.					.12	.20			.33	.10					.25			.16	.56		T.		.03				.52	.80				3.07
Galena	White					.68		.08	.10	.04					.05				.12	1.75	.05	.97					.22	.52	.07				4.65
Garber	....do					.85		.37	.26	.14					.03			.38	.12	.59		.43					.37	.32	.03			.15	4.04
Goodland	Black					.42													.57	1.31		.31	.47	.08				.40	1.08				4.64
Greenville	St. Francis					.49				.35	.11							.03	.48	1.11		.15	.21	.80			T.	.88	.30				4.91
Hailey	White							.60	.43		.10							1.08	.52	.50		.10			.53		.16	.25	1.20			1.19	6.66
Koshkonong	Black					.60			.10	.40	.10								1.15	.62		.25	.18	.10				1.00	.39				4.89
Lakeside	Osage					.71	.02	.13	.02	.14									.18	.55		.27	.01	.04			.10	.64	.42				3.23
Lebanon	....do					1.00	.10	T.	T.	.17	T.	T.							.35	.59		.56	T.				T.	.83	.34			T.	3.94
Leeper	Black					.09	.39			.53	.22								.34	1.24	.01	.25	.06	.63				.45	.72				4.93
Lockwood	Osage					1.62		.32	T.	.49				.10	.37			.07	.10	.68		1.09	T.			T.	.45	.15	.02			1.60	7.06
Meramec Park	Meramec					.39		.07								.33			.51	.55		.48		.08				.73	1.57	.15			4.86
Mountain Grove	White					.89		.07	.02	T.					T.				.59	.02	.55	.30	.05				.25	.72	.05				3.51
Neosho	Neosho					.48		.61		.50	T.				.29				.04	.67	.97	.97	.06			.03	.52	.42	.22			1.00	6.78
Owensville	Gasconade					.29	.14	.04		.02	T.								1.70			.20	.04	.15			.09	.28	.79	.15			3.89
Ozark Beach	White					.38			.34	.16									.27	.49	.44							.53	.08				2.69
Rolla	Meramec					.45	.20		.12		T.				.05				1.23	.04	.06	.40	.04				.04	.45	1.35				4.43
St. Thomas (near)	Osage					.48	T.	T.	.15	T.									.61	.03		.47						.25	.20				2.19
Salem	Meramec					.41				T.	.08								.62	.13		.70	.10	.07			.04	.30	1.32				3.77
Seligman	Neosho					.09		T.		.67				.03	.03				.35		.99	.02	.42				.48	.61	.33			.75	4.77
Seymour (near)	White				1.12			.12	T.	.24									.05	.03	1.23		.48	.74			.20	.50				.08	4.79
Springfield***	....do				.06	.72		.08	T.	.05	T.				.01			T.	.64	.26	.46	.01	.10			.09	.43	.09	T.			.88	3.88
Stover	Missouri					.44		.22		.12					.05				1.59	.04		.57	.01				.26	.36					3.66
Versailles	Osage					.56		.22		.15			T.					.56	.03	.04		.49	.04				.35	.36	.07			.66	3.53
Williamsville	Black						.40			.42	.18	.03				.40			.64	1.60		.16	.09	.73	.02			.55	.58					5.80
Willow Springs (near)	White					.65	.46		.03	.08	.17								.39	.14	.26	.45		.01				.60	1.21				4.45
Southwest Plain																																
Appleton City	Osage					.63		.27		.06	T.				1.17			.96	T.	.64		1.27	.02			T.	.27	.04	.07			.36	5.76
Clinton	....do					.73		.33		.16	.05			.20	.90			.44		15		.98	.09				.30	.21				.52	5.06
Concordia	Missouri					T.		.93	.02		.10				1.00				.17			1.05	.01				.07	.20					3.55

Continued on next page

Daily Precipitation for October 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Southwest Plain—Concluded																																
Harrisonville‖	Osage					.40		.50							.51				1.11			1.44					.15	.28					4.39
Joplin*	Neosho					.68		.49	.04	.31					.50			.28	1.35	.24	1.02		.05			.31	.58	.03	.30			.94	7.12
Lamar‖	Neosho					2.10	.08	.05	.10	.35	.08				.13				.08	1.27		1.10	.05				.18	.15	.03				5.75
Lamonte	Missouri							.40	.05	.05	.10			1.80	.04							.80	.02				.30					.20	3.76
Marshall	do					T		.18	.27	.19	.44			.59	.03			.11				.72				T.	T.					.20	2.73
Nevada	Osage					.85		.12			T				.58			2 07	T.	1.52	T.	1.01	.03				.32	T.	.25			.54	7.29
Warrensburg	Missouri					.03		.46		.22	.10		T.	.41	.09			.14				1.10					.25	T.				.36	3.16
Warsaw	Osage					.83		.30		.10				.01	.01			2.40		.22		.80	.03				.36	.20				.90	6.16
Waverly ‖	Missouri							.23	.28	.57	.30				1.07							.68					.05	.37					3.55
Northwest Plateau																																
Amity ‖	Grand								.52	T.	T.	T.	T.		.03				.24			.85				T.	••	.22			T.		1.86
Bethany	do							.23		T.	.30			.05				.17			T.	.15				.02	.12					.60	1.64
Chillicothe ‖	do							.17	.03	T.	.20	T.	T.	T.	.08				.28			.40					T.	.19			.02		1.37
Conception	Missouri							.42		T.		T.		.12				.60			.25	.24				T.	.15	T.		T.	T.	1.25	3.03
Edgerton	do							.54	.05	.03	.05	T.		.30				.14	.01		.02	.95				.04	.23	.03			T.	.70	3.09
Gallatin ‖	Grand								.23		.25			.08					.10			.46						.20					1.32
Grant City	do							.26		.02	.20		T.	.03		T.		.55			T.	.39				T.	.10				.06	1.15	2.76
Kansas City***	Missouri					T.		.87	.06	.08	.11	T.		.08				.01			1.70	.02				.08	.34	T.			T.	.34	3.69
Kidder ‖	Grand							.28	.06		.16			.10	.03							.44					.07	.18					1.32
King City	Missouri							1.75		T.	.01	.01						.78			.39	.38				T.	.16				T.	.23	3.71
Lexington ‖	do							.72	.58	.48	.14	.02			.12				.07			.83					.12	.27			.02		3.37
Maryville	do							.48		.03	.18		.01					.77			.14	.14				.07	.05	.02			.05	1.39	3.33
Oregon	do							.48	T.	T.	.06							.73			.64					.08	.09	.05			T	1.07	3.20
St. Joseph***	do				T.			.50	.01	.05	.01	T.	T.	.01				.65			.81	.05				.03	.23	.01		T.	.16	.57	3.09
Tarkio	do							.39		.12								1.74			.20						.15				.18	1.18	3.96
Trenton	Grand							.18			.27			.13				.07			.36		T.			T.	.25	.02				.32	1.60

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. •• Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for October 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.272	.170	.204	.232	.148	.035	.106	.059	.068	.076	.052	.050	.177	.136	.147	.156	.184	.079	.029	.022	.137	.045	.055	.082	.078	.023	.002	.033	.087	.132	.172	3.248
	Mean temperature	58	59	58	49	46	45	46	51	62	54	60	66	69	72	70	72	70	60	64	65	62	48	50	46	46	49	54	58	56	62	72	58.0
	Wind movement	89	50	66	62	48	41	46	41	73	49	32	42	44	39	29	47	48	37	40	59	48	46	58	38	41	46	38	44	40	77	90	1,548

Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.

Continued from page 46

Halos.—Solar, 2d, 10th, 16th, 17th, 23d, 24th, 30th, 31st; lunar, 11th, 14th, 17th.

Sleet.—7th, 22d.

Smoke.—Dense, 24th, 25th.

Thunderstorms.—Local, 5th, 6th, 7th, 9th 10th, 18th, 19th, 22d, 25th, 26th, 27th, 28th; more or less general, 8th, 13th, 14th, 17th, 20th, 21st, 30th, 31st.

Windstorms.—No damaging winds reported.

ERRATA

September 1935, page 42, greatest precipitation in 24 hours for the Northwest Plateau should be 3.00. Jefferson City mean temperature should be 68.0; departure should be — 1.3. Page 45, Jefferson City mean maximum temperature should be 79.2.

Daily Temperatures for October 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick	Maximum	74	77	71	60	64	59	55	62	66	65	64	84	76	80	85	86	77	70	79	75	69	53	55	62	58	55	64	66	74	79	79	69.1
	Minimum	44	40	46	32	46	30	36	45	52	41	47	53	62	56	57	63	64	47	45	50	48	42	37	29	32	46	51	42	40	48	39	45.5
Columbia	Maximum	64	77	66	56	56	53	48	61	65	59	63	82	79	80	82	84	77	66	72	73	62	49	52	60	56	56	57	63	73	83	80	66.3
	Minimum	44	42	41	33	42	30	38	46	54	43	50	55	63	58	59	62	61	54	52	54	47	42	36	27	34	46	51	47	42	56	37	46.6
Fayette	Maximum	75	79	67	61	59	57	50	62	62	62	65	84	79	81	84	86	77	66	79	73	68	49	54	65	57	56	61	66	72	81	78	68.2
	Minimum	42	35	42	28	45	29	29	44	50	42	46	52	59	52	55	59	59	51	45	46	47	40	40	42	28	45	50	44	33	51	41	44.2
Hannibal	Maximum	70	75	66	52	56	53	49	60	68	59	59	81	83	78	80	85	78	72	75	73	67	48	52	61	59	57	55	57	69	80	81	66.4
	Minimum	42	41	47	29	43	27	33	45	51	41	44	52	63	58	55	59	64	47	46	51	46	41	36	33	36	44	50	50	42	49	45	45.5
Jefferson City §§	Maximum	65	73	69	57	45	44	49	61	66	55	65	80	79	81	82	84	84	62	72	74	61	46	56	62	58	54	55	59	72	82	82	65.6
	Minimum	44	41	46	32	37	31	31	36	46	45	45	52	54	57	56	57	58	56	53	51	53	43	40	27	33	37	46	49	41	45	55	45.1
Kirksville	Maximum	66	75	63	57	58	55	50	59	70	62	67	82	77	77	82	86	79	77	81	78	70	48	57	66	60	52	64	69	72	79	77	68.2
	Minimum	40	46	28	40	40	24	34	44	50	38	40	49	65	55	53	60	60	42	45	47	42	40	37	30	32	44	48	45	40	52	40	43.5
Louisiana	Maximum	70	75	65	65	62	52	48	60	65	61	75	85	87	82	77	85	82	77	82	80	63	53	53	60	55	60	63	60	68	77	80	68.6
	Minimum	44	33	40	30	42	23	23	46	52	45	56	60	60	55	56	59	60	52	43	56	50	43	38	23	46	46	49	52	48	46	65	46.5
Macon §§	Maximum	65	76	64	51	61	41	46	59	69	51	66	82	77	77	83	86	72	73	78	73	55	48	54	63	57	55	63	66	72	81	78	65.9
	Minimum	39	39	43	28	38	24	31	39	45	40	40	50	55	55	54	59	65	44	45	45	54	40	38	29	32	39	48	45	38	52	59	43.6
Mexico §§	Maximum	66	77	68	55	56	53	48	62	65	51	65	82	83	82	83	85	81	68	75	74	64	48	53	61	58	57	57	61	70	81	81	66.8
	Minimum	41	37	43	29	37	25	26	38	46	41	42	50	54	57	55	57	60	51	47	50	57	40	36	26	27	39	45	50	38	49	56	43.5
St. Louis	Maximum	62	72	69	55	50	54	52	63	66	59	65	82	84	83	82	83	81	68	69	75	69	53	52	60	66	64	56	56	70	79	82	67.1
	Minimum	49	46	44	37	40	34	39	48	53	50	51	52	60	65	60	60	64	58	59	59	53	44	42	40	44	54	52	52	50	50	46	50.2
Unionville §§	Maximum	65	76	58	57	54	55	48	59	73	59	68	81	75	78	83	85	64	73	79	76	51	48	55	64	57	53	61	66	72	77	72	65.9
	Minimum	39	40	43	26	30	27	26	38	43	36	36	47	54	55	54	54	62	39	40	46	49	39	35	32	33	34	45	38	38	42	59	41.3
Warrenton	Maximum	77	71	71	61	52	52	50	60	66	65	63	81	84	81	82	84	84	68	75	77	73	55	52	61	65	60	54	55	71	82	82	68.2
	Minimum	43	40	47	30	42	28	32	44	52	45	49	52	57	61	58	58	62	54	55	52	54	42	40	32	40	46	48	50	45	50	61	47.4
Southeast Lowlands																																	
Campbell	Maximum	72	73	78	78	53	55	63	68	72	71	77	80	78	83	81	84	75	68	72	70	78	67	59	66	71	65	67	70	77	81	71.9
	Minimum	40	37	46	37	43	36	31	46	49	49	49	50	50	55	55	57	59	62	61	47	56	65	42	37	31	46	50	50	38	41	60	47.6
Caruthersville	Maximum	73	73	78	71	58	56	62	71	73	74	84	85	86	85	83	84	81	77	72	74	81	79	76	58	67	73	70	68	69	80	80	74.2
	Minimum	55	44	48	43	47	42	37	48	50	56	55	57	60	63	60	61	65	64	64	54	61	65	45	42	41	52	54	53	46	53	65	53.2
Doniphan	Maximum	70	72	79	75	52	52	62	69	71	74	83	86	85	87	86	87	83	71	78	75	84	69	62	62	68	75	61	68	74	81	84	73.7
	Minimum	43	36	44	35	45	39	41	53	52	50	50	51	55	51	53	51	62	61	48	60	60	44	33	30	46	53	50	37	40	50	46.8	
Jackson	Maximum	70	71	76	68	56	55	60	70	70	72	80	84	86	85	83	85	79	80	75	74	79	74	53	60	67	71	71	61	71	79	81	72.5
	Minimum	50	35	43	34	40	33	28	45	49	55	46	50	51	57	55	58	60	61	61	57	58	51	42	32	30	48	52	51	40	43	63	47.7
Poplar Bluff	Maximum	71	73	79	67	53	58	60	68	70	68	82	85	86	88	84	84	75	69	75	75	75	66	56	64	68	74	57	73	73	81	83	72.3
	Minimum	45	38	46	38	45	36	32	45	52	53	50	52	53	56	58	56	59	53	56	50	56	49	44	35	33	38	52	46	40	42	61	47.4
Sikeston	Maximum	76	73	77	75	60	57	63	73	69	71	84	84	83	85	86	83	83	68	72	73	83	81	60	60	70	75	72	63	69	80	79	73.8
	Minimum	52	39	45	37	44	35	32	49	52	54	55	55	58	60	58	58	64	63	59	57	57	58	43	35	36	50	52	51	43	46	63	50.3
Cairo, Ill	Maximum	66	68	75	59	49	54	60	69	69	71	80	84	84	83	84	84	78	68	70	74	81	70	54	59	68	72	60	62	70	80	81	70.5
	Minimum	52	44	51	43	46	37	37	50	50	55	53	56	62	61	60	60	66	65	63	59	62	50	43	40	43	53	54	52	49	54	66	52.8
Ozark Plateau																																	
Arcadia §§	Maximum	66	71	74	64	45	55	58	66	62	65	75	82	85	89	81	84	76	70	75	72	78	56	54	63	64	69	54	59	71	80	82	69.2
	Minimum	48	35	41	32	39	30	27	31	46	51	42	52	54	56	58	51	55	61	60	56	57	54	41	29	27	31	48	47	37	39	45	44.5
Birch Tree	Maximum	76	75	76	64	56	55	55	64	64	72	80	82	85	80	84	84	78	69	75	72	79	72	59	63	69	71	61	62	71	80	81	71.4
	Minimum	40	34	40	35	40	32	27	38	48	40	58	52	53	56	52	56	54	58	57	48	56	44	36	30	27	43	46	45	43	43	56	44.7
Crystal City §§	Maximum	66	73	72	57	47	56	55	66	70	68	70	84	87	86	85	85	83	65	67	76	73	52	54	..	68	65	56	58	73	83	85	[b]69.5
	Minimum	46	35	41	32	41	32	26	45	50	52	49	52	49	55	56	57	55	59	57	55	60	49	41	27	..	27	51	51	38	41	52	[b]46.0
Eldon §§	Maximum	67	79	..	70	48	55	52	65	72	60	68	87	85	84	87	87	85	63	72	75	62	47	51	63	57	56	57	64	74	84	82	[b]68.6
	Minimum	43	40	40	..	32	29	31	37	47	45	45	50	50	50	54	55	57	56	54	50	52	45	40	29	29	39	45	50	40	41	54	[b]44.3
Farmington	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	66	70	68	56	72	80	82	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32	28	47	52	48	38	46	60	....
Garber	Maximum	69	80	78	69	62	58	54	63	62	67	79	81	84	83	84	85	81	68	68	77	74	62	54	60	57	57	59	65	75	82	80	70.2
	Minimum	45	37	43	38	46	37	33	45	50	54	50	50	50	57	51	51	53	53	55	51	55	46	38	31	41	48	53	46	34	45	60	46.6
Koshkonong	Maximum	71	71	75	67	58	54	58	69	63	71	78	81	83	84	84	84	78	70	72	72	78	73	62	59	63	71	62	63	72	79	80	71.1
	Minimum	48	41	52	38	43	36	31	45	50	52	54	57	57	61	57	60	61	60	51	58	48	40	34	37	49	50	51	44	50	63	49.6	
Lebanon §§	Maximum	64	80	73	65	50	54	52	60	73	59	74	80	84	83	85	85	83	68	76	75	65	63	56	54	57	54	59	63	73	78	80	68.5
	Minimum	46	42	41	32	38	30	35	35	48	47	46	55	55	55	54	55	62	58	58	56	56	50	38	26	27	43	47	42	42	45	57	45.8
Mountain Grove	Maximum	66	75	74	65	48	56	51	52	64	70	79	80	82	85	82	82	81	65	75	71	74	56	54	64	60	59	55	65	70	77	78	68.2
	Minimum	45	40	40	35	42	31	34	36	50	50	54	57	57	58	55	59	60	59	55	57	54	41	37	31	40	47	51	46	43	50	52	47.3
Neosho	Maximum	78	76	76	74	67	67	59	63	65	65	72	78	77	81	82	81	80	68	67	76	73	60	53	58	57	54	64	63	75	75	75	69.6
	Minimum	44	38	39	40	49	38	38	43	49	46	48	58	59	56	52	57	58	58	52	47	55	43	38	34	45	45	48	43	37	48	43	46.7
Rolla	Maximum	75	72	74	65	57	52	52	62	73	64	71	82	85	80	85	84	84	73	64	72	68	58	51	59	63	57	57	58	71	79	80	68.6
	Minimum	46	42	46	37	42	32	32	43	53	50	49	53	63	62	56	58	65	60	59	52	58	51	40	32	36	48	52	47	49	54	66	49.5
Springfield	Maximum	63	76	72	64	52	54	48	63	62	60	74	79	82	79	82	81	78	65	64	72	63	56	50	60	58	57	59	64	71	78	77	66.5
	Minimum	46	44	51	40	42	35	39	45	52	47	56	60	64	60	60	63	62	57	56	52	55	42	38	37	46	48	52	48	47	57	39	49.7
Southwest Plain																																	
Appleton City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	44	41	45	36	45	32	39	48	54	44	49	56	62	57	57	64	63	56	56	52	49	43	38	33	45	47	49	43	42	60	42	48.1
Clinton	Maximum	73	81	75	69	60	60	56	70	63	64	66	82	80	81	86	85	78	70	72	73	69	60	53	60	60	56	60	65	75	80	75	69.6
	Minimum	42	39	44	34	32	29	45	48	43	43	48	52	58	58	57	60	58	54	56	50	50	42	37	30	40	46	48	42	39	58	40	45.9
Harrisonville §§	Maximum	65	77	68	58	61	57	50	68	67	57	60	82	76	75	85	84	70	72	79	73	53	51	53	58	51	52	60	69	77	75	70	66.2
	Minimum	40	41	43	38	35	30	31	39	47	41	41	57	59	58	59	61	50	49	49	47	39	29	29	34	45	45	39	39	47	63	44.2	
Lamar §§	Maximum	64	78	68	71	53	58	51	71	69	58	73	78	81	80	90	84	78	62	70	79	59	48	50	60	53	53	56	64	76	78	78	67.5
	Minimum	45	42	41	40	40	35	35	42	51	46	46	54	58	59	59	63	62	59	57	55	55	46	39	32	32	47	49	42	42	44	61	47.7
Lamonte	Maximum	71	80	71	62	57	56	58	69	71	61	66	85	77	83	89	88	79	79	79	79	62	48	54	65	58	57	64	69	78	83	79	70.2
	Minimum	37	40	41	30	39	26	26	45	53	41	48	51	60	57	56	56	52	52	51	51	46	41	34	27	36	45	46	41	39	57	35	43.8
Marshall	Maximum	80	75	70	59	56	56	50	60	67	65	60	81	75	77	84	83	78	67	72	72	71	48	49	56	56	52	60	66	67	80	77	66.7
	Minimum	52	42	47	31	45	28	31	45	53	46	47	53	60	57	57	61	65	52	46	50	46	40	37	30	36	45	42	48	48	57	40	46.4
Nevada	Maximum	66	80	73	62	58	55	51	70	69	65	68	81	81	78	84	86	79	64	71	76	68	51	52	59	57	56	58	64	74	80	76	68.1
	Minimum	44	41	41	36	36	31	39	47	55	44	45	55	61	57	61	63	62	55	55	53	49	43	41	29	45	46	50	42	45	59	40	47.4
Warrensburg	Maximum	75	80	70	68	60	54	50	68	71	64	64	82	78	78	85	84	78	66	78	73	70	48	52	63	55	56	59	67	75	80	75	68.6
	Minimum	41	44	45	33	36	31	39	47	55	42	48	57	64	58	57	65	63	53	51	53	46	41	33	26	41	45	49	41	45	60	39	46.7
Warsaw	Maximum	78	80	75	65	57	55	52	67	70	64	69	83	81	84	88	87	81	63	71	75	69	53	54	64	56	59	60	66	76	82	80	69.8
	Minimum	44	39	43	34	45	31	38	49	53	45	48	51	64	59	55	61	62	56	57	52	51	43	39	27	39	46	52	45	37	60	42	47.3
Northwest Plateau																																	
Chillicothe §§	Maximum	67	76	65	57	61	56	49	61	71	58	66	83	74	77	85	88	68	74	81	74	55	51	57	66	57	52	65	71	75	77	74	67.5
	Minimum	41	39	43	28	30	25	34	39	45	39	39	48	56	57	55	60	63	41	41	41	48	40	35	24	29	33	46	36	39	47	63	42.1
Grant City	Maximum	65	75	63	53	53	55	44	55	62	53	61	79	74	75	79	83	77	71	76	70	63	47	43	52	48	50	50	59	71	70	69	62.7
	Minimum	37	40	41	26	41	26	36	42	48	32	47	52	62	51	56	63	52	35	40	47	40	37	27	27	31	45	48	32	43	57	30	41.6
Kansas City	Maximum	66	78	68	57	60	57	50	69	67	58	60	82	76	74	85	85	72	71	79	72	58	50	52	57	52	53	60	68	76	75	74	66.5
	Minimum	45	46	45	36	40	31	41	49	44	40	52	56	62	57	59	68	55	48	48	50	44	38	32	32	39	46	44	39	44	63	30	45.9
Kidder §§	Maximum	63	73	61	55	57	58	45	61	68	56	60	78	74	75	82	84	66	71	77	74	49	54	50	60	53	52	59	63	72	73	72	64.4
	Minimum	39	42	44	28	29	25	27	38	43	36	36	49	54	54	53	54	61	39	39	47	44	35	27	28	32	41	44	36	37	42	58	40.7
Lexington §§	Maximum	69	78	70	61	65	58	47	65	70	52	61	82	76	77	86	86	70	70	79	72	49	54	56	63	55	53	63	69	77	77	74	67.2
	Minimum	43	44	46	33	36	29	32	40	47	40	41	51	55	59	57	62	65	47	47	48	48	41	31	31	32	44	47	40	41	43	63	44.6
Maryville	Maximum	64	70	64	54	57	51	47	64	62	56	56	78	77	75	81	84	73	71	77	71	57	46	51	60	48	49	55	57	70	70	64	63.2
	Minimum	39	40	42	28	38	25	35	42	47	31	46	54	61	53	56	64	50	39	42	45	39	36	25	27	35	43	45	35	41	59	28	41.6
Oregon	Maximum	65	76	66	57	59	55	47	65	61	59	59	81	75	76	84	85	76	70	77	71	58	47	52	60	50	50	59	62	73	71	69	65.0
	Minimum	38	46	44	30	38	26	38	43	48	32	47	54	60	50	67	66	52	40	44	51	38	37	26	29	39	43	45	34	45	59	29	43.2
St. Joseph	Maximum	65	76	63	57	60	55	48	65	66	59	59	81	76	78	83	84	71	70	76	72	58	48	53	60	50	52	58	64	74	73	70	65.3
	Minimum	44	47	41	34	39	30	40	47	43	36	52	57	64	55	60	67	50	43	45	52	40	36	30	32	41	45	43	35	48	61	27	44.6
Trenton	Maximum	67	71	66	59	60	56	48	58	69	65	68	74	76	76	79	82	76	70	73	70	64	48	48	50	53	56	61	66	67	76	72	65.3
	Minimum	49	40	46	29	43	27	40	42	48	38	46	60	62	56	56	60	58	39	40	44	44	39	35	26	35	42	48	39	38	52	38	43.8

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 11-19-35—945.

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CLIMATOLOGICAL DATA

MISSOURI SECTION

ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX NOVEMBER 1935 No. 11

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GENERAL SUMMARY

Temperatures were rather low for the time of year during most of the month. A persistent spell of cold weather occurred from about the 11th to the 24th, except one or two days, with hard freezing on the 21st, 22d, and 23d. Minimum readings were as low as 10° in this period in parts of both northern and southern sections. Unusually mild weather prevailed on the 3d-4th, and 7-10th.

An outstanding feature of the weather of the month was the prevalence of cloudy skies, in comparison with November records for the last 44 years. The average number of cloudy days for the State was 18 this month, whereas in no previous November of record has the number been greater than 15 days. The amount of sunshine received was but little more than half the normal amount.

The number of days with rain was also unusually large. There was very little snowfall, however. Rainy periods occurred from the 1st to 5th, 9-11th, 16-19th, and 26-27th. Total rainfall for the month was decidedly more than normal over a belt extending from west to east and covering most of the central third of the State, with marked excesses in the counties of Bates, Vernon, St. Clair, Henry, Johnson, Pettis, Benton, Morgan, Miller, Cole, Boone, Callaway, Audrain, Montgomery, Warren, and Lincoln. In large parts of the southern third of the State the rainfall was considerably less than normal, especially in some southeastern counties, while most of the more northern counties received considerably more than normal amounts.

Farm work was delayed by the unfavorable conditions. Corn dried very slowly, due to frequent rains, persistent cloudiness, and marked deficiency in sunshine. Cribbing of corn made but little progress. Wheat and other grains made slow growth, but were generally in good condition at the end of the month. Wet ground prevented turning of livestock on wheat fields in most sections.

No damaging wind storms occurred. Rivers were at medium to rather low stages.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 42.2°, or 2.3° below normal. The highest monthly mean was 49.5° at Caruthersville, and the lowest monthly mean was 36.0° at Unionville. The highest temperature recorded was 82° at Doniphan on the 10th, and the lowest was 10° at Downing and Unionville on the 22d and at Greenville on the 23d. The greatest daily range was 47° at Warrenton on the 1st.

PRECIPITATION

The average precipitation for the State, 123 stations reporting, was 4.11 inches, or 1.51 inches more than normal. The greatest local monthly amount was 8.06 inches at Clinton, and the least local monthly amount was 1.96 inches at Campbell. The greatest amount in any twenty-four hours was 3.37 inches at Clinton on the 4th. The average number of days with 0.01 inch or more of precipitation was 10. The snowfall for the State averaged 0.1 inch, or 0.9 inch less than normal. The greatest local monthly snowfall was 3.0 inches at Oregon.

MISCELLANEOUS PHENOMENA

Fog.—Dense, 2d, 3d, 6th, 7th, 8th, 10th, 11th, 12th, 26th.

Frost.—Killing, 5th, 6th (at stations where killing frost had not occurred.)

Halos.—Solar, 3d, 5th, 18th, 24th; lunar, none.

Sleet.—4th, 10th, 11th, 15th, 28th, 29th.

(Continued on page 54)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.11	30.56	23	29.50	27	8.7	24	sw.	27	83	72	75	29
Kansas City.....	30.13	30.49	1	29.45	27	9.6	30	sw.	27	83	71	75	30
St. Joseph.....	30.12	30.51	1	29.43	27	8.7	30	w.	27	86	70	77	34
St. Louis.....	30.13	30.62	23	29.60	27	11.7	30	s.	27	83	71	73	35
Springfield.....	30.12	30.52	23	29.58	9	10.3	34	se.	26	90	76	77	31
Cairo, Ill.....	30.14	30.60	24	29.69	27	8.5	24	sw.	27	89	73	71	32
Keokuk, Iowa..	30.16	30.63	23	29.50	27	8.6	27	w.	27	82	67	74	34

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	41.6	− 2.9	87	15	3.26	+0.66	6.54	1.00	....	7	..	..	..
1889....	39.9	− 4.6	76	6	3.43	+0.83	6.25	1.36	0.6	7	..	..	..
1890....	46.5	+ 2.0	80	14	2.31	−0.29	4.70	0.83	T.	5	..	..	..
1891....	39.6	− 4.9	82	− 7	3.60	+1.00	9.75	0.25	....	8	..	..	..
1892....	40.1	− 4.4	79	9	2.60	0.00	6.21	0.18	1.0	6	11	7	12
1893....	40.9	− 3.6	79	− 1	1.59	−1.01	4.72	0.08	0.3	4	14	9	7
1894....	41.0	− 3.5	80	3	1.58	−1.02	5.40	0.20	T.	4	15	9	6
1895....	41.6	− 2.9	82	− 4	3.37	+0.77	7.06	0.52	3.2	8	10	7	13
1896....	42.3	− 2.2	82	− 5	2.18	−0.42	6.80	0.70	0.2	6	11	7	12
1897....	43.4	− 1.1	82	− 3	2.40	−0.20	6.21	0.27	T.	6	13	8	9
1898....	39.9	− 4.6	79	− 8	2.28	−0.32	4.31	0.85	2.3	6	14	8	8
1899....	49.5	+ 5.0	82	16	1.90	−0.70	5.29	0.69	0.2	7	11	9	10
1900....	43.7	− 0.8	84	7	2.58	−0.02	8.76	0.20	0.2	6	15	7	8
1901....	43.6	− 0.9	84	9	1.38	−1.22	4.34	0.32	0.8	4	17	7	6
1902....	50.1	+ 5.6	85	18	3.52	+0.92	6.21	1.51	0.4	9	8	9	18
1903....	40.9	− 3.6	79	2	1.24	−1.36	3.26	0.20	1.1	5	13	8	9
1904....	46.3	+ 1.8	83	11	0.22	−2.38	0.89	0.00	T.	2	21	5	4
1905....	45.8	+ 1.3	83	2	1.94	−0.66	3.58	0.65	T.	6	18	6	6
1906....	42.5	− 2.0	88	− 3	2.60	0.00	10.07	1.13	5.0	8	12	6	12
1907....	43.8	− 0.7	88	11	2.52	−0.08	6.03	0.55	T.	4	19	4	7
1908....	47.6	+ 3.1	87	9	4.14	+1.54	9.41	1.50	0.2	8	15	7	8
1909....	53.6	+ 9.1	87	11	4.43	+1.83	12.52	1.20	0.4	8	12	7	11
1910....	42.0	− 2.5	83	11	0.38	−2.22	1.07	0.00	0.1	3	15	8	7
1911....	39.1	− 5.4	83	− 3	2.55	−0.05	4.63	0.37	1.1	7	13	6	11
1912....	45.9	+ 1.4	85	12	1.52	−1.08	4.27	0.11	0.1	3	20	5	5
1913....	51.7	+ 7.2	80	11	2.73	+0.13	4.82	0.25	T.	7	10	8	12
1914....	48.6	+ 4.1	89	2	0.65	−1.95	2.07	T	0.1	3	19	6	5
1915....	49.5	+ 5.0	87	12	2.76	+0.16	5.25	0.82	0.1	5	16	7	7
1916....	46.9	+ 2.4	85	3	2.49	−0.11	5.60	1.45	0.1	4	19	4	7
1917....	46.1	+ 1.6	80	8	1.05	−1.55	7.75	0.00	T.	3	14	5	11
1918....	44.9	+ 0.4	85	12	3.18	+0.58	11.00	1.34	1.2	6	15	4	11
1919....	42.2	− 2.3	78	2	3.62	+1.02	7.96	1.17	1.0	6	15	5	10
1920....	40.9	− 3.6	82	6	1.21	−1.39	2.75	0.00	T.	6	12	6	12
1921....	45.6	+ 1.1	84	10	2.82	+0.22	11.78	0.00	0.4	5	13	7	10
1922....	47.8	+ 3.3	84	15	3.82	+1.22	6.75	1.11	T.	7	16	6	8
1923....	45.1	+ 0.6	79	14	2.15	−0.45	4.45	0.26	3.0	6	15	6	9
1924....	46.7	+ 2.2	88	4	1.72	−0.88	4.11	0.51	0.5	4	15	8	7
1925....	42.8	− 1.7	80	− 2	2.99	+0.39	7.75	0.40	2.0	6	16	6	8
1926....	39.6	− 4.9	78	0	2.98	+0.38	5.68	0.25	4.2	7	11	7	12
1927....	46.8	+ 2.3	89	12	3.55	+0.95	7.89	0.03	0.9	7	6	9	15
1928....	44.6	+ 0.1	79	9	5.10	+2.50	10.88	0.74	0.5	10	13	4	13
1929....	39.0	− 5.5	78	− 8	1.46	−1.14	4.47	0.11	2.1	6	11	8	11
1930....	45.8	+ 1.3	83	8	2.93	+0.33	6.10	1.27	T.	5	18	5	7
1931....	52.2	+ 7.7	87	17	5.46	+2.86	9.72	2.58	1.4	11	10	5	15
1932....	39.5	− 5.0	75	− 9	1.82	−0.78	3.93	0.59	4.5	5	16	5	9
1933....	45.9	+ 1.4	83	7	0.84	−1.76	2.09	0.06	0.2	4	16	6	8
1934....	48.5	+ 4.0	84	16	5.68	+3.08	10.04	2.51	4.6	10	14	5	11
1935....	42.2	− 2.3	82	10	4.11	+1.51	8.06	1.96	0.1	10	8	4	18
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	44.6	.....	89	− 9	2.60	.....	12.52	0.00	1.0	6	14	6	10

Climatological Data for November 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	42.1	+ 0.5	72	3	17	22	35	5.81	+3.77	1.56	T.	14	8	1	21	se.	O. K. Beuecke
Clifton Hill	Randolph	731	36	40.8	− 2.6	73	3	15	22	37	4.37	+2.23	2.06	0	12	9	2	19	.....	Dr. A. J Bradsher
Columbia	Boone	784	45	41.2	− 2.1	76	3	19	22	29	6.70	+4 50	2.75	T.	13	9	1	20	n.	U. S. Weather Bureau
Downing	Schuyler	876	14	37.6	− 4.0	66	8	10	22	34	3.68	+1.82	1.15	T.	9	10	1	19	s.	James Taylor
Elsberry	Lincoln	449	4	42.2[c]	.....	78	3	13	23	34	5.20		1.63	0	12	5[c]	5[c]	17[c]	n.	Ray E. Mills
Fayette	Howard	680	55	40.7	− 1.5	74	3	17	22†	36	4.56	+2.43	1.87	0	9	8	1	21	s.	Harry P. Mason
Fulton	Callaway	818	47	41.2	− 3.0	78	3	15	23	41	6.79	+4.43	2.88	T.	11	8	3	19	n.	Clyde C. Herring
Gorin	Scotland	700	48	.....	..	..	..	..	..	..	3.51	+1.52	1.70	T.	7	10	1	19	nw.	W. L. Harker
Hannibal	Marion	759	43	40.1	− 2.0	74	3	14	22	32	4.40	+2.34	1.96	0	12	9	2	19	n.	Hannibal Water Dept.
Jefferson City	Cole	557	45	40.4	− 3.7	71	3	18	23	34	5.32	+2.95	1.10	T.	13	7	4	19	nw.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	38.4	− 2.2	67	3	11	22	32	4.23	+2.32	1.40	T	8	7	2	21	n.	Prof. J. S. Stokes
Linneus	Linn	816	3	.....	..	..	..	..	..	..	4.48		1.21	T.	13	9	2	19	nw.	J. Robert Hall
Louisiana	Pike	469	41	41.5	− 2.6	75	3	13	23	35	4.22	+1.80	2.30	T.	5	11	2	17	e.	Stark Bro's Nurseries
Macon	Macon	875	36	38.5	− 4.3	73	3	12	22	34	4.74	+2.64	1.15	0	10	11	0	19	nw.	W. C. Brown
Mexico	Audrain	800	46	39.1	− 3.8	76	3	15	22	38	6.50	+4.12	2.03	0	14	10	3	17	ne.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	.....	..	..	..	..	..	..	4.91	+2.78	2.10	0	10	6	4	20	n.	J. S. Conway
St. Charles	St. Charles	520	47	41.8	− 3.5	80	3	16	23	40	3.33	+0.81	1.03	T.	14	7	8	15	se.	Martin L. Comann
St. Louis	**St. Louis City**	568	62	43.4	− 2.0	76	3	20	22	31	2.71	−0.12	1.32	T.	13	9	4	17	nw	**Section Center**
St. Louis University	St. Louis City	578	23	43.4	− 3.1	76	3	21	22	30	2.76	+0.14	1.51	T.	14	9	4	17	se.	St. Louis University
Shelbina	Shelby	779	42	.....	..	..	..	..	..	..	4.69	+2.50	1.98	0	11	..	..	..	.....	J. C. Jewett
Steffenville	Lewis	650	37	39.6	− 3.9	70	3	12	22	32	5.28	+3.17	1.85	T.	11	8	4	18	n.	Frank Hall
Unionville	Putnam	1,062	42	36.0	− 4.3	66	8	10	22	39	4.16	+2.20	1.23	0	8	10	1	19	n.	John H. Schick
Warrenton	Warren	816	53	42.7	− 0.5	78	1	16	22	47	5.65	+2.96	1.83	T.	13	10	2	18	nw	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia.	614	64	39.0	− 2.1	72	3	12	29	30	2.94	+1.00	1.51	T.	11	10	1	19	n	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**40.5**	**− 2.7**	**80**	**3**	**10**	**22**	**47**	**4.75**	**+2.29**	**3.18**	**T.**	**11**	**9**	**2**	**19**	**n.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	46.2	− 1.4	77	4†	19	23	36	1.96	−1.74	0.41	0	10	10	5	15	n.	Jeff. King
Caruthersville	Pemiscot	265	39	49.5	− 0.9	79	3†	25	23	33	2.48	−1.48	0.60	0	9	10	6	14	n.	Sam Smith
Doniphan	Ripley	344	31	47.0	− 0.3	82	10	18	23	46	2.43	−1.10	0.48	0	13	10	2	18	nw.	W. W. Martin
Jackson	Cape Girardeau	428	44	45.6	− 1.0	76	1†	16	23	37	3.62	+0.19	1.00	0	11	7	3	20	n.	John G. Putz
Marble Hill	Bollinger	470	40	46.8	+ 1.6	80	3	13	23	41	3.60	−0.03	0.67	0	11	5	9	16	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	.....	.....	..	..	..	..	..	2.49	−1.58	1.03	0	10	11	2	17	n.	John A. Spence
Poplar Bluff	Butler	339	30	46.4	− 1.3	80	10	17	23	42	2.12	−1.50	0.60	0	8	11	4	15	w.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	47.3	+ 0.1	79	1†	20	23	37	2.35	−1.39	1.00	0	12	8	6	16	n	John A. LaFont
Cairo, Ill.	Alexander, Ill.	356	63	47.1	− 0.2	78	3	23	23	29	1.70	−1.98	0.40	T.	12	5	4	21	n.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**47.0**	**− 0.4**	**82**	**10**	**18**	**23**	**46**	**2.48**	**−1.37**	**1.25**	**0**	**11**	**9**	**4**	**17**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	54	42.5	− 1.4	78	3	12	23	42	5.39	+1.77	2.39	0	15	12	2	16	w.	Arcadia College
Birch Tree(near)	Shannon	1,000	40	44.6	− 2.0	79	10	15	23	45	3.57	+0.24	1.04	0	11	12	3	15	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	.....	.....	..	..	..	..	..	3.74	.	1.45	0	8	10	4	16	.	C. M. McCallister
Caplinger Mills	Cedar	750	9	.....	.....	..	..	..	..	..	3.75	+0.99	1.63	0	6	9	2	19	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	43.8[a]	.....	79	3	14	23	35	4.54	..	1.23	0	11	4	6	20	ne.	Pittsburgh Plate Glass Co.
Dean †‡	McDonald	1,000	31	43.2	− 6.1	78	2	19	20†	42	2.76	−0.58	0.88	0	7	6	8	16	e.	H. E. Dean
Eldon	Miller	934	40	40.8	− 4.0	79	3	17	23	37	6.02	+3.53	1.26	0	12	5	7	18	e.	E. H. Shepherd
Farmington	St. Francois	960	24	44.2	− 0.6	78	3	14	23	41	5.06	+1.31	1.55	0	12	6	7	17	nw.	Mrs. Edna P. Bleeck
Garber	Taney	950	0	45.4	..	81	10	19	23	46	5.54	.....	2.22	0	8	7	4	19	e.	William H. Durham
Goodland	Iron	1,000	42	43.6	− 1.1	77	3	11	23†	46	5.59	+2.67	1.60	0	8	11	3	16	n.	F. M. Adams
Greenville	Wayne	381	26	44.8	− 0.6	79	3†	10	23	45	3.50	−0.18	0.73	0	10	10	6	14	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	.....	.....	..	..	..	..	..	2.33	−0.78	0.89	0	6	8	5	17	se.	A. W. Madison
Koshkonong	Oregon	958	34	45.6[b]	− 3.4	76	3	17	24	30	3.60	+0.30	0.99	0	11	7	4	19	ne.	Geo R. Hitt
Lebanon	Laclede	1,265	47	42.2	− 3.4	79	3	20	24	45	2.29	−0.33	0.87	0	7	7	5	18	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	44.6	− 2.4	75	3	25	23	37	3.24	+0.79	1.42	0	9	10	3	17	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	42.6	− 3.3	78	10	19	23	35	4.07	+1.31	1.35	T.	10	10	8	12	n.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	43.7	− 3.6	76	3	20	22	38	2.92	−0.24	0.90	0	12	8	4	18	se.	U. S Fisheries Sta.
Rolla	Phelps	1,099	35	44.5	− 0.5	77	3	17	23	39	4.26	+1.74	0.90	T.	12	9	2	19	nw	F. H. Lane
Salem	Dent	1,173	31	42.9	− 3.2	79	3	14	23	38	3.98	+1.36	1.36	0	10	6	7	17	n.	E. E Martin
Seligman	Barry	1,542	34	44.4	− 2.9	77	3	23	22†	44	5.73	+2.86	2.09	0	6	11[a]	5[a]	13[a]	w.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	42.4	− 3.5	77	10	20	23	39	3.71	+1.04	1.09	0	9	9	3	18	nw.	A. L. Hailey
Springfield	Greene	1,324	47	42.6	− 3.1	76	10	25	23	37	2.50	−0.29	1.08	T.	11	7	4	19	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	42.7		78	3	21	23	38	5.73	+3.36	2 14	0	13	9	2	19	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**43.6**	**− 2.7**	**81**	**10**	**10**	**23**	**46**	**4.16**	**+0.95**	**2.39**	**T.**	**10**	**8**	**5**	**17**	**nw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	43.2	− 2.8	73	3	25	22†	38	6.61	+4.37	2.48	T.	9	8	2	20	nw.	W. G Bigelow
Clinton	Henry	765	42	42.6	− 4.4	73	3	22	23	38	8.06	+5.99	3.37	0	12	9	1	20	se.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	.....	.....	..	..	..	..	..	5.20	+2.91	1.40	0	9	7	3	20	sw.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	40.0	− 2.5	69	3†	23	5†	35	4.79	+2.72	1.35	T.	15	7	2	21	ne.	John H. Patterson
Lamar	Barton	980	47	42.6	− 3.7	75	3	24	22	34	3.34	+1.01	0.95	T.	9	8	2	20	se	Jesse A. Mann
Lamonte	Pettis	867	34	41.4	− 3.0	74	3	20	23	36	5.23	+3.07	1.65	0	11	5	6	19	nw.	J. E. Wheeler
Marshall	Saline	779	48	41.4	− 3.8	76	8	19	22	38	4.29	+2.03	1.96	T.	10	8	3	19	se.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	43.4	− 1.4	74	3	24	22	36	6.42	+4.39	2.14	0.5	8	10	1	19	sw.	George A. Kaupp
Warrensburg	Johnson	878	48	42.4	− 2.6	72	3	24	29	35	5.67	+3.67	2.00	T.	9	7[a]	2[a]	20[a]	ne.	E. A. Markey
Warsaw	Benton	687	34	43.8	− 3.4	76	3	22	23	38	6.39	+3.80	2.43	0	11	10	0	20	w.	Everett Martin
Division means	**and extremes**	.....	..	**42.3**	**− 3.1**	**76**	**8**	**19**	**22**	**38**	**5.35**	**+3.10**	**3.37**	**T.**	**10**	**8**	**2**	**20**	**se.**	
Northwest Plateau																				
Bethany	Harrison	916	40	37.9	− 4.9	67	8	14	22	36	2.83	+1.00	1.24	0.5	9	8	3	19	nw.	A. S. Cumming
Chillicothe	Livingston	779	26	38.2	− 3.5	71	3	14	22	40	4.66	+2.32	1.32	0	11	9	4	17	se.	Wm. J. Olenhouse
Conception	Nodaway	980	46	38.0	− 3.4	65	8	21	1†	29	3.01	+1.54	0.87	T.	9	7	5	18	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	40.0	− 1.8	67	8	23	5†	33	3.65	+2.12	1.02	1.0	13	11	0	19	n.	Fred L. Stiff
Grant City	Worth	1,134	31	36 6	− 5.3	66	8	13	22	33	3.36	+1.74	1.42	T.	10	5	8	17	se.	Howard Rybolt
Kansas City	Jackson	963	46	41.5	− 2.2	68	3	26	22	31	3.84	+2.01	1.28	1.1	10	8	2	20	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	36.6	− 5.2	65	3†	15	23	38	3.47	+1.56	1.40	0.5	11	9	1	20	se.	Roscoe L. Terry
King City	Gentry	1,095	9	.....	.....	..	..	..	..	..	2.77	+1.03	1.05	1.5	11	5	7	18	nw.	John M. Martin
Lexington	Lafayette	688	50	40.4	− 3.8	69	3	22	22	34	4.91	+2.84	1.28	T.	11	9	3	18	sw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	36.4	− 3.0	66	8	15	22	33	2.31	+0.68	0.83	0.7	9	9	2	19	nw.	R. B. Montgomery
Oregon	Holt	1,048	79	38.2	− 2.3	67	8	20	22	31	2.86	+1.13	0.90	3.0	10	9	5	16	ne.	Miss Mina Wright
St. Joseph	Buchanan	967	25	39.4	− 4.2	67	8	21	22	30	2.71	+0.62	1.23	0.8	11	9	2	19	s.	U. S. Weather Bureau
Tarkio	Atchison	916	32	38.0	− 2.1	68	8	17	22	43	3.09	+1.61	1.15	2.0	11	8	5	17	se.	Albert Volker
Trenton	Grundy	822	39	38.7	− 3.5	67	8	14	22	32	3.80	+1.92	0.94	T.	11	8	2	20	ne.	W. H. Estes
Division means	**and extremes**	.....	..	**38.5**	**− 3.5**	**71**	**8**	**13**	**22**	**43**	**3.61**	**+1.65**	**2.34**	**0.8**	**10**	**8**	**4**	**18**	**nw.**	
State means	**and extremes**	.....	..	**42.2**	**− 2.3**	**82**	**10**	**10**	**22†**	**47**	**4.11**	**+1.51**	**3.37**	**0.1**	**10**	**8**	**4**	**18**	**n.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for November 1935

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Northeast Plain																																
Boonville	Missouri	.77	.37	.68	1.32	.50				.55	.10	T.					.10			.10								.75	T.				5.24
Bowling Green	Mississippi	.61	.05		2.40	.71				.80		.57	.03							.02								.69					5.88
Brunswick	Grand	.40	.35	1.56	1.20	.13				.30	.06		.04				.12			.25						.03	.02	1.30	.05				5.81
Canton	Mississippi	.43		.68	1.03	.28				.73	.19	.03	.17		T.		.08			.08							.02	.65					4.37
Clifton Hill	Chariton		.30	.36	2.06					.34	.02	.03	.03			.04			.02	.19						T.	.62	.36					4.37
Columbia	Missouri		.93	.50	2.27					1.36	.73	.01	.01		T.	.02	.01		.01	.05					T.	T.	.77	.03	T.				6.70
Downing	Mississippi		.09	1.02	1.15					.10	.11	.05				T.			T.	.20							.28	.68	T.				3.68
Edina	do	.10	.11	.39	1.38	.30				.19	.07		.05			T.	.06			.08						T.		.84					3.57
Elsberry	do	.67	.29	.03	1.63					1.50	.09	.31	.04			.03				.08							.27	.26					5.20
Farber	do	.57	.40		3.18					.86		.52								.10								.87					6.50
Fayette	Missouri		.92	.31	1.87					.32	.01					.12	T.		T.	.07					T.	T	.74	.20					4.56
Fulton	do	.81	.23	.77	1.95	.93				.95	.15	.09	T.				.04			.04						T.	.83		T.				6.79
Gorin	Mississippi		.04	.48	1.70					.10	T.	.27				T.	T		T.	.16							.76	T.					3.51
Hannibal	do	T.	.02	.49	1.96					.90	.06	.22	T.			.03	.01		T.	.03						.01	.35	.32					4.40
Hermann	Missouri	.97	.06	1.42	.81	.89		.04		.46	.46	.22	.03				.02			.01							.01	.70					6.10
Jefferson City	do	1.10	.08	.92	1.04	.45				.50	.10	.04	.02				.16			.07							.02	.82		T.			5.32
Kahoka	Mississippi	.31			1.60	.50				.15		.25	.20															.75	T	T			3.76
Kirksville	do		.42	1.02	1.40					.09	.03					.03											.50	.74		T.			4.23
LaBelle	do	.17	.09	.64	1.20	.06				.53							.12			.08								.92					3.81
Linneus	Grand	.85	.28	.69	.96	.03				.23	.03	.03	.02			T.	.04			.08								1.21	.03				4.48
Louisiana	Mississippi		.25		2.30					.87																							4.22
Lucerne	Grand		.15	.82	.87	.02				T.	.15	.09	.11				.02			.29						.50	30		T.				3.73
Macon	Chariton	.20	.59	.82	1.15	.06				.56	.10	T.	T				.03			.12								1.21	T.				4.74
Madison	Mississippi	.30	.45	.30	1.80	.48				.60	.10	.05	.06							.18						T.		1.11					5.24
Memphis	do	.45		.96	1.58					T.	.30	T.	T.	T.						.36								.92					4.58
Mexico	do	1.05	.54	.50	2.03	.35		.10		.64	.08	.08	.07				.05			.08								.93					6.50
Milan	Grand	.10	.23	.68	1.40	.13					.11				.08		.03			.45						.01	.92						4.63
Monroe City	Mississippi		.12	.50	2.10					.91		.32	.03			.04			.03								1.30	.12					4.91
New London	do	1.73	.37		1.33						.39		.17			.96	.09			.11						.54	.32						5.79
Palmyra	do	.28	.12	.43	2.00	.42				.92	.25	.12	.14							.11								.64					5.43
Paris	do	.44	.28	.33	1.70	.52				.81	.21	.08					.04			.10								.64					5.35
Perry	do	.80	.42		1.71	.75						.25	.33			.04	.03			.16								.84					5.18
Philadelphia	do	.15	.20	.79	2.00	.10				.92	.24	.10					.14			.09							.69						5.28
St. Charles	Missouri	.06		.19	.11	.42		.06	T.	.45	1.03	.29	.04			.01	.10			.06								.55					3.33
St. Louis	Mississippi	.05	.04		.32			.10		1.32	T.	.30	.01		T.	.04	.01		.01	.12						T.	.38	.49	.02	T.			2.71
St. Louis University*	do	.08	.07	T.	.14			.07		1 51	.02	.28	.01			.05	.01		.01	.09							.40	T.	.01				2.76
Shelbina	do	.09	.13	.65	1.98					.74	.10	.04	.04				.06			.13								.02	T.				4.69
Shelbyville	do	.17	.30	.85	**	2.05				**	.79		.17				.04			.10								.73					5.39
Steffenville	do		.37	.80	1.85					.95	T.	.10	.10			.05			.05	.10						.46	.92						5.28
Troy	do	1.40		.50	.43	1.04		.02		.74	.84	.84	.12				.03			.03								.45	T				6.63
Union	Meramec	.10	T.	.46		.63		.12		.47	.82	.10	.05				.09			.02						T.	.54	.64					3.42
Unionville	Chariton	.57	.08	.75	.90					T.	.12	.08								.43								.54	.02				4.16
Valley Park	Meramec	.15		.12	T.	.33		.14		.20	1.36	.13	.02	T.			.08	T.		.07								1.28					3.09
Warrenton	Mississippi	.62	.77	.08	1.83			.05		1.30	.05	.09	.02			T.	.09			.05						T.	.41	.49	T.				5.65
Kookuk, Ia.	do		.04	1.51	.33					.21	T.	.13	T.		T.	.01	.01		.01	.14					T.	T.	.53	.29	T				2.94
Southeast Lowlands																																
Bragg City	St. Francis					.40		.10			.55	1.25	.12				T.			.17							.15	.02	T.				5.28
Campbell	do	.05				.30	.02	.16		.07	.41	.29								.14							.22	.18					2.92
Cape Girardeau	Mississippi		.05			.30		.06	.02		.48	.61	T	T.						.30							.01	.30					1.96
Caruthersville	do	T.		T.	.60		.20			.60	.30	.30				.05			.13							.10	.43	T.				2.38
Dexter	St. Francis	.01				.45		.03			.29	.51					.08				.28	.02					.20						2.48
Doniphan	Black	.28			.13	.35		.13		.18	.25	.26	.14			.03				.05					.07	.24	.08	.27					2.02
Fisk	St. Francis	.55	T.			.21		.06	T.		.55	.11	.06							.13							.32		T.				2.43
Jackson	Mississippi				.74			.07		1.00		.92	.02			.03	.04			.21							.05	.63	T.	T.			2.35
Marble Hill	do	.10			.36	.67		.10		.40	.50	.32	.32							.02							.10	.47	.02				3.62
Morehouse	do	.12			T.	.45		.15		.04		1.03	.01			.08				.29							.20	.34					3.60
New Madrid	do	.02	.05			.52		.15	.03	.01	.60	.35	.06	.08			.02			.26							.08	.27					2.49
Parma	St. Francis		T.		.22	.25		.13	.05		.45	.48					.07			.17							.15	.32					2.55
Poplar Bluff	Black	.47				.45		.13		T.	**	.60	**	.20													.13	.28					2.23
Sikeston	Mississippi	.13				.40		.13	.04	.65	.35		.03	.02		.09				.19								.27					2.12
Cairo, Ill.	do	.02			.16	.15		.16		.30	.16	.07	.06			.08	T.		T.	.19						.06	.26					2.35
Ozark Plateau																										T	.10	.25	T.			1.70
Arcadia	St. Francis	.70		.05	.32	2.07		.13		.01	1.20	.30	.02	.01		T.	.04			.03							.04	.42	.02				5.39
Birch Tree (near)	Black	.15	.28		.60	.28		.08		.83	.21	.08								.02							.52	.32					3.37
Buffalo	Osage	.56		.50	1.05	.40				.19	.43																	.25	.36				3.74
Caplinger Mills*	do		.16	T.	1.63					1.10	T.	T.	T.			.05										.02	.79	T.	T.				3.75
Crystal City	Mississippi			1.09	.25	.73		.06		.07	1.23	.50		.02			.15			.07								.37					4.54
Cuba	Meramec		.70	1.55		.55					1.20																	.85					4.85
Dean	Neosho	.75	.06		.85		T.	.06		.88	T.	T.				T.	.08		T.							T.		.08					2.76
Eldon	Missouri	1.08	.01	1.27	1.28					.83	.40					.03	.28	.02		.02						.02		.78					6.02
Farmington	St. Francis	1.20	.19		1.55	.50		.14		.75	.33	.05	T.			T.	.03			.02						T.	.08	.22					5.06
Fredericktown	do					.92				.17	1.34		.10	.04						.13								.40	.02				3.12
Galena	White	.46	.06		.47	.74				.12	1.19	.05															.96	.24					4.29
Garber	do	.75			1.29					2.22	.04								T.							.14	.98	.07	.05				5.54
Goodland	Black	.38	.35		1.54	.52				1.60	.71	.11																.38					5.59
Greenville	St. Francis				.60	.46		.11		.73	.24	.25	.23			T.				.38						T.	.15	.35					3.50
Hailey	White	.17				.27	.10			.89						T.										.72	.18						2.33
Koshkonong	Black	.99	.08		.25	.40		.10		.09	.50		.68															.05	.08	.38			3.60
Lakeside	Osage	.81	.24	1.77	1.33	.32		.02		.28	.11	T.					.21		T.							.03	.05	.70	.03	T.			5.90
Lebanon	do	.42				.32				.33	.87		T.	T.			.20									T.	.09	.06	T.				2.29
Leeper	Black	.09			T.	.71		.08	T.		.79	.02	.05	.01						.07						T	.13	.45	.01				2.41
Lockwood	Osage	.22	.07	T.	1.42			.04		.32	.07					.03										T.	.94	.13					3.24
Meramec Park	Meramec	.15	.75	.05	.28	.46					1 76	.44	.05				.16											.80	T.				4.90
Mountain Grove	White	.54			1.12			.05		1.35	.01	.02		T.		.02			T.	.03						.03	.90		T.				4.07
Neosho	Neosho	.05	.02		.90			.05		.55	.11	.03	T.			.05										.13	.89	.08	.06				2.92
Owensville	Gasconade	.12	.24	.64	.10	.69		.14		.48	.68	.12	.08	T.			.07										T	.64					4.00
Ozark Beach	White					34		.09		.60	1.69															.72		.62					4.06
Rolla	Meramec	.20	.08	.90		.85		.08		.30	.76	.06					.17				T.						.06	.75	.05				4.26
St. Thomas (near)	Osage	.45	.09	.98	1.21	.52		T.		.52	.12	T.					.20										.07	.68					4.84
Salem	Meramec	.68	.02		.67			.10		1.36	.36	.06				.04										.23	.98						5.73
Seligman	Neosho	1.00			2.09			.25		1.18																T.	.39	.30					3.98
Seymour (near)	White	.75			1.09		.11			.97	.02	T.	T.			.03	.05		T.							.09	.60						3.71
Springfield	do	.19	T.	.04	.46		.05	.01		1.08	.03	.04	T.	T.		.01	T.		T	T.						.11	.48	T.	T.				2.50
Stover	Missouri	.84		1.22	2.16	.32				.79	.18	.02					.13											.81					6.47
Versailles	Osage	.22	1.23	.07	2.14					.54	.40	.04	.03			.05	.10			.03						.01	.87	T.					5.73
Williamsville	Black	.09			.11	.44		.12			1.06		.24	.06			.06			.11							.13	.32	.01	.01			2.76
Willow Sprgs (near)	White	.51				.76		.17			1.66	.01														.08	.53	.51					4.23
Southwest Plain																																
Appleton City	Osage		1.34	.13	2.48					.84	.20		T.			.44				T.					T	.03	1.05	.10	T.	T.			6.61
Clinton	do		1.38	.38	3.37					.90	.23	.05				.35				.05						.08	1.12	.10	.05				8.06
Concordia	Missouri	.40		1.27	.18	1.40		T.		.11	.03		T.				.24			.22						T		1.35					5.20

Continued on next page

Daily Precipitation for November 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Southwest Plain—Concluded																																
Harrisonville‖‖	Osage	.27	.41	.52	.91	.30		.01		.31	.13					••	.46			.05						.05	.02	1.33	.02				4.79
Joplin*	Neosho	.02	.05	.03	1.29		.05	.03		.12		.05				.12										.11	1.06		.08				3.01
Lamar‖	Neosho	.38	.17	.14	.95	.15		T.			.40	T.					.15									T.	.40	.60					3.34
Lamonte	Missouri		.98	.20	1.65					.60	.03	.04	.01			.32										.15	1.20	.05					5.23
Marshall	do		.36		1.96			.04		.18	.04		T.			.32	.05		T.						T.	.02	.97	.35	T.				4.29
Nevada	Osage		1.27	.07	2.14					1.14	.07	T.	T.			.35									T.	T.	1.30	.08					6.42
Warrensburg	Missouri		1.29	.49	2.00			.03		.39	.05	T.				.15	T.		T.	.02							1.25		T.				5.67
Warsaw	Osage		1.60	.05	2.43					.88	.38					.05	.03									.05	.76	.14	.02				6.39
Waverly ‖‖	Missouri	.28	.57	.54	1.41	.15				.12	.05	T.					.25			.35								1.45	T.				5.17
Northwest Plateau																																
Amity ‖‖	Grand	.75	.20	1.05	.71					••	.09	.02		.07			.15			.45						T.		2.34	.10				5.93
Bethany	do		.22	.40	.35					.07	T.	T.				T.			.13	.37							.98	.26	.05				2.83
Chillicothe ‖‖	do	.45	.30	.94	1.00					.23	.19	T.	.01	.05			.03			.14					T.			1.32	T.	T.			4.66
Conception	Missouri	.02	.40	.72	.14					.07	T.	T.				.03		T.	T.	.31		T.					.87	.45	T.				3.01
Edgerton	do	.03	.39	.39	.54					.21	.06	.02			T.	.38	.01		.05	.25							1.02	.30	T.				3.65
Gallatin ‖	Grand	.31	.30	.48	1.15	.10				.13		.03	.10				.04			.30								1.56	.04				4.54
Grant City	do		.22	1.42	.15					.03	T	.01	.02		T.	T.	T		.01	.26							.65	.59	T.				3.36
Kansas City***	Missouri		.55	.69	.21				T.	.45	.01	T.	T.	T.		.49			.02	.13					T.		1.07	.22	T.				3.84
Kidder ‖‖	Grand	.33	.12	.48	.71					.08	.09					.03	.04			.16								1.40	.03				3.47
King City	Missouri		.25	.45	.02					.01	.04	.11				.02				.31							1.05	.45	.06				2.77
Lexington ‖‖	do	.21	.71	1.00	.89					.27	.03	.05					.23			.22					.02			1.28					4.91
Maryville	do		.16	.57	.16					.03		.01				T.			T	.24							.83	.30	.01				2.31
Oregon	do		.32	.53	.05					.01	T.	.06			T.	.35			.04	.34							.90	.26					2.86
St. Joseph***	do		.31	.17	.24					.01	.04	.02	T.		T.	.34			.28	.03						T.	1.21	.06	T.				2.71
Tarkio	do		1.15	.20						.10	.05	.10			.10	.12			.05	.10							1.05	.07					3.09
Trenton	Grand		.94	.41	.55			T.		••	.19	.09	.05			T.	T.	T		.27					T.		.60	.67	.03				3.80

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. •• Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. ‖‖‖ Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for November 1935
(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	
Lakeside (Osage Dam)	Evaporation	.186	.083	.155	.181	.062	.071	.084	.080	.094	.007	.051	.015	.014	.018	.016	††††	.027	.017	.010	.057	.095	.084	••••	.142	.055	.011	.045	.063	.055	.024	....	1.794
	Mean temperature	46	49	62	48	42	44	48	52	48	58	37	36	38	42	40	40	40	42	43	46	40	34	34	38	42	46	44	36	38	44	..	43.2
	Wind movement	119	69	65	93	111	59	81	54	49	82	97	116	61	73	60	79	55	44	119	86	86	107	63	85	70	63	150	157	116	64	..	2,538

Observations taken at 7.30 a.m. Wind movement corrected to true velocities. For description see April 1932 report.
•••• Daily evaporation included in next measurement; ice cover on tank. †††† −0.08.

Continued from page 51

Thunderstorms.—General on 3d, 4th, 9th; more or less local on 1st, 2d, 10th, 11th, 18th, 19th, 26th, 27th.

Windstorms.—No damaging winds reported.

CHANGE OF LOCATION, ST. LOUIS STATION

On November 26-27, 1935, the Weather Bureau station in St. Louis was removed from the Railway Exchange Building, 7th and Olive streets, to the new Federal Building, about one-half mile west-southwest, at 12th and Market streets, except that the wind instruments were left unchanged on the roof of the Railway Exchange Building where the exposure is more satisfactory than would be possible at the Federal Building. The continuous automatic wind records, however, are registered in the office, as heretofore. The automatic river gage, keeping a continuous record of fluctuations in the level of the Mississippi River, near Eads Bridge, also registers in the office.

The new location affords good exposure for the instruments used for records of temperature, precipitation, sunshine, relative humidity, clouds, etc. Records, it is believed, will be very little affected by the change; for example, although the thermometers are now only 179 feet above ground, or 85 feet lower than at old location, the effects of lower elevation will probably be largely offset by the more open surroundings in the new location. A series of comparative temperature records will be made.

Daily Temperatures for November 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	..	Mean
Northeast Plain																																	
Brunswick	Maximum	54	47	72	69	48	59	63	67	59	60	43	39	44	46	45	44	42	45	53	56	52	39	43	44	46	47	51	51	38	53	..	50.6
	Minimum	28	39	46	34	26	26	40	35	51	39	31	31	38	40	39	38	38	33	36	27	35	17	20	33	39	32	41	28	23	26	..	33.6
Columbia	Maximum	49	52	76	52	48	57	62	66	58	59	36	39	44	44	40	41	41	46	50	57	48	32	42	45	45	45	50	37	35	53	..	48.3
	Minimum	31	41	52	31	27	29	42	37	51	36	33	33	39	40	39	38	36	32	33	30	26	19	21	32	39	41	37	27	24	31	..	34.2
Fayette	Maximum	49	48	74	65	50	55	61	67	57	57	43	39	45	44	43	42	42	43	50	56	48	36	41	44	43	44	48	44	36	52	..	48.9
	Minimum	28	38	46	34	23	23	40	31	43	42	32	32	37	40	38	38	37	30	38	25	35	17	17	30	37	30	42	28	22	23	..	32.5
Hannibal	Maximum	49	57	74	67	47	55	61	64	53	59	43	39	43	43	40	39	39	42	47	54	49	31	38	40	41	42	48	42	33	47	..	47.5
	Minimum	28	37	45	35	26	26	40	38	46	41	33	34	38	40	37	37	35	33	39	25	30	14	17	30	38	35	40	23	15	25	..	32.7
Jefferson City §§	Maximum	48	65	71	44	49	52	60	65	58	65	36	38	44	43	41	41	42	51	52	58	44	33	38	39	44	49	48	32	36	57	..	48.1
	Minimum	31	31	41	44	26	28	32	38	41	51	35	32	34	36	38	36	34	29	36	28	31	20	18	19	36	37	41	31	24	25	..	32.8
Kirksville	Maximum	48	44	67	54	44	54	63	66	59	55	37	38	43	42	41	40	40	41	41	54	48	34	41	38	42	41	46	41	36	50	..	46.3
	Minimum	25	32	42	32	23	22	37	36	45	35	30	30	36	40	37	35	35	33	34	24	29	11	16	28	37	32	39	16	18	25	..	30.5
Louisiana	Maximum	65	70	75	48	46	50	60	58	62	58	52	50	48	43	43	40	40	42	43	52	48	38	39	41	42	45	45	40	35	48	..	48.9
	Minimum	30	36	48	43	30	24	32	34	47	47	36	39	40	40	40	38	38	30	40	28	36	15	13	35	30	42	39	33	19	22	..	34.1
Macon §§	Maximum	49	61	73	39	47	56	62	67	55	48	32	39	44	42	40	40	41	47	45	55	40	30	41	42	42	47	43	29	41	53	..	46.3
	Minimum	25	29	39	37	23	23	30	36	44	47	31	31	32	38	37	36	36	31	34	25	32	12	16	27	34	30	37	27	17	26	..	30.7
Mexico §§	Maximum	49	56	76	41	47	55	62	65	56	59	36	42	43	45	43	42	41	49	49	55	43	31	41	43	43	49	48	35	37	53	..	47.8
	Minimum	27	28	38	40	26	25	29	33	37	47	33	32	33	35	37	35	35	30	32	28	33	15	16	19	31	33	36	28	21	20	..	30.4
St. Louis	Maximum	52	54	76	70	50	54	59	65	55	66	46	41	46	46	42	42	42	46	51	55	48	31	39	44	47	47	56	44	36	58	..	50.3
	Minimum	37	39	50	39	33	33	44	44	47	46	39	38	40	40	38	38	39	34	39	32	30	20	24	28	36	42	43	26	24	29	..	36.4
Unionville §§	Maximum	47	45	61	34	41	50	63	66	65	45	35	39	43	41	40	40	40	43	42	54	38	32	42	42	46	46	43	27	35	47	..	44.4
	Minimum	24	24	36	33	22	21	24	34	36	43	29	27	29	36	36	35	36	35	35	24	26	10	11	17	33	30	30	25	15	16	..	27.7
Warrenton	Maximum	78	50	77	75	49	55	61	66	62	69	52	39	44	43	42	40	39	43	49	56	49	35	40	44	43	43	51	45	38	55	..	51.1
	Minimum	31	37	46	40	29	26	39	40	48	49	36	35	38	40	36	36	36	29	42	27	35	16	18	28	38	37	41	29	23	25	..	34.3
Southeast Lowlands																																	
Campbell	Maximum	71	62	75	77	75	55	56	63	57	74	77	63	52	50	48	44	45	48	55	49	62	52	33	40	50	53	56	57	44	51	..	56.5
	Minimum	46	46	46	49	39	31	42	32	37	54	45	38	40	40	38	38	38	24	42	27	33	26	19	21	26	36	40	34	26	24	..	35.9
Caruthersville	Maximum	74	64	79	79	75	50	53	60	65	76	74	53	46	48	48	45	45	51	60	53	60	55	39	46	53	54	65	62	48	60	..	58.0
	Minimum	50	48	52	63	42	39	46	40	45	55	52	40	42	44	40	39	40	33	46	38	39	30	25	28	34	40	44	37	30	30	..	41.0
Doniphan	Maximum	71	69	75	77	66	56	60	66	54	82	72	57	45	45	46	47	46	46	60	57	62	50	47	47	51	52	48	51	68	54	..	57.6
	Minimum	48	50	45	49	39	30	30	31	43	53	42	39	41	42	41	39	36	23	44	27	30	26	18	29	40	45	35	25	22	30	..	36.4
Jackson	Maximum	76	59	76	74	74	55	51	61	59	74	69	49	46	47	45	42	44	47	54	52	57	39	40	45	50	47	62	57	44	57	..	55.1
	Minimum	42	42	45	61	37	29	41	31	40	50	43	38	40	42	38	37	38	25	42	30	37	24	16	20	28	39	42	36	31	23	..	36.2
Poplar Bluff §§	Maximum	70	74	79	77	55	56	60	62	62	80	65	51	45	48	45	46	49	47	58	57	63	45	43	47	49	55	63	47	45	62	..	56.8
	Minimum	47	48	48	46	35	33	41	40	36	42	41	40	41	43	40	40	30	28	44	29	36	25	17	20	28	39	41	35	26	20	..	36.0
Sikeston	Maximum	79	66	74	79	77	55	52	63	60	76	70	49	46	47	47	45	44	48	60	52	°60	48	39	48	47	50	63	58	42	61	..	56.8
	Minimum	47	44	47	60	40	33	43	34	43	53	48	40	41	44	37	38	39	28	43	33	36	26	20	22	26	39	42	37	27	25	..	37.8
Cairo, Ill	Maximum	66	62	78	77	49	56	50	63	64	74	66	44	48	47	45	44	44	50	59	53	59	37	39	48	49	54	62	45	43	58	..	54.4
	Minimum	46	49	51	49	40	35	44	37	47	55	43	42	42	45	39	39	40	36	44	38	37	27	23	28	35	41	43	36	33	29	..	39.8
Ozark Plateau																																	
Arcadia §§	Maximum	57	64	78	66	55	57	61	66	57	74	46	40	43	45	39	42	44	45	50	55	52	40	41	47	46	48	61	37	46	66	..	52.3
	Minimum	40	39	47	52	34	27	31	31	33	49	44	30	37	39	37	35	37	23	24	29	29	23	12	13	27	37	38	34	27	24	..	32.7
Birch Tree	Maximum	76	68	67	58	54	56	58	65	60	79	72	46	40	42	42	41	49	42	52	59	52	42	43	47	41	47	58	46	48	69	..	54.0
	Minimum	53	41	50	40	28	26	42	35	47	50	38	37	37	37	38	37	37	27	41	27	25	24	15	24	34	41	42	34	24	24	..	35.2
Crystal City §§	Maximum	52	65	79	67	48	55	60	67	60	71	47	42	45	47	47	43	43	53	54	58	49	34	39	49	50	55	61	36	41	..	..	*52.3
	Minimum	39	42	44	58	34	25	39	32	48	52	45	38	39	41	38	38	38	24	32	28	37	22	14	22	33	36	42	34	27	21	..	35.4
Eldon §§	Maximum	51	60	79	45	50	61	62	68	59	63	35	38	38	43	39	40	38	53	52	58	41	37	43	50	43	51	48	34	42	60	..	49.4
	Minimum	32	32	42	45	26	25	35	38	50	35	32	24	38	38	37	37	27	31	29	29	25	17	18	33	37	40	34	25	26	..	..	32.1
Farmington	Maximum	73	59	78	70	53	57	58	65	55	73	67	42	43	44	43	41	40	45	52	55	49	38	40	47	47	43	62	46	44	64	..	53.1
	Minimum	39	42	48	50	33	28	40	32	45	50	41	35	37	40	37	35	36	25	41	29	37	22	14	24	33	42	42	33	27	23	..	35.3
Garber	Maximum	67	69	79	74	55	56	57	67	60	81	73	39	41	42	43	42	44	53	56	62	55	45	45	48	46	48	53	47	55	71	..	55.8
	Minimum	42	47	55	39	28	26	40	30	49	49	34	32	35	38	39	36	38	27	42	23	36	21	19	29	36	39	39	34	22	25	..	35.0
Koshkonong	Maximum	73	66	76	72	55	54	57	64	52	53	69	69	42	42	..	..	51	46	44	55	55	57	49	41	47	44	49	61	47	48	..	b54.9
	Minimum	43	46	49	53	32	33	41	39	34	41	50	39	36	36	..	..	35	36	28	41	27	42	25	17	19	35	37	41	33	25	..	b36.2
Lebanon §§	Maximum	72	75	79	58	49	56	60	65	61	76	48	37	40	42	40	40	45	54	43	56	47	39	48	52	41	52	47	37	47	62	..	52.3
	Minimum	84	34	34	45	25	25	29	37	37	49	35	30	30	35	36	34	34	39	30	27	28	24	21	20	32	35	39	34	23	26	..	32.0
Mountain Grove	Maximum	56	63	74	67	53	55	61	64	59	78	51	37	38	40	40	39	47	45	50	56	52	42	42	48	41	46	52	39	48	65	..	51.6
	Minimum	38	47	54	34	27	30	39	37	46	49	34	31	34	34	34	34	30	29	35	26	36	22	19	25	33	36	35	28	24	30	..	33.7
Neosho	Maximum	48	64	76	71	50	61	61	61	61	74	48	38	41	41	41	41	44	55	54	58	60	43	54	49	48	51	51	47	51	56	..	53.3
	Minimum	35	45	55	33	23	25	43	33	50	46	31	29	33	35	35	34	34	30	40	22	32	20	24	34	36	38	40	35	23	29	..	34.1
Rolla	Maximum	75	53	77	73	59	55	58	65	59	75	67	54	42	42	45	42	41	44	49	56	52	39	40	50	46	45	52	46	38	61	..	53.3
	Minimum	36	45	51	54	29	29	41	36	49	50	34	34	36	37	37	37	34	29	39	29	36	24	17	29	37	39	42	31	25	26	..	35.7
Springfield	Maximum	50	66	74	67	48	54	54	63	60	76	41	38	38	39	39	39	40	48	54	58	47	40	44	46	41	47	51	38	48	62	..	50.3
	Minimum	35	50	58	30	26	34	42	40	48	41	30	30	34	36	34	34	35	34	32	29	31	28	25	31	35	39	36	28	27	38	..	35.0
Southwest Plain																																	
Appleton City	Maximum	52	52	73	70	50	60	60	68	59	58	41	40	40	41	42	43	42	53	53	57	53	39	51	47	43	48	48	43	50	61	..	51.2
	Minimum	31	45	49	32	26	29	44	38	51	41	32	30	37	38	33	34	38	33	34	38	27	37	25	25	34	38	39	41	32	25	33	35.2
Clinton	Maximum	50	50	73	70	50	60	60	68	60	57	42	40	40	42	40	40	41	50	49	58	50	41	50	50	45	45	42	43	45	59	..	50.3
	Minimum	30	42	50	32	24	28	45	40	50	41	32	30	38	38	33	34	37	30	37	26	38	28	22	34	38	40	39	32	25	30	..	34.8
Harrisonville §§	Maximum	48	60	69	35	46	57	61	69	65	47	38	40	41	41	50	42	45	49	40	57	39	36	57	50	45	51	45	35	50	51	..	48.6
	Minimum	27	27	40	34	23	24	31	34	41	47	29	28	29	34	37	32	35	33	39	25	28	27	28	25	35	37	39	30	24	27	..	31.5
Lamar §§	Maximum	52	63	75	44	50	60	59	66	61	62	37	39	41	39	41	42	43	56	47	60	48	44	55	51	45	52	43	38	51	64	..	50.9
	Minimum	33	33	52	42	26	26	33	38	38	51	33	31	31	36	38	33	38	33	43	26	27	24	26	28	37	39	42	37	26	31	..	34.4
Lamonte	Maximum	51	49	74	65	51	62	65	67	61	57	40	39	39	43	41	39	39	49	49	56	46	40	50	46	43	46	49	37	47	49	..	49.6
	Minimum	29	41	48	31	24	26	40	37	49	39	30	30	37	37	35	36	37	30	35	27	34	22	20	33	38	39	39	35	29	23	24	33.2
Marshall	Maximum	47	61	73	68	41	60	64	76	61	59	46	39	43	43	42	40	40	46	43	55	53	36	42	40	43	44	44	45	43	52	..	49.6
	Minimum	31	30	39	32	24	27	43	38	50	40	31	30	37	39	37	36	31	35	36	28	34	19	20	32	35	39	40	34	23	29	..	33.3
Nevada	Maximum	54	55	74	68	49	54	58	68	63	58	40	38	42	41	40	43	43	54	54	58	49	41	53	49	45	49	53	54	49	61	..	51.6
	Minimum	31	46	54	32	25	30	44	40	50	36	31	30	35	38	32	35	37	32	35	27	36	24	28	35	37	40	40	34	25	34	..	35.1
Warrensburg	Maximum	50	48	72	66	49	59	62	67	61	60	40	38	41	42	42	40	41	48	51	57	53	39	50	46	45	45	50	42	48	55	..	50.2
	Minimum	28	39	46	31	26	28	45	41	50	34	30	29	36	37	33	33	38	33	36	27	36	31	32	35	35	40	40	30	24	34	..	34.6
Warsaw	Maximum	54	53	76	73	49	60	62	67	60	59	44	38	42	43	43	43	42	51	55	58	53	38	51	49	47	47	52	45	47	60	..	52.0
	Minimum	32	45	52	35	26	29	46	34	50	44	33	31	37	38	38	34	38	32	39	26	36	29	22	35	37	41	42	33	25	28	..	35.6
Northwest Plateau																																	
Chillicothe §§	Maximum	53	57	71	35	45	57	65	69	57	45	32	41	42	42	41	42	41	47	41	57	43	36	44	47	44	47	41	29	38	53	..	46.7
	Minimum	24	28	39	34	22	24	26	29	36	44	29	28	31	38	35	36	36	35	35	25	31	14	17	23	35	28	32	28	20	26	..	29.6
Grant City	Maximum	45	43	42	42	32	50	50	66	56	56	34	38	39	39	38	38	40	42	42	50	46	32	42	53	46	42	42	34	41	48	..	43.6
	Minimum	23	36	40	28	22	22	29	33	32	33	25	26	35	36	33	35	38	35	30	22	27	13	21	35	38	29	34	23	21	30	..	29.5
Kansas City	Maximum	48	45	68	37	45	58	61	67	64	56	33	37	41	41	40	42	43	50	51	58	46	37	51	51	44	52	50	39	47	55	..	48.6
	Minimum	28	40	37	28	27	29	42	39	52	33	29	30	36	39	32	35	38	38	32	31	34	26	27	42	39	39	36	30	29	36	..	34.4
Kidder §§	Maximum	46	46	65	34	45	55	65	63	52	42	30	38	40	40	39	41	41	47	40	56	39	33	45	49	43	47	41	28	42	52	..	44.8
	Minimum	21	23	36	31	21	24	27	35	38	40	26	26	27	35	33	34	34	34	35	23	27	16	15	20	35	30	32	26	25	26	..	28.5
Lexington §§	Maximum	52	58	69	36	49	59	64	68	62	45	32	41	41	42	39	42	41	50	42	59	42	38	51	50	43	49	43	32	48	58	..	48.0
	Minimum	29	31	40	35	24	27	30	40	42	44	30	29	31	37	37	35	37	35	38	28	32	22	23	24	37	38	40	31	25	29	..	32.7
Maryville	Maximum	44	40	43	37	35	52	63	66	56	44	29	39	37	38	37	40	40	43	42	55	42	32	42	47	54	50	39	47	31	43	50	43.8
	Minimum	21	35	37	25	21	23	33	34	44	29	24	25	31	35	31	34	35	35	29	22	28	15	22	35	36	29	29	23	20	30	..	29.0
Oregon	Maximum	45	42	44	38	38	51	64	67	58	58	33	37	40	39	38	41	46	45	45	56	50	36	50	51	49	44	50	34	46	52	..	46.2
	Minimum	21	36	35	25	21	26	33	41	50	29	23	25	31	35	31	31	35	35	29	25	31	20	24	37	36	32	31	26	23	33	..	30.3
St. Joseph	Maximum	47	43	47	34	39	55	63	67	61	56	31	38	41	40	37	43	41	47	47	58	47	35	50	53	44	51	48	34	46	58	..	46.5
	Minimum	24	39	34	25	24	29	34	44	52	31	26	28	33	37	32	36	38	37	29	28	32	21	25	41	38	34	33	26	26	33	..	32.3
Trenton	Maximum	54	58	60	48	48	48	62	67	60	52	35	39	41	40	42	41	41	44	42	55	48	34	38	42	45	42	40	36	35	52	..	46.3
	Minimum	24	37	43	31	22	23	34	35	47	35	28	28	38	37	36	36	36	36	34	24	30	14	18	32	36	33	36	25	19	27	..	31.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 12-23-35—945.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX DECEMBER 1935 No. 12

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

The month on the average was decidedly colder than normal, due largely to a cold spell of unusual severity that began about the 19th and continued through the remainder of the month except that considerable moderation occurred the last two days in the western half of the State. The lowest temperatures came between the 25th and 30th, when on one or more dates zero or lower was registered almost generally in northern and eastern sections, even as far south as Poplar Bluff. The cold was not quite so severe in the southwestern quarter. These low temperatures relatively were more marked in the southeastern counties than elsewhere. For the State as a whole, the average temperature was slightly lower than for any other December since 1927.

Precipitation occurred on about the usual number of days for December, but the amounts were mostly light and averaged decidedly less than normal. However, precipitation over the State and through the month was fairly well distributed, and ground moisture continued satisfactory. A feature of the snowfall was the relatively heavy amounts that fell in some southeastern counties. It was rather heavy also at a few stations in the northeastern quarter; but, generally speaking, the snowfall was considerably less than normal.

The amount of bright sunshine was somewhat more than normal at most stations. There was no severe windstorm during the month.

Farm work made slow progress at the beginning of December, due largely to the wet ground caused by November rains. Fair progress was made in the third week, but the fourth week was too cold. In some areas considerable corn was still in the fields at the end of December. Wheat made only fair progress during the month and was in fair to good condition.

River stages ranged mostly below normal for the time of year. The severe cold spell of the 19th-30th caused heavy floating ice to appear at unusually early dates in the Mississippi River from Hannibal to Cairo. By the 26th the rivers of the St. Louis district were nearly full of ice, and some blocking was occurring at various points. Ice had diminished somewhat by the 31st.

TEMPERATURE

The monthly mean temperature for the State, 70 stations reporting, was 30.7°, or 3.3° below normal. The highest monthly mean was 35.6° at Caruthersville, and the lowest monthly mean was 24.0° at Unionville. The highest temperature recorded was 66° at Doniphan on the 8th, and the lowest was −11° at Greenville on the 30th. The greatest daily range was 43° at Greenville on the 30th.

PRECIPITATION

The average precipitation for the State, 123 stations reporting, was 1.13 inches, or 0.92 inch less than normal. The greatest local monthly amount was 2.79 inches at Fisk, and the least local monthly amount was 0.21 inch at Conception. The greatest amount in any twenty-four hours was 1.76 inches at Ozark Beach on the 6th. The average number of days with 0.01 inch or more of precipitation was 6. The snowfall for the State averaged 2.8 inches, or 0.7 inch less than normal. The greatest local monthly snowfall was 8.2 inches at Edina.

MISCELLANEOUS PHENOMENA

Fog.—Dense, 6th, 7th, 8th, 13th, 30th.

Halos.—Solar, 2d, 5th, 9th, 13th, 27th; lunar, 2d, 5th, 8th, 9th, 10th, 11th, 13th.

Sleet.—14th, 15th, 16th, 22d, 31st.

Thunderstorms.—None.

Windstorms.—No damaging winds reported.

(Continued on page 59)

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	7 a. m.	12 noon	7 p. m.	
Columbia.....	30.17	30.66	4	29.58	22	8.7	32	nw.	25	81	68	70	59
Kansas City.....	30.17	30.67	26	29.53	22	9.3	35	nw.	25	78	61	68	54
St. Joseph.....	30.16	30.66	26	29.50	22	8.8	32	nw.	22	82	64	70	53
St. Louis.....	30.17	30.64	4	29.58	22	12.0	36	nw.	25	81	70	71	41
Springfield.....	30.17	30.59	4	29.61	22	10.3	27	nw	23	83	66	68	50
Cairo, Ill.....	30.18	30.62	4	29.72	23	9.0	26	nw.	25	82	69	69	48
Keokuk, Iowa..	30.21	30.69	4	29.53	22	8.1	28	nw.	25	80	66	74	45

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation					Number of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888....	35.9	+ 1.9	70	0	2.29	+0.24	3.70	0.70	....	6	..	..	..
1889....	46.8	+12.8	80	2	0.96	−1.09	4.60	0.00	0.1	3	..	..	..
1890....	36.0	+ 2.0	76	− 3	1.03	−1.02	2.65	T.	4.6	3	..	..	..
1891....	39.8	+ 5.8	72	− 1	1.90	−0.15	4.50	0.16	....	6	..	..	..
1892....	29.4	− 4.6	75	−22	2.38	+0.33	6.73	0.51	4.8	6	8	7	16
1893....	35.2	+ 1.2	76	− 7	0.95	−1.10	3.85	0.10	2.7	5	11	11	9
1894....	36.7	+ 2.7	75	− 7	2.13	+0.08	5.79	T.	1.3	5	14	8	9
1895....	34.3	+ 0.3	69	− 8	6.13	+4.08	13.67	1.28	3.4	8	9	8	14
1896....	38.6	+ 4.6	79	− 5	0.93	−1.12	3.90	0.02	T.	3	13	8	10
1897....	29.3	− 4.7	74	−14	2.80	+0.75	6.61	0.76	6.3	7	8	8	15
1898....	28.7	− 5.3	74	−20	1.69	−0.36	3.55	0.50	5.1	5	17	6	8
1899....	30.4	− 3.6	75	−13	2.11	+0.06	6.10	0.50	6.6	9	12	9	10
1900....	35.6	+ 1.6	68	− 3	0.69	−1.36	3.45	0.05	0.6	4	14	8	9
1901....	28.5	− 5.5	71	−29	2.93	+0.88	6.72	0.82	6.9	8	11	7	13
1902....	30.7	− 3.3	68	− 7	2.91	+0.86	9.31	0.94	3.1	8	10	4	17
1903....	30.2	− 3.8	65	−11	1.51	−0.54	4.62	0.13	2.3	5	16	7	8
1904....	32.9	− 1.1	75	−10	1.50	−0.55	4.52	0.12	6.0	5	16	7	8
1905....	33.3	− 0.7	66	− 2	1.45	−0.60	5.02	T.	1.7	4	18	6	7
1906....	36.1	+ 2.1	73	0	2.27	+0.22	8.87	0.56	0.6	8	8	6	17
1907....	37.7	+ 3.7	76	3	1.84	−0.21	4.52	0.14	3.7	7	11	7	13
1908....	38.4	+ 4.4	80	− 4	0.85	−1.20	1.82	0.00	T.	3	16	7	8
1909....	24.9	− 9.1	76	−17	2.86	+0.81	6.17	0.80	7.7	8	12	6	13
1910....	31.2	− 2.8	67	− 5	1.25	−0.80	5.38	0.43	2.4	4	16	5	10
1911....	36.7	+ 2.7	74	−11	2.80	+0.75	4.55	1.27	5.1	7	13	6	12
1912....	36.5	+ 2.5	72	2	0.59	−1.46	2.36	0.00	0.6	3	19	5	7
1913....	38.3	+ 4.3	74	− 3	2.27	+0.22	3.70	1.00	6.6	7	9	4	18
1914....	26.8	− 7.2	68	−18	2.48	+0.43	5.84	0.57	6.6	9	7	5	19
1915....	34.7	+ 0.7	68	−13	2.77	+0.72	9.38	0.35	7.8	6	12	6	13
1916....	31.3	− 2.7	82	−29	1.85	−0.20	7.08	0.19	4.4	6	15	6	10
1917....	25.5	− 8.5	82	−23	0.74	−1.31	2.84	0.07	7.3	5	11	7	13
1918....	40.0	+ 6.0	83	−12	3.21	+1.16	8.86	1.21	7.8	7	13	6	12
1919....	28.5	− 5.5	74	−22	0.69	−1.36	4.30	0.00	0.7	3	12	4	15
1920....	35.6	+ 1.6	77	−10	1.93	−0.12	6.76	0.40	2.3	5	13	7	11
1921....	36.9	+ 2.9	74	− 8	1.86	−0.19	3.74	0.13	1.9	6	13	7	11
1922....	36.3	+ 2.3	75	− 6	2.11	+0.06	5.25	0.00	0.2	6	15	6	10
1923....	41.0	+ 7.0	82	− 4	3.06	+1.01	7.27	0.25	0.8	8	11	6	14
1924....	27.7	− 6.3	80	−28	3.43	+1.38	6.70	0.67	4.6	7	13	6	12
1925....	31.6	− 2.4	69	−10	1.45	−0.60	3.69	0.30	4.8	4	13	7	11
1926....	32.6	− 1.4	75	−12	2.18	+0.13	6.74	0.55	2.4	6	11	5	15
1927....	29.9	− 4.1	74	−11	2.68	+0.63	7.84	0.52	2.9	6	15	5	11
1928....	36.2	+ 2.2	81	0	2.24	+0.19	5.04	0.23	1.4	5	14	6	11
1929....	35.2	+ 1.2	76	− 9	1.66	−0.39	5.46	0.15	3.7	6	13	5	13
1930....	34.2	+ 0.2	70	2	1.23	−0.82	3.78	0.18	1.9	5	15	6	10
1931....	42.7	+ 8.7	80	11	2.57	+0.52	9.32	0.42	1.7	8	11	6	14
1932....	31.2	− 2.8	77	−21	4.46	+2.41	9.87	1.01	5.7	7	12	6	13
1933....	39.1	+ 5.1	78	− 7	1.82	−0.23	4.65	0.76	0.4	5	12	7	12
1934....	31.6	− 2.4	69	− 3	1.66	−0.39	4.12	0.05	5.0	7	10	6	15
1935....	30.7	− 3.3	66	−11	1.13	−0.92	2.79	0.21	2.8	6	11	7	13
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
.....	....	.....	..	....	....	.....	....	....	....	..	..	..	..
Period.	34.0	.....	83	−29	2.05	.....	13.67	0.00	3.5	6	13	6	12

Climatological Data for December 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation, in inches				Number of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall, unmelted	With precip., .01 inch or more	Clear	Partly cloudy	Cloudy		
Northeast Plain																				
Brunswick	Chariton	652	54	31.5	+ 0.9	59	9	− 1	26	30	0.66	−0.99	0.24	2.2	7	15	1	15	sw.	O. K. Beuecke
Clifton Hill	Randolph	731	36	29.8	− 1.2	58	9	− 4	26	31	0.96	−0.67	0.47	2.2	8	12	4	15	sw.	Dr. A. J. Bradsher
Columbia	Boone	784	45	30.6	− 2.6	57	9	0	26	24	0.97	−0.89	0.50	2.8	8	10	10	11	nw.	U. S. Weather Bureau
Downing	Schuyler	876	14	25.6[a]	− 4.0	60	9	−10	26	36	0.89	−0.61	0.20	5.8	9	9[a]	5[a]	16[a]	w.	James Taylor
Elsberry	Lincoln	449	4	28.4[a]	.....	58	9	− 1	26	30	0.70	.....	0.35	1.2	8	4[a]	12[a]	14[a]	sw.	Ray E. Mills
Fayette	Howard	680	55	29.2	− 1.9	57	9	− 1	26†	29	0.96	−0.72	0.55	2.6	6	13	5	13	s.	Harry P. Mason
Fulton	Callaway	818	47	28.8	− 4.7	60	9	− 1	26	39	1.23	−0.80	0.48	2.2	7	12	7	12	nw.	Clyde C. Herring
Gorin	Scotland	700	48	....	.....	..	..	..	..	..	1.17	−0.49	0.36	7.0	6	12	11	8	se.	W. L. Harker
Hannibal	Marion	759	43	27.2	− 4.3	57	9†	− 6	26	39	0.91	−0.63	0.37	3.3	8	10	3	18	nw.	Hannibal Water Dept.
Jefferson City	Cole	557	45	29.4	− 3.5	58	9	2	26†	29	1.12	−0.82	0.26	4.0	6	7	18	6	n.	Mrs. Frank Kliegel
Kirksville	Adair	969	46	27.0	− 2.6	59	9	− 8	26	33	0.98	−0.63	0.33	5.3	5	10	4	17	nw.	Prof. J. S. Stokes
Linneus	Linn	816	3	....	.....	..	..	..	..	..	0.54	.....	0.25	1.5	7	9	2	20	w.	J. Robert Hall
Louisiana	Pike	469	41	27.2	− 4.6	53	9	− 2	26	34	0.70	−1.06	0.50	0.5	4	16	10	5	n.	Stark Bro's Nurseries
Macon	Macon	875	36	26.2	− 3.9	60	9	− 6	26	31	0.86	−0.68	0.30	3.0	6	14	6	11	nw.	W. C. Brown
Mexico	Audrain	800	46	28.1	− 3.7	57	9	− 3	27	33	1.68	−0.32	0.66	4.6	8	13	0	18	se.	Mrs. Abbie Snoddy
Monroe City	Monroe	748	14	....	.....	..	..	..	..	..	0.87	−0 80	0.45	1.2	6	11	10	10	s.	J. S. Conway
St. Charles	St. Charles	520	47	28.0	− 6.9	60	9	1	26†	31	1.88	0.00	0.68	1.9	8	12	6	13	w.	Martin L Comann
St. Louis	**St. Louis City**	568	62	30.3	− 4.6	57	9	2	26	28	1.11	−1.10	0.77	2.8	10	12	2	17	nw.	**Section Center**
St. Louis University	St. Louis City	578	23	30.4	− 3.9	57	9	3	25†	27	1.19	−1.29	0.72	4.2	7	9	3	19	se.	St. Louis University
Shelbina	Shelby	779	42	....	.....	..	..	..	..	..	1.03	−0.60	0.42	3.9	5	..	..	..	...	J. C. Jewett
Steffenville	Lewis	650	37	26.8	− 3.8	58	12	− 9	26	34	1.39	−0.24	0.60	3.0	8	13	2	16	n.	Frank Hall
Unionville	Putnam	1,062	42	24.0	− 3.6	57	9	− 9	27	34	0.56	−1.06	0.24	4.5	5	11	3	17	n.	John H. Schick
Warrenton	Warren	816	53	29.8	− 2.6	57	9	− 2	26	29	1.01	−1.13	0.27	4.0	8	11	5	15	se.	Prof. A. W. Ebeling
Keokuk, Iowa	Lee, Ia	614	64	25.6	− 4.0	56	9	− 7	26	25	1.00	−0 45	0.42	6.8	9	9	4	18	nw.	U. S. Weather Bureau
Division means	**and extremes**	.....	..	**28.2**	**− 3.4**	**60**	**9**	**−10**	**26**	**39**	**1.04**	**−0.77**	**1.60**	**3.4**	**7**	**11**	**6**	**14**	**nw.**	
Southeast Lowlands																				
Campbell	Dunklin	314	9	31.4	− 7.0	60	9	5	27†	32	2.47	−1.48	0.91	3.3	6	9	9	13	n.	Jeff. King
Caruthersville	Pemiscot	265	39	35.6	− 5.3	60	9	9	30	25	1.80	−2.48	0.75	3.5	5	11	3	17	n.	Sam Smith
Doniphan	Ripley	344	31	32.8	− 5.0	66	8	− 2	30	39	2.20	−1.37	0.92	2.7	6	13	6	12	n.	W. W. Martin
Jackson	Cape Girardeau	428	44	31.0	− 5.6	58	8	− 3	30	31	1.60	−1.62	0.66	4.5	7	10	2	19	n.	John G. Putz
Marble Hill	Bollinger	470	40	31.6	− 5.1	64	9	2	30	36	2.35	−1.16	0.70	5.1	7	10	6	15	s.	R. A. DeWitt
Morehouse	New Madrid	289	24	....	.....	..	..	..	..	..	1.92	−1.85	0.78	2.2	6	12	6	13	n.	John A. Spence
Poplar Bluff	Butler	339	30	32.0	− 5.8	63	8	− 1	30	34	2.55	−1.39	1.72	6.0	4	16	0	15	w.	Mrs. J. H. Wolpers
Sikeston	Scott	318	28	33.3	− 4.4	60	8	3	30	29	1.92	−1.93	0.80	2.6	7	8	9	14	n.	John A. LaFont
Cairo, Ill.	Alexander, Ill.	356	63	33.0	− 4.8	59	8	9	30	22	1.99	−1.41	0.84	4.7	9	9	7	15	nw.	U. S Weather Bureau
Division means	**and extremes**	.....	..	**32.6**	**− 5.4**	**66**	**8**	**− 3**	**30**	**39**	**2.14**	**−1.67**	**1.72**	**3.8**	**6**	**11**	**5**	**15**	**n.**	
Ozark Plateau																				
Arcadia	Iron	926	54	29.4	− 4.9	61	9	− 2	30	37	1.49	−1.48	0.92	4.1	7	9	5	17	n.	Arcadia College
Birch Tree(near)	Shannon	1,000	40	33.1	− 3.3	60	1†	5	27†	35	1.83	−0.92	0.69	5.0	4	17	5	9	n.	V. H. Kirkendall
Buffalo	Dallas	1,200	5	....	.....	..	..	..	25	..	0.77	.....	0.51	3.3	3	15	6	10	..	C. M. McCallister
Caplinger Mills	Cedar	750	9	....	.. ...	..	..	..	..	..	0.72	−0.98	0.48	1.0	5	12	7	12	se.	Ozark Utilities Co.
Crystal City	Jefferson	420	0	29.0[e]	.....	64	1	− 3	30	40	1.12	.....	0.86	5.0	6	5[b]	6[b]	18[b]	se.	Pittsburgh Plate Glass Co.
Dean †‡	McDonald	1,000	31	32.1	− 5.4	61	9	7	30	41	1.48	−0 79	0.85	1.8	5	13	5	13	w.	H. E. Dean
Eldon	Miller	934	40	29.9	− 4.4	59	9	2	27	34	1.22	−0.86	0.47	3.0	6	10	15	6	n.	E. H. Shepherd
Farmington	St. Francois	960	24	31.6[e]	− 5.1	59	9	2	26	..	1.00	−1.76	0.55	4.1	6	7[e]	9[e]	12[e]	nw.	Mrs. Edna P. Bleeck
Garber	Taney	950	0	33.9	.....	64	9	6	27	40	1.88	.....	1.50	1.8	4	8	7	16	e.	William H. Durham
Goodland	Iron	1,000	42	30.6	− 4.2	65	1	− 1	30	39	2.17	−0.38	1.45	3.0	4	11	6	14	n.	F. M. Adams
Greenville	Wayne	381	26	29.4	− 6.8	64	9	−11	30	43	1.90	−1.13	0.79	6.0	5	11	5	15	nw.	Wm. E. Shoemake
Hailey	Barry	1,350	10	....	.....	..	..	..	..	..	2.02	−0.30	0.82	4.0	3	15	6	10	se.	A. W. Madison
Koshkonong	Oregon	958	34	33.4	− 5.0	63	1	6	26†	34	2.55	−0.86	1.24	5.2	6	10	1	20	nw.	Geo. R. Hitt
Lebanon	Laclede	1,265	47	32.6‡	− 2.2	58	9	..	..	..	1.05	−1.43	0.53	3.0	4	13	6	12	e.	Mrs. Lou Mulcare
Lockwood	Dade	1,078	29	35.0	− 1.1	59	9	10	26†	28	1.17	−0.89	0.85	1.2	6	16	8	7	nw.	Hubert A. Nieman
Mountain Grove	Wright	1,463	34	31.5	− 3.2	59	9	4	26	34	1.40	−1.08	1.00	4.5	5	15	9	7	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	48	32.4	− 4.7	58	9	9	27	31	1.53	−0.96	1.47	0.5	3	17	6	8	se.	U. S. Fisheries Sta.
Rolla	Phelps	1,099	35	32.2	− 2.4	54	9	3	26	28	0.91	−1.25	0.38	3.8	5	12	3	16	w.	F. H. Lane
Salem	Dent	1,173	31	30.5	− 4.9	52	8†	4	26†	26	1.09	−1.29	0.55	2.0	4	10	9	12	n.	E. E Martin
Seligman	Barry	1,542	34	34.2[a]	− 3.1	58	1	7	26	30	2.09	−0.41	1.21	3.0	4	20[a]	3[a]	7[a]	e.	Floyd E. Fawver
Seymour(near)	Webster	1,642	29	32.3	− 3.1	57	10†	5	26†	37	1.37	−0.94	1.12	1.5	4	8	13	10	nw.	A. L. Hailey
Springfield	Greene	1,324	47	33.0	− 3.2	57	9	7	26	24	0.62	−1.69	0.46	1.4	6	10	12	9	se.	U. S. Weather Bureau
Versailles	Morgan	1,037	3	32.2	.....	60	9†	0	26	38	1.31	−0.56	0.79	2.0	8	12	7	12	nw.	I. M. Wilson
Division means	**and extremes**	.....	..	**31.9**	**− 3.9**	**65**	**1**	**−11**	**30**	**43**	**1.39**	**−1.06**	**1.76**	**3.1**	**5**	**12**	**7**	**12**	**nw.**	
Southwest Plain																				
Appleton City	St. Clair	853	40	33.6	− 1.0	56	9†	6	25	27	0.34	−1.32	0.22	0.7	8	8	16	7	nw.	W. G Bigelow
Clinton	Henry	765	42	32.5	− 2.2	55	9	5	25	25	0.60	−1.27	0.37	1.2	7	10	14	7	sw.	A. E. Derwent, M. D.
Concordia	Lafayette	784	20	....	.....	..	..	..	..	..	0.31	−1.55	0.13	1.8	6	14	4	13	n.	Mrs. W. H. Stratman
Harrisonville	Cass	904	57	30.2	− 1.1	57	8	2	25	30	0.24	−1.45	0.14	T.	3	11	8	12	sw.	John H. Patterson
Lamar	Barton	980	47	32.8	− 2.4	59	13	10	26	31	1.15	−0.83	0.85	2.0	4	16	6	9	nw.	Jesse A. Mann
Lamonte	Pettis	867	34	32.6	− 1.3	59	11	0	26	42	1.42	−0.33	0.28	2.8	7	2	19	10	nw.	J. E. Wheeler
Marshall	Saline	779	48	31.8	− 0.1	53	8†	1	26	33	0 28	−1.40	0.08	3.0	4	13	8	10	sw.	Sec. Chamber of Commerce
Nevada	Vernon	862	42	33.9	− 1.4	57	7†	8	25	24	0.43	−1.40	0.34	1.0	3	14	6	11	nw.	George A. Kaupp
Warrensburg	Johnson	878	48	31.0[1]	− 2.4	56	13	2	26	25	0.50	−1.26	0.25	2.5	3	12	8	11	sw.	E. A. Markey
Warsaw	Benton	687	34	33.2	− 2.5	59	9	4	27	30	0.81	−1.47	0.60	2.0	5	14	3	14	w.	Everett Martin
Division means	**and extremes**	.....	..	**32.4**	**− 1.6**	**59**	**9†**	**0**	**26**	**42**	**0.65**	**−1.16**	**0.85**	**1.7**	**5**	**11**	**9**	**11**	**nw.**	
Northwest Plateau																				
Bethany	Harrison	916	40	28.4	− 1.7	55	8†	− 5	26	28	0.55	−0.70	0.18	2.0	6	13	6	12	nw.	A. S. Cumming
Chillicothe	Livingston	779	26	27.6	− 5.3	61	9	− 4	26†	31	0.39	−1.07	0.26	1.0	6	12	2	17	nw.	Wm. J. Olenhouse
Conception	Nodaway	980	46	28.2	− 1.0	54	7	− 5	26	26	0.21	−0.73	0.08	1.5	4	7	12	12	nw.	Fr. Adelhelm Hess
Edgerton	Platte	856	15	31.1	+ 0.7	56	8†	− 4	27	32	0.50	−0.71	0.13	1.5	10	17	2	12	n	Fred L. Stiff
Grant City	Worth	1,134	31	27.1	− 0.9	50	8	− 6	26	27	0.34	−0.73	0.14	2.0	7	8	10	13	sw.	Howard Rybolt
Kansas City	Jackson	963	46	32.2	− 0.3	57	8	3	25	25	0.25	−1.08	0.13	1.0	6	11	7	13	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,020	43	26.6	− 2.6	57	9	− 3	25†	28	0.28	−0.98	0.10	1.6	5	12	8	11	nw.	Roscoe L. Terry
King City	Gentry	1,095	9	....	.....	..	..	..	..	..	0.35	−0.72	0 24	1.1	6	8	10	13	se.	John M. Martin
Lexington	Lafayette	688	50	30.8	− 1.2	59	9	2	25†	28	0.56	−1.22	0.23	1.9	9	14	6	11	nw.	Miss Carrie Loomis
Maryville	Nodaway	1,169	45	27.4	+ 0.6	52	8	− 3	25†	24	0.31	−0.69	0.11	2.4	6	13	3	15	nw.	R. B. Montgomery
Oregon	Holt	1,048	79	29.8	+ 1.1	55	8	− 2	25	28	0.40	−0.97	0.20	1.5	5	14	6	11	nw	Miss Mina Wright
St. Joseph	Buchanan	967	25	30.6	− 0.2	56	7	0	25	25	0.25	−0.85	0.13	0.8	7	11	8	12	nw.	U. S. Weather Bureau
Tarkio	Atchison	916	32	27.5	+ 1.1	55	8	− 2	26	24	0.35	−0.53	0.30	0.5	3	8	10	13	nw.	Albert Volker
Trenton	Grundy	822	39	28.8	− 0.8	57	9	− 3	26	31	0.50	−0.89	0.30	1.4	9	8	8	15	n.	W. H. Estes
Division means	**and extremes**	.....	..	**28.9**	**− 0.8**	**61**	**9**	**− 6**	**26**	**32**	**0.37**	**−0.86**	**0.30**	**1.4**	**6**	**11**	**7**	**13**	**nw.**	
State means	**and extremes**	.....	..	**30.7**	**− 3.3**	**66**	**8**	**−11**	**30**	**43**	**1.13**	**−0.92**	**1.76**	**2.8**	**6**	**11**	**7**	**13**	**nw.**	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters [a], [b], [c], appearing in the table indicate number of days missing; for example, [b], represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office address of Dean is Anderson. ¶ Estimated. ‡ Partially estimated.

Daily Precipitation for December 1935

Stations	Drainage-basins	Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northeast Plain																																	
Boonville	Missouri						.38	.23								.18								.04		.08			.03	.04			0.98
Bowling Green	Mississippi							.27								.53		.03						.04		.03					.13		1.03
Brunswick	Grand						.24	.17								.06							T.	.03		.05			.01		.10		0.66
Canton	Mississippi						.02	.19								.61		.08						.09		.10							1.09
Clifton Hill	Chariton						.47	.04	.01						.28	T.	T.						.02	T.		.06			.03		.05		0.96
Columbia***	Missouri					.04	.25	.01							.50	T.	T.			T.		T.	.05	T.	T	.06		.04	.02		T.		0.97
Downing	Mississippi					.05	.20	.02							.14		.17						.08	T	T.	.18			.03		.02		0.89
Edina	....do						.04	.13								.22	T.							.20		.40			T.			T.	0.99
Elsberry	....do						.15	.20							.20	.03	T.						••	.05		.02			T.	.05			0.70
Farber	....do					.30	.25									.56										.20			.10				1.41
Fayette	Missouri						.55	T.							.15	T.	T.						.02			.20			.02	.02			0.96
Fulton	....do						.35	.16								.48		T.						.03		.05			.10	.06			1.23
Gorin	Mississippi	T.				T.	.19								.18		.36					.15			T.	.15			.14				1.17
Hannibal	....do						.25	.12							.35	.02	.01			T.			.04			.11			.01	T.	T.		0.91
Hermann	Missouri						.13	.23								.40		T.						.05		.08			.07	.07			1.03
Jefferson City	....do						.24	.22								.26	T.									.10			.20	.10			1.12
Kahoka	Mississippi							1.60								.45								.17	T.	.15				.20			2.57
Kirksville	....do						.33								.29	.06							.10			.20							0.98
LaBelle	....do						.03	.19								.32		.03						.09		.16			.02				0.84
Linneus	Grand						.25	.06								.04		T.						.06	T.	.10			.02		.01		0.54
Louisiana	Mississippi.						.15								.45	.05										.05		T.					0.70
Lucerne	Grand						.28	.09								.04								.20		.05				.11			0.77
Macon	Chariton						.23	.30							.03	.11								.04		.15			T.				0.86
Madison	Mississippi						.28	.33								.54								.05		.20				.10			1.50
Memphis	....do						T	T.	.10							.65										.10				T	T.		0.85
Mexico	....do						.29	.22	.05							.66								.10		.25			.05	.06	T.		1.68
Milan	Grand					.14	.10	.06	.08	.04					.08	.04								.08		.33					T.		0.95
Monroe City	Mississippi						.31	.07							.36	.09										.03			.01				0.87
New London	....do						.37	.16	T.							.56		T.						.17		.21							1.47
Palmyra	....do						.04	.23								.30								.05		.10			.02		T.		0.74
Paris	....do						.24	.13								.41								.06		.06				.10			1.00
Perry	....do						.18	.14								.40	.01							.04		.03			T.				0.80
Philadelphia	....do						.06	.26								.10	T.									.10					T.		0.52
St. Charles	Missouri					.06	.68	.68	.02							.08		T.					T.	.02		.30		T.	.04				1.88
St. Louis**	Mississippi						.36	.41	.01						.05	T.	.03			T		T.	.06	T.	T.	.10		.02	.06	.01			1.11
St. Louis University*	....do						.35	.37	T.						.05		T.			T.		T.	.05			.20		.08	T.	.09			1.19
Shelbina	....do						.13	.21								.42										.26			.01				1.03
Shelbyville	....do						••	.35								.43								.05		.25							1.08
Steffenville	....do						.35	.05							.60	.05	.10						.07			.10			.07				1.39
Troy	....do						T	.31								.22		.06						.02		.04	T.		.02	.01			0.68
Union	Meramec						.10	.62	.02							.06								T.		.07			.09	.05			1.01
Unionville	Chariton						.24									.10								.08		.10					.04		0.56
Valley Park	Meramec						.03	.64		T.						.12	T	T.			T		T.	T.		.14			.08	.06			1.07
Warrenton	Mississippi						.22	.12							.24	.03	T						T.	.10		.10			.10	.10			1.01
Keokuk, Ia.***	....do	T.				.01	.17	..	T.	T.					.42	T.	.01			T.			.14		.17	.05		T.	.02		.01		1.00
Southeast Lowlands																																	
Bragg City	St. Francis							.90	.30	.25																			.12	.15			1.72
Campbell	....do						.36	.91	.70						.03														.05	.42			2.47
Cape Girardeau	Mississippi						.11	.72	.12	.06						.03								T.		.06	T.		.09	.41			1.60
Caruthersville	....do					.10	.60	.75														T.							.20	.15			1.80
Dexter	St. Francis						.22	.79	1.20	.05										.02										.01	.02			2.31
Doniphan	Black						.90	.92	.05						.03							T.	.05			T.		T.	T.	.25		T.	2.20
Fisk	St. Francis						.41	.81	.97	.14					.07														T.	.39			2.79
Jackson	Mississippi						.35	.66	.07						.07					T.				T.		.05			.15	.25			1.60
Marble Hill	....do						.44	.70	.10						.08											.06			.32	.65			2.35
Morehouse	....do						.31	.78	.68						.02								T.						.02	.11			1.92
New Madrid	....do						.12	.71	.60	.70						.02								T.				.01	.10	.40			2.66
Parma	St. Francis							.95	.79																				.05	.45			2.24
Poplar Bluff	Black							1.72	.23																	T.			.05	.55			2.55
Sikeston	Mississippi						.30	.80	.34	.18					.03													.02	.25			1.92
Cairo, Ill ***	..do						.15	.53	.80		T.				.04		T.			T			.01			.03		.07	.21	.15	T.		1.99
Ozark Plateau																																	
Arcadia	St. Francis						.20	.92	.02							T.					T.		T.	.03		.01			.09	.22			1.49
Birch Tree (near)	Black						.64	.69																					.10	.40			1.83
Buffalo	Osage						.51																						.20	.06			0.77
Caplinger Mills*	....do					.48	.06																.13			T.			.02	.03			0.72
Crystal City	Mississippi						.13	.73	.01														T.	T.	.07				.08	.10			1.12
Cuba	Meramec						••	.73								.02								T.		.06			.08	.05			‡0.94
Dean	Neosho					.35	.85	.04								T.													.09	.15		T.	1.48
Eldon	Missouri						.36	.47								.16								.01		.12			.10		T.		1.22
Farmington	St. Francis						.04	.55	.01						T.					T.			T.			.04			.35	.01			1.00
Fredericktown	....do						.24	.88							.03									T.		.04		.15	.20				1.54
Galena	White						1.05	.06																						.25			1.36
Garber	....do					.25	1.50	T.							T.													.07		.06			1.88
Goodland	Black						1.45	.42																						.20	.10			2.17
Greenville	St. Francis						.55	.79	.05																					.10	.41			1.90
Hailey	White					T.	.80								.82														.40	T.			2.02
Koshkonong	Black						1.24	.90		.05																			.01	.15	.20			2.55
Lakeside	Osage						.39	.24	T.							.11	T.				T.			.02		.02			.07	.05			0.90
Lebanon	....do						.53	T.																									1.05
Leeper	Black						.36	1.03	.01							.01								.03		T.			••	.52			1.71
Lockwood	Osage					.20	.65		.14						T.								.05					.04	.23			1.17
Meramec Park	Meramec						.05	.60								.06								.03		.09			.07	.06	T.		0.97
Mountain Grove	White						1.00	.05	T.						T.								.03			T.			.09	.05			1.40
Neosho	Neosho						1.47		.01																			.20	.12				1.53
Owensville	Gasconade						.25	.18																T.		T.		.05	T.		T.	T.	0.58
Ozark Beach	White						1.76	.25																					.08	.07			2.28
Rolla	Meramec						.38	.35								T.					T.			T.		.03			.15	.12			0.91
St. Thomas (near)	Osage						.26	.21																					.08	.07			0.62
Salem	Meramec						.55	.28							T.								T.			T.		.12		.14			1.09
Seligman	Neosho					.58	1.21								T.													.20		.10			2.09
Seymour (near)	White						1.12	.10																				.05		.10			1.37
Springfield***	....do					.15	.31	T.	T.						T.	T.							.01			.04		.08	.03	T.			0.62
Stover	Missouri						.41	.04								.11											T.				.11		0.67
Versailles	Osage						.79	.05							.26								.04			.03		.03	.05	.06			1.31
Williamsville	Black						.47	1.05	.03							.06	.01							.02					.02	.37			2.03
Willow Sprgs. (near)	White						.90	1.02	.02															.02		.01			.08	.30			2.35
Southwest Plain																																	
Appleton City	Osage					.01	.21	T.								.02							.02			.02		.02	.03	.01	T.		0.34
Clinton	....do						.37	.05	.03															.05	.02			.04	.04				0.60
Concordia	Missouri						.13									.03								.04		.06	T.		.03	.02			0.31
Harrisonville	Osage						.14	.03								.07												T.					0.24

Continued on next page

Daily Precipitation for December 1935—Continued from preceding page

Stations	Drainage-basins	Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Southwest Plain—Concluded																																	
Joplin*	Neosho					.63	.35	.09	.20																				.08	.02		T.	1.37
Lamar ‖	Neosho						.85	.05								.05													T.	.20	T.		1.15
Lamonte	Missouri					.25	.28									.25							.15		T.	.20		.19	.10				1.42
Marshall	do					T.		T								.05							T.			.08		.08	.07				0.28
Nevada	Osage				T.	T.	.34																T.					.04		.05			0.43
Warrensburg	Missouri					T.	T.	.25	T.	T.																.05		.20					0.50
Warsaw	Osage						.60								.05								T.			.08			.04	.04			0.81
Waverly ‖	Missouri						.19	.05	T.															.05		.02			.02	.02			0.35
Northwest Plateau																																	
Amity ‖	Grand						.21	.10						T.		.03				T.				.01		.02			T.		T.		0.37
Bethany	do					.05	.15								.18	T.							.08		.07	.02					T.		0.55
Chillicothe ‖	do						.26	.02									T.							.02		.03			.04		.02		0.39
Conception	Missouri					T.	.06								T.	T.				T.			.03	T.	T.	.08						.04	0.21
Edgerton	do					.13	.09	.03			T.				T	.06	T.			T			T.		.03	.06		.01	.01	T.	.02	.06	0.50
Gallatin ‖	Grand						.18	.02								.05										.10							0.35
Grant City	do					.02	.14	T.			T.				T.	T.							.02	T.	.05	.08			.01			.02	0.34
Kansas City***	Missouri					.13	T.	T.		T.					.05					T.			.02		.01	.02		T	.02	T.	T.	T.	0.25
Kidder ‖	Grand						.10	.04								.04										.05		.05					0.28
King City	Missouri					.01	.23								T.	.01							.02			.06			T.		T.	.02	0.35
Lexington ‖	do						.18	.05	.02							.05								.06		.10			.04	.04	.02		0.56
Maryville	do					T.	.06									T.			T.				.10		.01	.10			T.		.02	.02	0.31
Oregon	do					.03	.12								T.	.05							T.		.05	.15		T.					0.40
St. Joseph***	do	T.				.11	.02	T.		T.					.03	T.				T.			.03	T.	.04	.01		T	T.	T.		.01	0.25
Tarkio	do					.15	.15										T.						T.		T.	.05							0 35
Trenton	Grand					.02	.30	.02							.01	.05	T.			T.			.01	T.	.05	.02		T.		T.	.02	T.	0.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
*** Regular U. S. Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ** Precipitation in the next following measurement; separate dates of fall not recorded. * Precipitation is for 24-hour period, midnight to midnight ¶ Estimated. ‡ Partially estimated. |||||| Incomplete.

Daily Evaporation (inches), Mean Temperature (F°), and Wind Movement (miles) for December 1935

(See precipitation data in table on preceding page)

Station	Data	Day of month																														Monthly
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Lakeside (Osage Dam)	Evaporation	.058	.063	.068	.042	.029	.043	††††	.002	.037	.050	.055	.048	.041	.113	.049	.030	.021	.069	.072	****	****	****	.234										1.497
	Mean temperature	36	32	34	34	36	37	48	50	43	34	35	40	42	42	38	38	38	38	32	20	24	33	34	24	13	14	16	17	24	30	33	32.5
	Wind movement	97	87	45	78	57	81	78	38	44	86	68	51	41	125	105	89	53	84	95	160	97	77	96	135	117	112	97	66	71	39	48	2,517

Observations taken at 7.30 a. m. Wind movement corrected to true velocities. For description see April 1932 report.
**** Daily evaporation included in next measurement; ice cover on tank. †††† −.013.

Continued from page 56

ERRATA

October 1935, page 47: Mean temperature at Columbia should be 56.5; departure should be −0.1; page 50: minimum temperature at Columbia on 10th should be 44; mean minimum temperature at Columbia should be 46.7.

November 1935, page 52: Total precipitation at Columbia should be 6.71; departure should be +4.51; number of days with precipitation 0.01 inch or more should be 14; page 53: amount of precipitation at Columbia on 7th should be .01; total amount should be 6.71.

Daily Temperatures for December 1935

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain																																	
Brunswick..	Maximum...	48	39	43	40	45	45	52	55	59	51	36	55	54	47	43	39	47	45	49	24	28	46	51	29	25	17	18	21	30	42	39	40.7
	Minimum ...	30	15	28	19	24	39	45	38	32	21	23	27	31	36	34	33	24	25	22	7	14	17	26	10	1	− 1	2	16	10	20	23	22.3
Columbia.	Maximum...	36	39	42	41	48	46	54	51	57	44	37	50	47	42	37	37	49	45	36	22	27	41	38	27	25	16	20	22	29	41	40	38 3
	Minimum ...	24	16	27	23	28	39	46	39	33	21	22	29	31	36	35	28	27	28	18	7	16	22	17	11	2	0	6	16	12	21	28	22.8
Fayette	Maximum...	41	39	42	39	46	46	54	51	57	45	37	49	45	41	40	38	45	43	37	24	27	38	38	27	26	16	19	22	27	40	41	38.1
	Minimum ...	29	12	23	19	21	38	44	38	28	20	19	23	30	25	33	33	21	25	23	6	11	15	25	9	1	− 1	− 1	16	10	12	18	20.2
Hannibal	Maximum...	39	35	39	36	45	41	52	50	57	57	30	45	37	35	36	35	43	43	36	18	23	34	31	23	23	14	14	20	25	34	35	35.0
	Minimum ...	22	12	29	17	26	35	39	44	34	18	18	26	26	32	32	31	27	25	17	1	10	21	22	3	− 2	− 6	− 2	11	5	11	17	19.4
Jefferson City §§	Maximum...	36	40	44	39	49	47	54	47	58	33	38	51	51	44	38	38	49	43	32	18	25	39	35	27	9	18	19	21	33	43	40	37.4
	Minimum ...	29	15	16	25	25	28	39	45	34	24	21	22	28	30	34	34	26	27	26	9	9	14	25	13	3	2	2	5	14	16	25	21.5
Kirksville.	Maximum...	40	36	39	38	44	44	49	55	59	48	34	51	39	34	36	35	43	43	39	20	25	33	36	23	22	17	13	18	27	32	38	35.8
	Minimum ...	23	11	24	23	24	36	40	35	32	15	17	23	27	30	33	31	24	27	16	0	10	16	20	− 1	− 4	− 8	− 2	9	1	15	16	18.2
Louisiana	Maximum...	33	30	40	42	40	40	50	52	53	36	32	50	36	36	36	35	44	41	34	22	25	30	31	30	15	12	15	20	25	34	36	34.0
	Minimum ...	30	13	22	29	28	37	37	47	33	24	15	28	28	33	33	32	27	30	20	4	9	20	15	7	0	− 2	0	13	10	0	9	20.4
Macon §§	Maximum...	33	38	42	39	46	48	51	53	60	33	34	52	41	35	37	36	44	44	26	20	28	36	27	23	10	15	14	18	28	38	40	35.1
	Minimum ...	28	11	13	20	24	31	38	40	32	16	16	21	28	29	32	32	24	25	22	2	4	12	22	2	− 3	− 6	− 5	3	1	8	15	17.3
Mexico §§	Maximum...	54	39	42	38	50	47	54	52	57	39	35	50	41	40	37	36	46	44	30	20	33	38	30	25	13	16	18	20	29	40	40	37.2
	Minimum ...	28	12	14	18	19	28	37	45	33	30	29	24	25	28	32	32	25	25	24	5	5	17	18	6	− 1	− 2	− 3	1	8	7	20	19.0
St. Louis	Maximum...	36	34	42	36	49	43	53	55	57	50	35	41	38	43	43	36	48	44	37	18	23	38	39	30	31	15	19	22	25	32	34	37.0
	Minimum ...	22	21	28	20	28	36	42	45	40	25	23	31	29	34	34	34	30	30	15	8	14	22	24	12	3	2	5	16	18	17	24	23.6
Unionville §§	Maximum...	31	32	37	37	39	46	48	54	57	34	36	52	37	36	36	34	41	43	21	16	20	36	24	21	7	13	13	18	25	34	41	32.9
	Minimum ...	23	11	11	18	17	30	38	33	31	14	15	20	22	28	31	31	23	23	18	0	− 1	15	19	− 1	− 2	− 8	− 9	0	0	0	20	15.2
Warrenton	Maximum...	51	38	42	38	53	49	53	53	57	51	37	46	44	38	41	37	48	45	43	24	23	38	37	27	27	15	18	18	27	33	36	38.3
	Minimum ...	26	13	25	17	25	36	42	43	35	22	18	25	25	32	33	32	26	26	24	6	11	21	25	8	0	− 2	0	15	13	13	21	21.2
Southeast Lowlands																																	
Campbell	Maximum...	55	40	40	38	40	46	57	56	60	54	41	38	42	47	44	43	52	50	40	36	35	42	45	39	33	30	26	24	30	29	41	41.7
	Minimum ...	23	11	11	22	15	32	42	42	29	37	20	26	22	27	30	32	24	25	27	12	10	17	23	18	13	14	5	11	8	5	20	21.1
Caruthersville	Maximum...	57	42	40	40	48	51	56	58	60	56	41	43	47	48	49	43	51	51	47	37	29	38	45	38	31	28	28	27	29	34	38	42.9
	Minimum ...	34	20	23	28	23	37	48	53	36	41	26	30	26	29	38	36	28	32	29	25	17	26	33	23	25	14	21	20	20	9	24	28.2
Doniphan	Maximum...	57	41	45	42	43	46	51	66	65	51	46	42	48	53	50	51	54	51	43	38	30	44	46	38	35	30	28	26	30	36	37	44.0
	Minimum ...	32	16	15	23	16	36	41	43	26	21	18	19	19	34	40	36	19	26	22	16	11	25	22	15	18	11	5	20	15	− 2	15	21.7
Jackson	Maximum...	53	36	39	38	45	44	54	58	57	54	37	42	46	42	40	48	46	47	44	32	25	35	38	33	29	24	24	25	27	28	36	39.5
	Minimum ...	29	20	20	21	17	30	42	51	28	33	19	21	21	31	35	30	28	25	27	13	9	24	31	17	13	7	5	18	18	− 3	13	22.4
Poplar Bluff	Maximum...	50	40	40	43	45	46	54	63	61	51	48	48	48	45	43	40	52	54	41	34	32	43	45	36	33	32	27	24	30	33	37	42.5
	Minimum ...	27	16	15	19	17	36	36	40	29	24	20	25	20	31	39	35	22	25	27	11	11	26	27	20	15	11	7	20	4	− 1	12	21.5
Sikeston	Maximum...	58	43	39	39	48	47	54	60	59	59	43	44	44	44	40	51	49	48	35	27	41	41	37	29	28	24	24	29	28	31	37	41.8
	Minimum ...	30	18	21	24	19	35	45	52	34	39	22	27	23	30	35	35	27	28	27	15	12	25	32	19	19	12	7	19	16	3	18	24.8
Cairo, Ill.	Maximum...	43	36	40	38	46	53	56	59	58	47	38	42	48	47	45	39	48	48	37	24	27	35	39	30	29	24	26	25	28	31	37	39.5
	Minimum ...	24	23	25	25	26	38	50	48	37	31	24	29	27	32	39	35	31	33	24	15	15	25	30	22	13	11	12	20	18	9	26	26.4
Ozark Plateau																																	
Arcadia §§	Maximum...	44	41	47	42	47	45	53	59	61	43	41	47	47	41	38	38	52	49	32	25	27	39	33	34	16	23	24	22	29	35	34	39.0
	Minimum ...	29	15	15	19	19	27	36	44	31	32	17	17	19	20	33	33	26	26	30	11	6	15	25	15	14	4	4	8	16	− 2	7	19.7
Birch Tree	Maximum...	60	43	43	45	49	43	52	58	60	47	43	60	47	49	50	41	50	50	48	31	27	43	40	35	33	21	27	22	27	40	40	42.7
	Minimum ...	29	15	24	26	20	36	41	43	29	35	22	26	27	36	35	35	20	24	29	12	11	24	30	16	15	7	5	17	14	5	22	23.5
Crystal City §§	Maximum...	64	39	46	39	53	47	..	59	61	39	37	44	43	..	45	40	52	47	32	22	27	41	..	..	32	18	21	23	29	33	38	[d]39.7
	Minimum ...	..	11	17	21	13	30	38	..	29	30	18	24	21	23	..	33	25	24	26	10	9	16	26	..	..	3	− 1	5	18	− 3	11	[e]18.3
Eldon §§	Maximum...	41	43	45	43	50	48	52	54	59	32	43	55	52	48	38	35	50	48	32	20	34	40	36	29	12	12	18	22	28	45	41	38.9
	Minimum ...	29	15	14	20	19	25	39	45	34	27	21	21	25	29	34	34	24	25	28	10	9	19	22	14	6	3	2	5	15	12	24	20.9
Farmington	Maximum...	55	39	..	47	48	41	53	57	59	51	38	43	46	40	41	38	50	47	42	28	25	40	39	30	30	19	24	23	27	..	..	[c]40.0
	Minimum ...	28	13	..	19	22	35	41	47	37	29	18	31	21	32	35	32	26	29	27	10	8	23	28	14	8	2	4	17	16	..	..	[c]23.3
Garber	Maximum...	61	46	56	47	42	50	57	60	64	56	45	53	57	53	46	46	52	51	44	33	33	51	48	37	35	20	24	24	26	48	40	45.3
	Minimum ...	30	12	16	18	20	36	45	40	29	35	20	23	20	32	35	33	18	26	28	13	11	18	30	12	16	8	6	17	15	9	25	22.5
Koshkonong	Maximum...	63	42	48	44	43	49	53	55	59	53	40	47	48	54	53	40	49	50	45	45	33	42	42	37	34	21	23	22	27	37	37	43.1
	Minimum...	29	16	21	24	23	34	42	40	36	35	22	23	25	36	36	34	25	30	11	22	13	23	30	16	16	6	6	16	13	14	21	23.8
Lebanon §§	Maximum...	43	44	50	43	48	50	53	55	58	40	46	54	55	50	41	40	49	48	32	23	36	42	36	24	20	22	24	23	30	45	42	40.8
	Minimum ...	35	20	21	28	28	35	43	50	30	30	20	23	30	39	40	36	28	30	30	..	..	..	..	..	..	..	..	..	..	..	..	....
Mountain Grove	Maximum...	42	44	51	46	42	44	50	55	59	49	47	53	48	48	39	42	48	48	35	25	29	40	41	32	32	23	25	21	28	46	35	40.9
	Minimum ...	22	15	23	21	23	33	41	45	35	31	23	24	26	36	32	27	24	28	20	9	13	19	25	13	7	4	5	15	11	12	23	22.1
Neosho §§	Maximum...	38	43	51	49	45	53	55	51	58	38	43	51	53	45	44	43	48	46	35	32	40	49	38	35	20	22	26	26	28	40	38	41.4
	Minimum ...	24	12	25	24	27	23	45	42	31	32	30	23	26	35	34	24	20	27	25	13	15	18	30	15	15	10	9	20	16	12	28	23.5
Rolla	Maximum...	51	39	47	47	50	46	51	53	54	49	42	49	48	47	48	38	47	45	44	30	28	40	39	32	29	16	25	23	25	39	41	40.7
	Minimum ...	28	15	27	24	24	36	44	46	36	28	21	26	27	38	33	35	23	28	27	10	12	23	28	14	6	3	5	17	15	11	25	23.7
Springfield	Maximum...	40	42	48	42	51	49	53	52	57	45	43	51	50	48	37	42	47	46	37	24	39	45	37	32	32	21	21	24	27	43	38	40.4
	Minimum ...	26	21	30	26	30	37	46	41	37	30	28	33	35	37	34	30	27	30	19	10	18	23	22	15	8	7	9	18	15	22	30	25.6
Southwest Plain																																	
Appleton City	Maximum...	51	43	48	44	44	45	52	54	56	49	42	51	56	52	39	43	51	50	44	28	36	38	37	30	27	22	23	25	33	45	40	41.9
	Minimum ...	29	20	29	23	28	39	45	36	32	27	27	29	34	39	34	33	24	29	28	11	18	21	27	14	6	8	10	20	15	22	29	25.4
Clinton	Maximum...	52	43	47	40	45	45	50	50	55	46	42	50	45	53	44	41	48	45	40	27	35	40	40	35	20	20	24	25	28	41	41	40.5
	Minimum ...	29	18	27	20	27	38	45	35	32	26	25	28	32	40	34	32	23	28	27	10	15	22	28	14	5	9	10	20	15	20	26	24.5
Harrisonville §§	Maximum...	40	42	40	48	43	49	48	57	55	38	45	50	56	45	39	48	49	48	28	27	31	45	33	20	15	16	22	21	45	43	41	39.6
	Minimum ...	30	16	19	20	22	29	39	33	29	24	24	27	28	31	32	25	24	25	25	7	8	15	24	11	2	3	6	9	16	18	21	20.7
Lamar §§	Maximum...	39	46	49	48	44	48	56	51	55	45	46	51	59	50	38	42	49	47	34	28	40	41	39	30	19	22	27	28	29	40	45	41.5
	Minimum ...	29	17	18	23	23	33	42	39	35	32	29	30	30	30	35	35	28	24	25	26	14	13	21	25	16	16	10	11	13	15	18	25.2
Lamonte	Maximum...	50	52	53	55	57	50	55	54	54	58	59	58	56	54	39	39	50	48	34	27	37	39	39	27	27	21	23	24	32	45	41	43.8
	Minimum ...	25	25	26	23	15	38	46	36	34	23	22	28	24	27	27	27	24	28	18	7	14	17	22	11	3	0	2	17	15	21	25	21.5
Marshall	Maximum...	52	52	35	37	45	46	52	53	53	53	37	52	48	48	43	38	44	43	42	25	27	35	35	38	26	25	23	21	28	39	49	40.1
	Minimum ...	28	26	29	19	28	38	45	36	32	20	23	28	31	38	33	33	25	27	24	6	14	20	27	10	3	1	4	15	15	27	25	23.5
Nevada	Maximum...	46	42	42	48	48	47	57	49	57	52	45	51	57	48	42	40	49	48	42	29	39	41	41	30	25	22	25	26	30	42	42	42.0
	Minimum ...	28	18	30	30	40	40	43	35	34	29	28	29	34	34	34	28	28	28	26	11	19	20	29	14	8	9	10	20	15	23	27	25.8
Warrensburg	Maximum...	49	39	46	40	45	46	55	55	55	48	41	54	56	51	39	36	40	45	42	25	31	36	40	33	27	20	23	24	32	46	46	40.8
	Minimum ...	28	16	31	21	29	..	46	34	32	24	24	..	..	..	..	..	..	..	..	10	20	18	27	12	3	2	5	18	17	21	26	[f]21.1
Warsaw	Maximum...	51	43	48	44	48	48	55	54	59	50	45	55	57	55	46	40	50	47	43	28	38	40	40	30	27	20	24	24	29	45	43	42.8
	Minimum ...	27	15	29	20	28	38	45	40	31	25	24	26	30	43	35	35	21	29	28	9	14	21	28	13	6	6	4	19	15	15	14	23.6
Northwest Plateau																																	
Chillicothe §§	Maximum...	36	41	41	41	41	48	52	56	61	42	36	54	43	40	39	41	45	45	31	27	31	37	32	23	11	17	16	20	31	41	34	37.2
	Minimum ...	27	13	14	15	15	28	39	28	30	17	18	24	26	31	38	32	23	24	23	3	4	17	20	7	− 2	− 4	− 4	3	11	13	24	18.0
Grant City	Maximum...	41	36	33	29	37	42	49	50	49	45	36	46	42	40	35	35	39	42	37	19	25	40	38	21	19	14	14	18	25	37	37	34.5
	Minimum ...	23	12	24	21	24	27	42	27	29	18	23	23	33	33	32	29	21	25	19	2	14	22	19	7	− 2	− 6	− 3	12	14	24	22	19.7
Kansas City	Maximum...	38	42	43	40	43	48	54	57	56	38	44	52	55	47	38	42	47	48	32	25	30	45	36	28	28	17	21	22	32	45	41	39.8
	Minimum ...	26	20	28	22	29	41	44	35	35	25	29	27	40	33	34	30	27	29	17	9	18	26	19	14	3	4	7	19	19	26	27	24.6
Kidder §§	Maximum...	34	39	40	39	39	46	53	53	57	34	38	52	43	42	38	38	43	44	26	21	29	41	30	24	8	14	16	19	28	37	39	35.6
	Minimum ...	25	14	14	17	18	26	37	28	30	19	19	24	24	31	31	30	23	24	21	3	3	17	20	6	− 3	− 3	− 3	4	13	14	19	17.6
Lexington §§	Maximum...	42	42	46	42	41	48	52	57	59	40	39	55	52	48	39	44	47	48	31	26	25	43	35	26	13	22	22	22	33	45	40	39.5
	Minimum ...	31	17	18	21	21	30	41	35	34	23	24	27	31	36	34	32	26	28	26	7	7	19	23	12	2	2	3	9	17	19	26	22.0
Maryville	Maximum...	36	38	32	35	36	42	48	52	48	41	41	48	43	43	35	38	42	44	34	21	27	41	36	20	20	13	14	18	28	40	37	35.2
	Minimum ...	24	14	24	23	24	35	38	29	29	17	24	25	32	32	31	29	19	23	16	1	14	22	16	0	− 3	− 3	− 1	12	15	24	24	19.6
Oregon	Maximum...	41	41	40	36	40	44	54	55	52	45	44	51	47	44	35	42	45	48	39	21	29	44	40	22	22	17	18	22	30	42	39	38.4
	Minimum ...	25	17	25	25	26	36	41	29	31	17	26	28	35	33	31	27	23	23	17	3	16	23	18	7	− 2	0	2	15	14	24	23	21.2
St. Joseph..	Maximum...	37	40	39	39	40	47	56	55	54	35	43	53	48	45	37	42	45	48	30	25	30	45	34	25	17	16	19	21	33	40	41	38.0
	Minimum ...	24	18	27	24	30	40	42	30	33	21	28	30	37	33	32	29	25	26	13	6	18	25	15	11	0	3	4	18	18	27	29	23.1
Trenton	Maximum...	45	40	36	39	38	42	54	55	57	48	35	52	42	43	39	38	42	45	35	18	24	38	32	26	20	18	15	19	29	37	42	36.9
	Minimum ...	25	12	27	17	26	36	42	31	32	17	18	23	32	36	33	32	25	29	18	3	14	18	22	6	− 1	− 3	1	12	11	22	22	20.6

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. Records of daily temperatures are also kept at the following stations in Missouri: Bethany, Clifton Hill, Conception, Dean, Downing, Elsberry, Edgerton, Fulton, Goodland, Greenville, Lakeside, Lockwood, Marble Hill, St. Charles, St. Louis University, Salem, Seligman, Seymour, Steffenville, Tarkio, and Versailles. These records are on file at the Weather Bureau Office, St. Louis, Mo.

WBO, St. Louis, 1-28-36—945.

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CLIMATOLOGICAL DATA

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ROSCOE NUNN
ST. LOUIS, MO.

VOL. XXXIX ANNUAL SUMMARY 1935 No. 13

PRICE: 5 CENTS A COPY; 50 CENTS A YEAR

GENERAL SUMMARY

In 1935, for the first time since 1929, the annual average temperature for the State as a whole was down to normal. Each of the five years, 1930-1934, was warmer than normal, and three of the five were outstanding warm years. The year 1935 had some strong fluctuations in temperature, but no great extreme of either heat or cold, although a period of very warm weather occurred in the western third of the State, and some central areas, during the last two weeks of July and the first eleven days of August.

Temperatures ranged well above normal for the most part during the first three months. February and March were decidedly warmer than normal. During the first three weeks of April temperatures were almost constantly subnormal, and unseasonably low temperatures prevailed most of the time through May and June.

July and August averaged considerably warmer than normal, especially in the western half of the State, but, considering the summer season as a whole and the State as a whole, the temperature averaged very nearly normal, and it was the most moderate summer since 1929.

October had a very early cold period, with killing frost on the 4th to 6th, but the month as a whole averaged nearly normal in temperature. November and December were considerably colder than normal. A cold spell of marked severity occurred from about December 19 to the end of the month.

The 1935 precipitation, 47.65 inches, was the greatest for any year since 1927, but only slightly greater than in 1928 and 1929. Notwithstanding the large general average for the year, there was a rather severe drought in the western half of the State during portions of July and August. The rainfall average was deficient in February, April, July, August, September, and December, but these monthly deficiencies were mostly slight or moderate.

The strong annual surplus of rainfall was accumulated in March, May, and June. The two-month period, May-June 1935, is an outstanding instance of long-continued wet weather. The average rainfall for the two-month period was 17.75 inches, which is slightly more rainfall than was ever before recorded for a like period in Missouri (records extending back to 1888).

The May-June floods in the principal rivers were the highest since 1927 at many points, and the highest since 1903 in the lower Missouri. Flood losses in Missouri were estimated to be approximately $14,000,000. Of this, more than $10,500,000 was in damages to crops and lands, mostly in the rich Missouri River bottom lands.

Excepting a slight tornado near Joplin on February 24 and some local storms in June and July, the year was unusually free from damaging winds. Duststorms that originated outside of Missouri to the westward were quite noticeable on two or three days in March, principally on the 20th.

It was an unfavorable year for crops in some respects, due principally to the very wet spring and early summer and the early killing frost in fall. Conditions were particularly unfortunate for corn in much of the principal corn-growing areas, with planting entirely prevented, or delayed much beyond normal planting time, by the rains and floods, with drought over considerable areas in July-August, and the growing and maturing season cut short by frost as early as October 4, or about ten days to two weeks earlier than normal. However, for several

(Continued on page 65)

CONDENSED STATE SUMMARY FOR 1935

Month	Temperature				Precipitation				
	Mean	Departure from Normal	Maximum	Minimum	Mean	Departure from Normal	Greatest	Least	No. Days with .01 or more
January	33.0	+ 2.1	71	−12	2.42	+0.20	7.00	0.50	7
February	37.4	+ 4.3	80	0	1.55	−0.45	3.10	0.77	5
March	50.4	+ 6.7	87	8	5.27	+2.09	14.61	0.29	9
April	52.3	− 2.9	90	23	2.89	−0.98	6.11	1.00	9
May	60.3	− 4.0	92	32	8.50	+3.69	13.36	5.18	17
June	69.6	− 3.9	98	39	9.25	+4.41	18.63	2.77	15
July	80.8	+ 3.0	104	53	3.12	−0.65	8.82	T.	6
August	77.7	+ 1.5	110	45	2.26	−1.65	5.01	0.18	6
September	68.1	− 1.0	98	33	3.63	−0.50	8.47	1.09	6
October	57.1	− 0.3	90	21	3.52	+0.65	7.29	0.83	10
November	42.2	− 2.3	82	10	4.11	+1.51	8.06	1.96	10
December	30.7	− 3.3	66	−11	1.13	−0.92	2.79	0.21	6
Year	55.0	0.0	110	−12	47.65	+7.41	18.63	T.	106

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Precipitation					Number of days		
	Mean	Highest	Lowest	Average	Greatest annual	Least annual	Average snowfall	Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1888	52.9	111	−32	41.22	54.85	32.77	....	81	....	....	....
1889	54.3	107	− 9	37.91	56.27	20.18	....	85	....	....	....
1890	54.7	110	−19	35.71	63.15	16.98	....	82	....	....	....
1891	53.9	104	−13	38.04	47.71	26.84	....	93	....	....	....
1892	52.8	102	−31	42.76	59.51	31.32	....	92	141	95	130
1893	52.7	107	−20	38.19	53.00	27.03	....	77	155	117	93
1894	55.1	111	−35	33.18	47.51	18.68	15.4	73	170	120	75
1895	52.9	106	−26	39.30	63.18	26.75	23.7	85	161	108	96
1896	55.5	108	−10	44.63	58.92	29.06	12.6	86	154	111	101
1897	55.0	108	−16	38.82	57.80	23.49	19.5	86	167	104	94
1898	54.4	104	−20	53.67	80.08	39.05	18.6	102	162	102	101
1899	54.0	108	−32	37.22	66.01	27.21	28.8	82	166	110	89
1900	55.6	105	−16	38.34	51.53	26.04	18.5	90	171	106	88
1901	55.5	116	−29	25.28	39.22	16.66	19.2	72	190	98	77
1902	54.1	103	−17	44.96	65.64	34.89	16.7	103	159	103	103
1903	53.6	102	−25	40.15	51.64	32.20	16.5	96	170	96	99
1904	53.2	100	−23	41.68	55.83	32.06	18.8	89	180	99	87
1905	53.6	103	−40	45.41	71.25	31.94	22.3	97	174	91	100
1906	55.0	101	−13	37.09	59.92	21.81	28.2	98	165	89	111
1907	55.4	109	−15	41.87	53.78	23.23	12.8	95	173	82	110
1908	56.8	102	−10	43.56	58.27	30.78	9.7	91	184	92	90
1909	55.8	110	−20	45.16	57.59	34.73	18.3	92	173	90	102
1910	54.6	109	−24	37.91	52.42	14.37	17.2	82	188	81	101
1911	56.7	113	−19	38.94	50.03	28.13	15.2	88	166	86	113
1912	53.5	105	−36	38.68	58.27	23.90	39.6	81	192	80	94
1913	56.5	110	−12	37.47	54.85	25.07	26.0	87	174	80	111
1914	56.1	109	−18	34.72	47.09	25.16	26.4	81	171	86	108
1915	55.0	102	−24	49.88	64.62	36.15	25.3	98	160	86	119
1916	55.3	109	−29	41.45	50.61	28.17	18.2	87	191	77	98
1917	52.6	107	−23	32.06	48.31	22.58	13.9	80	186	83	96
1918	55.4	111	−25	37.06	52.91	24.89	27.2	84	185	80	100
1919	55.3	106	−23	40.14	58.49	26.53	10.2	86	181	81	103
1920	54.3	105	−10	37.17	52.77	24.09	15.4	89	171	82	113
1921	58.2	109	− 8	43.77	61.33	21.48	11.1	92	173	98	99
1922	56.8	108	− 6	39.99	56.59	29.15	8.2	85	192	80	93
1923	55.3	108	−11	41.53	61.54	23.98	8.6	98	165	88	112
1924	53.0	106	−28	39.73	54.55	30.11	28.3	92	173	91	102
1925	55.6	110	−15	39.06	53.47	31.13	16.4	84	171	94	100
1926	54.5	108	−20	43.07	61.99	32.04	23.2	95	160	86	119
1927	55.6	102	−24	55.06	82.67	30.71	13.4	101	163	91	111
1928	55.2	102	−18	45.59	67.40	28.28	6.8	90	174	94	98
1929	53.5	105	−23	46.61	62.34	32.17	22.3	102	155	93	117
1930	55.9	114	−31	31.27	55.26	19.06	17.6	75	194	84	87
1931	58.0	110	− 5	40.27	52.27	29.89	14.2	93	175	82	108
1932	55.6	109	−21	37.79	60.29	25.49	16.0	85	178	93	95
1933	57.3	108	−22	36.21	59.32	20.46	8.0	86	175	95	95
1934	57.4	117	−26	34.21	53.71	24.86	23.0	82	187	89	89
1935	55.0	110	−12	47.65	66.27	33.86	5.0	106	144	89	132
Period	**55.0**	**117**	**−40**	**40.24**	**82.67**	**14.37**	**18.0**	**89**	**172**	**92**	**101**

Climatological Data for Year 1935

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain																				
Brunswick	Chariton	652	55	55.5	102	Aug. 9†	− 5	Jan. 21	57	45.64	10.92	May	0.18	Aug.	5.1	118	171	29	165	se.
Clifton Hill	Randolph	731	37	54.5	103	Aug. 9†	− 6	Jan. 21	27	35.89	9.05	May	0.29	Aug.	9.2	120	160	65	140	.....
Columbia	Boone	784	46	54.7	100	Aug. 11	− 3	Jan. 21	46	40.46	8.19	May	0.27	Aug.	5.7	123	112	103	150	n.
Downing	Schuyler	876	15	51.7	99	July 30	−10	Dec. 26	27	42.83	9.58	May	0.89	Dec.	9.8	116	150[a]	97[a]	117[c]	s.
Elsberry	Lincoln	449	5	53.9	99	Aug. 6	− 3	Jan. 24	5	38.76	6.90	May	0.70	Dec.	5.4	104	113[d]	123[d]	125[d]	sw.
Fayette	Howard	680	56	54.4	102	Aug. 11	− 4	Jan. 21†	53	45.07	9.86	May	0.96	Dec.	7.6	86	106	131	128	s.
Fulton	Callaway	818	48	53.7	99	Aug. 11	− 4	Jan. 21†	44	46.22	8.29	May	1.02	Aug.	4.9	119	153	64	148	s.
Gorin	Scotland	700	..	....	..	.....	....	.....	49	50.85	12.60	June	1.17	Dec.	17.0	95	171	95	99	se.
Hannibal	Marion	759	44	52.9	96	Aug. 6†	− 8	Jan. 24	52	45.36	10.79	May	0.91	Dec.	9.1	121	127	66	172	se.
Jefferson City	Cole.	557	46	54.1	101	Aug. 9	− 1	Jan. 21†	54	41.15	7.65	May	1.12	Dec	6.5	117	116	141	108	s.
Kirksville	Adair.	969	47	52.3	98	July 28†	− 9	Jan. 21	54	46.89	9.60	May	0.98	Dec.	13.3	88	133[b]	103[b]	127[b]	nw.
Linneus	Linn	816	..	....	..	.....	....	.....	4	49.19	13.10	May	0.54	Dec.	8.7	112	153	79	133	e.
Louisiana	Pike	469	42	53.4	98	Aug. 6	− 2	Dec. 26	55	44.09	10.33	May	0.70	Dec.	0.7	87	173	88	104	w.
Macon	Macon	875	37	52.4	103	Aug. 9	− 7	Jan. 21†	43	35.90	9.73	May	0.22	Aug.	11.2	100	163	85	117	w.
Mexico	Audrain	800	47	52.9	100	Aug. 6†	− 5	Jan. 24	58	46.19	10.08	May	0.66	Aug.	4.8	115	205	29	131	se.
Monroe City	Monroe	748	..	....	..	.....	....	.....	15	43.12	9.96	May	0.57	Aug.	4.0	94	133	91	141	n.
St. Charles	St. Charles	520	48	54.9	102	July 30	− 1	Jan 24	58	39.96	7.48	May	0.67	Aug.	5.0	120	164	94	107	s.
St. Louis	**St. Louis City**	568	99	56.1	100	July 30	1	Jan. 24	99	39.36	7.35	May	1.11	Dec,	2.9	126	129	86	150	s.
St. Louis University	St. Louis City	578	24	56.1	98	Aug. 1	2	Jan. 22†	25	37.91	7.50	May	1.01	Feb.	4.3	125	158	63	144	se.
Shelbina	Shelby	779	..	....	..	.....	....	.....	43	40.91	10.63	May	0.75	Aug.	11.9	108	..	..	..	.....
Steffenville	Lewis	650	38	52.8	98	July 30†	− 9	Dec. 26	43	51.26	12.13	May	1.39	Dec.	13.0	107	158	92	115	s.
Unionville	Putnam	1,062	43	50.4	98	July 28†	−10	Jan. 21†	43	43.10	9.38	June	0.56	Dec.	8.0	90	155	54	156	s.
Warrenton	Warren	816	54	54.8	96	July 30	− 3	Jan. 24	46	50.29	7.80	June	1.01	Dec.	7.5	125	116	100	149	sw.
Keokuk, Iowa	Lee, Iowa	614	64	52.2	97	July 28	− 8	Jan. 24	64	39.54	7.28	May	1.00	Dec.	14 2	121	105	75	185	sw.
Division means	**and extremes**	.....	..	**53.7**	**103**	**Aug. 9†**	**−10**	**Jan. 21†**	..	**43.69**	**13.10**	**May**	**0.18**	**Aug.**	**8.0**	**112**	**144**	**85**	**136**	**s.**
Southeast Lowlands																				
Campbell	Dunklin	314	10	57.0	102	Aug. 11	5	Jan. 24†	10	52.95	14.27	Mar.	1.88	July	3.3	102	175	90	100	s.
Caruthersville	Pemiscot	265	40	61.0	105	Aug. 7	9	Jan. 24†	44	42.02	10.66	Mar.	0.92	Aug.	3.5	97	170	66	129	s.
Doniphan	Ripley	344	32	58.2	103	Aug. 11	− 2	Dec. 30	32	58.90	14.17	Mar.	1.13	Aug.	2.7	99	166	59	140	s.
Jackson	Cape Girardeau.	428	45	57.8	103	Aug. 7	− 3	Dec. 30	46	51.07	10.22	Mar.	1.27	Aug.	5.5	108	91	75	199	s.
Marble Hill	Bollinger	470	41	58.0	102	Aug. 11	2	Dec. 30	43	53.45	9.97	Mar.	1.09	Feb.	5.1	104	169	95	101	s.
Morehouse	New Madrid	289	..	....	..	.....	....	.....	25	52.60	14.18	Mar.	1.26	July	2.2	100	175	78	112	n.
Poplar Bluff	Butler	339	31	58 1	103	Aug. 7	− 1	Dec. 30	32	56.40	10.16	Mar.	1.26	Aug.	6.0	95	201	48	116	s.
Sikeston	Scott	318	29	58.8	102	July 31†	3	Dec. 30	39	53.28	14.61	Mar.	1.79	Sept.	2.6	114	132	127	106	n.
Cairo, Ill	Alexander, Ill.	356	64	58.6	100	July 31	6	Jan. 24	64	51.88	12.00	Mar.	1.23	Sept.	4.8	121	81	101	183	n.
Division means	**and extremes**	.....	..	**58.4**	**105**	**Aug. 7**	**− 3**	**Dec. 30**	..	**52.40**	**14.61**	**Mar.**	**0.92**	**Aug.**	**3.9**	**104**	**151**	**81**	**133**	**s.**
Ozark Plateau																				
Arcadia	Iron	926	55	54.3	96	Aug. 7	− 2	Dec. 30	58	58.34	12.48	June	1.02	Feb.	4.1	132	169	62	134	n.
Birch Tree(near)	Shannon	1,000	41	55.9	99	Aug. 11	0	Jan. 22	42	54.99	11.82	June	1.41	Aug.	5.0	88	197	53	115	.....
Buffalo	Dallas	1,200	..	....	..	.....	....	.....	5	48.16	12.34	June	0.77	Dec.	3.3	78	169	64	132	.....
Caplinger Mills	Cedar	750	..	....	..	.....	....	.....	9	42.42	8.61	June	0.72	Dec.	2.0	90	120	132	113	sw.
Crystal City	Jefferson	420	1	55.2	98	July 30†	− 3	Dec. 30	1	50.99	9.31	June	1.12	Dec.	5.0	116	68[1]	102[1]	179[1]	s.
Dean	McDonald	1,000	32	56.3	110	Aug. 8†	− 4	Jan. 21	37	51.72	10.64	June	0.99	Aug.	2.5	102	156[a]	84[a]	124[a]	e.
Eldon	Miller	934	41	54.2	100	Aug. 11	....	.. ....	37	56.81	16.33	June	1.20	Feb.	3.0	110	96[p]	151[p]	102[p]	s.
Farmington	St. Francis	960	25	55.1	..	.....	− 2	Jan. 22	39	66.27	17.71	June	1.00	Dec.	4.1	102	..	..	..	.....
Garber	Taney	950	1	57.5	109	Aug. 11	− 1	Jan. 21	1	57.01	12.46	June	0.91	July	1.8	107	138	61	166	e.
Goodland	Iron	1,000	43	54.8	97	July 30	− 1	Dec. 30	43	62.79	12.26	June	1.56	Feb.	4.5	98	156	88	121	n.
Greenville	Wayne	381	27	55.6	99	July 30†	−11	Dec. 30	29	63.96	10.58	Mar.	1.13	Feb.	6.0	101	162	86	117	sw
Hailey	Barry	1,350	..	..	..	.....	....	.....	11	57.38	12.24	June	1.35	July	5.5	87	163	105	97	ne.
Koshkonong	Oregon	958	35	57.7	101	Aug. 11	0	Jan. 22	36	57.86	10.20	Mar.	1.83	Feb.†	5.2	106	159[e]	55[e]	146[e]	se.
Lebanon	Laclede	1,265	48	54.9	103	Aug. 9	− 2	Jan. 21†	49	51.70	15.46	June	1.05	Dec	3.0	88	181[b]	56[b]	126[b]	e.
Lockwood	Dade	1,078	30	57.2	103	Aug. 9†	− 3	Jan. 21	40	45.85	8.99	June	1.17	Dec.	2.2	104	174	105	86	sw.
Mountain Grove	Wright	1,463	35	55.3	101	Aug. 11	− 1	Jan 21	39	53.32	9.96	June	1.35	Feb.	7.1	122	172	92	101	s.
Neosho	Newton	1,011	49	56.9	104	Aug. 8†	− 3	Jan. 21	53	54.05	14.24	June	0.08	July	1.0	119	164	104	97	se.
Rolla	Phelps	1,099	36	56.1	99	Aug. 11	− 1	Jan. 21	52	48.26	12.84	June	0.91	Dec.	4.3	114	108	46	211	se.
Salem	Dent	1,173	32	55.1	98	July 30	− 1	Jan. 21†	35	50.69	12.80	June	1.09	Dec.	2.0	114	129	112	124	s.
Seligman	Barry	1,542	35	56.9	101	Aug. 9	− 3	Jan. 21	33	55.84	12.82	June	0.65	July	3.1	90	158[v]	90[v]	95[v]	e.
Seymour(near)	Webster	1,642	30	54.6	99	Aug. 7†	− 2	Jan. 21	30	46.30	9.86	June	1.05	Feb.	1.5	101	145	90	130	se.
Springfield	Greene	1,324	48	56.0	102	Aug. 11	− 3	Jan. 21	48	47.68	11.31	June	0.62	Dec.	2.3	118	156	86	123	se.
Versailles	Morgan	1,037	4	55.8	100	Aug. 11	− 4	Jan. 21	4	52.69	13.08	June	1.31	Dec.	5.0	121	136	69	160	sw.
Division means	**and extremes**	.....	..	**55.8**	**110**	**Aug. 8†**	**−11**	**Dec. 30**	..	**52.79**	**17.71**	**June**	**0.08**	**July**	**3.7**	**104**	**150**	**87**	**128**	**se.**
Southwest Plain																				
Appleton City	St. Clair	853	41	55.7	102	Aug. 9	− 4	Jan. 21	44	45.66	8.35	May	0.13	July	3.3	109	95	176	94	sw.
Clinton	Henry	765	43	55.8	107	Aug. 11	− 3	Jan. 21	49	59.38	18.63	June	0.50	July	2.2	115	119	141	105	se.
Concordia	Lafayette	784	..	....	..	.....	..	.....	20	44.55	9.13	June	0.31	Dec.	1.8	104	160	55	150	s.
Harrisonville	Cass	904	58	54.3	102	Aug. 9†	− 8	Jan. 21†	61	47.27	12.21	June	0.24	Dec	T.	104	117	72	176	sw.
Lamar	Barton	980	48	55.9	101	Aug. 9†	− 2	Jan. 21†	55	41.11	7.69	June	1.15	Dec.	4.0	103	176	65	124	sw.
Lamonte	Pettis	867	35	54.8	102	July 27†	− 5	Jan. 21	50	50.07	11.32	May	1.16	July	3.5	117	123	112	130	nw.
Marshall	Saline	779	49	54.7	100	Aug. 11	− 5	Jan. 21	46	46.93	11.92	May	0.28	Dec.	5.0	103	150	102	113	sw.
Nevada	Vernon	862	43	56.4	103	Aug. 9†	− 4	Jan. 21	44	47.59	8 89	May	T.	July	1.5	87	166	56	143	sw.
Warrensburg	Johnson	878	49	55.5	104	Aug. 9	− 6	Jan. 21	56	37.70	7.42	May	0.44	July	4.0	99	146[b]	71[b]	146[b]	ne.
Warsaw	Benton	687	35	57.3	106	Aug 11	− 3	Jan. 21	41	55.46	16.23	June	0.58	July	8.5	116	132	87	146	s.
Division means	**and extremes**	.....	..	**55.6**	**107**	**Aug. 11**	**− 8**	**Jan. 21†**	..	**48.11**	**18.63**	**June**	**T.**	**July**	**3.3**	**106**	**140**	**92**	**133**	**sw.**
Northwest Plateau																				
Bethany	Harrison	916	41	52.3	103	Aug. 9	− 9	Jan. 21	43	38.00	9.73	May	0.55	Dec.	4.3	96	180	76	109	se.
Chillicothe	Livingston	779	27	52.7	104	July 26	− 7	Jan. 21†	30	44.48	13.30	May	0.39	Dec.	1.0	105	168	74	123	se.
Conception	Nodaway	980	47	51 9	..	.....	−12	Jan 21	52	35.87	8.62	May	0.21	Dec	4.3	91	115	135	117	se.
Edgerton	Platte	856	16	53.8	102	Aug. 9	− 8	Jan. 21	25	35.33	10.89	May	0.29	Mar.	4.5	121	193	35	137	s.
Grant City	Worth	1,134	32	51.0	101	Aug. 11	−11	Jan. 21	44	37.01	12.12	June	0.34	Dec.	3.5	100	78	164	123	se.
Kansas City	Jackson	963	47	55.9	104	July 27†	− 6	Jan. 21	47	33.86	9.99	May	0.25	Dec.	3.4	115	115	95	155	sw.
Kidder	Caldwell	1,020	44	51.5	103	July 28	−10	Jan. 21†	48	41.33	12.27	May	0.22	July	4.3	101	135	108	122	s.
King City	Gentry	1,095	..	....	..	.....	....	.....	10	34.85	8.71	May	0.35	July†	6.3	101	75	167	123	se.
Lexington	Lafayette	688	51	54.4	103	Aug 9†	− 6	Jan. 22	52	45.04	10.29	May	0.56	Dec.	5.4	123	164	108	93	s.
Maryville	Nodaway	1,169	46	51.6	104	Aug. 9	−11	Jan. 21	42	36.67	8.85	May	0.31	Dec.	10.1	104	134	91	110	nw.
Oregon	Holt	1,048	80	53.5	105	Aug. 9	−10	Jan. 21	80	36.08	8.20	May	0.40	Dec.	9.0	106	189	77	99	se
St. Joseph	Buchanan	967	26	54.2	104	Aug. 9	− 9	Jan. 21	64	34.61	8.20	June	0.11	July	1.7	113	154	79	132	se.
Tarkio	Atchison	916	33	51.4	103	Aug. 9	−10	Jan. 21	42	37.05	8.94	June	0.35	Mar.†	9.0	82	143	95	127	se.
Trenton	Grundy	822	40	52.8	103	Aug. 9	− 8	Jan. 21	41	38.60	10.32	May	0.50	Dec.	4.9	115	135	118	112	s.
Division means	**and extremes**	.....	..	**52.9**	**105**	**Aug. 9**	**−12**	**Jan. 21**	..	**38 63**	**13.30**	**May**	**0.11**	**July**	**5.1**	**104**	**141**	**102**	**122**	**se.**
State means	**and extremes**	.....	..	**55.0**	**110**	**Aug. 8†**	**−12**	**Jan. 21**	..	**47.65**	**18.63**	**June**	**T.**	**July**	**5.0**	**106**	**144**	**89**	**132**	**s.**

† Also on other dates ¶ Estimated * Partially estimated

[a], [b], [c], indicate the number of days missing from records, a, 1; b, 2; c, 3; etc

Monthly and Annual Mean Temperatures for the Year 1935, with Departures from Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	32.2	+ 5.5	37.0	+ 7.2	50.8	+ 8.9	52.2	− 2.0	60.4	− 3.8	70.4	− 2.6	83.1	+ 7.0	79.8	+ 5.6	69.4	+ 2.4	57.3	+ 2.0	42.1	+ 0.5	31.5	+ 0.9	55.5	+ 2.6
Clifton Hill	30.9	+ 2.8	35.4	+ 5.2	49.4	+ 7.2	51.7	− 1.8	59.4	− 4.2	71.1	− 1.3	81.7	+ 5.3	78.6	+ 2.6	68.5	− 0.1	56.4	− 0.3	40.8	− 2.6	29.8	− 1.2	54.5	+ 1.0
Columbia	32.3	+ 3.1	36.8	+ 5.1	50.1	+ 7.5	52.1	− 2.8	59.9	− 4.4	69.6	− 3.2	80.6	+ 3.7	77.6	+ 2.0	68.8	+ 0.6	56.5	− 0.1	41.2	− 2.1	30.6	− 2.6	54.7	+ 0.6
Downing	26.7	+ 1.3	32.9[a]	+ 0.6	45.9[a]	+ 4.3	49.6	− 3.6	56.8	− 5.9	68.4	− 3.0	80.4	+ 4.0	75.2	+ 0.3	66.8	− 0.8	54.8	− 1.1	37.6	− 4.0	25.6[a]	− 4.0	51.7	− 1.0
Elsberry	32.4	.....	36.7	.....	49.2	.....	51.0	.....	59.4	.....	69.2	.....	79.0	.....	76.3	.....	66.8	.....	55.8	.....	42.2[e]	.....	28.4[a]	.....	53.9	.....
Fayette	30.0	+ 3.0	38.3	+ 7.7	49.8	+ 7.9	51.7	− 2.5	59.8	− 4.0	70.0	− 2.8	81.4	+ 4.2	77.4	+ 1.5	67.7	− 0.4	56.2	− 0.2	40.7	− 1.5	29.2	− 1.9	54.4	+ 0.9
Fulton	30.5	+ 1.0	35.5	+ 2.4	48.8	+ 4.7	51.0	− 3.6	59.2	− 5.4	68.6	− 4.6	80.0	+ 2.3	76.8	+ 0.4	67.8	− 1.1	56.5	− 0.9	41.2	− 3.0	28.8	− 4.7	53.7	− 1.0
Hannibal	29.8[b]	+ 2.7	34.0	+ 4.3	48.3	+ 7.3	50.6	− 2.8	58.4	− 5.2	68.4	− 4.1	79.0	+ 2.2	76.0	+ 1.0	67.4	− 0.3	56.0	0.0	40.1	− 2.0	27.2	− 4.3	52.9	− 0.1
Jefferson City	32.3	+ 2.5	36.4	+ 4.3	49.8	+ 6.2	51.7	− 4.3	59.9	− 4.8	69.6	− 4.2	79.5	+ 1.4	76.6	− 0.1	68.0	− 1.3	55.4	− 1.4	40.4	− 3.7	29.4	− 3.5	54.1	− 0.7
Kirksville	28.0[b]	+ 3.2	33.4	+ 6.8	46.6	+ 6.9	48.9	− 3.0	57.6	− 4.7	68.4	− 3.3	80.4	+ 4.4	75.7	+ 1.7	67.0	+ 0.7	55.8	+ 1.1	38.4	− 2.2	27.0	− 2.6	52.3	+ 0.7
Louisiana	29.8	+ 1.7	35.2	+ 4.3	48.7	+ 5.2	51.0	− 3.0	59.0	− 4.7	69.2	− 2.9	78.8	+ 2.4	75.9	+ 1.0	67.2	− 0.8	57.6	+ 1.4	41.5	− 2.6	27.2	− 4.6	53.4	− 0.2
Macon	27.6	+ 0.1	33.4	+ 3.8	46.2	+ 4.0	48.2	− 4.9	57.8	− 5.7	69.7	− 2.7	81.6	+ 4.4	77.6	+ 1.5	67.8	− 0.1	54.8	− 1.5	38.5	− 4.3	26.2	− 3.9	52.4	− 0.8
Mexico	29.6	+ 1.6	34.2	+ 4.1	47.2	+ 5.2	49.6	− 4.2	57.9	− 6.1	69.5	− 3.7	80.4	+ 3.1	76.6	+ 0.6	67.6	− 0.9	55.2	− 1.1	39.1	− 3.8	28.1	− 3.7	52.9	− 0.7
St. Charles	32.1	+ 1.1	37.1	+ 3.8	49.7	+ 5.2	51.6	− 4.0	60.6	− 2.5	71.6	− 2.3	81.2	+ 3.1	77.9	+ 1.1	69.9	+ 1.6	57.1	− 1.1	41.8	− 3.5	28.0	− 6.9	54.9	− 0.4
St. Louis	34.1	+ 3.0	38.5	+ 3.7	51.2	+ 7.1	52.4	− 3.7	61.4	− 5.6	71.5	− 3.5	82.2	+ 3.4	78.6	+ 1.1	71.4	+ 0.9	58.6	− 0.2	43.4	− 2.0	30.3	− 4.6	56.1	− 0.1
St. Louis University	33.9	+ 3.7	38.8	+ 6.6	51.3	+ 7.7	52.4	− 2.8	61.1	− 5.0	71.3	− 3.6	81.8	+ 1.7	78.6	+ 1.4	71.3	+ 1.1	58.8	− 0.1	43.4	− 3.1	30.4	− 3.9	56.1	+ 0.3
Steffenville	28.8	+ 1.4	34.4	+ 4.7	47.6	+ 5.4	49.8	− 3.3	58.2	− 5.6	68.4	− 4.2	80.0	+ 2.2	76.3	− 0.2	67.2	− 1.8	56.4	− 1.0	39.6	− 3.9	26.8	− 3.8	52.8	− 0.8
Unionville	23.1	− 0.4	31.2	+ 4.5	42.6	+ 3.7	47.6	− 3.4	55.8	− 6.3	68.2	− 3.1	80.4	+ 3.9	75.6	+ 0.8	66.3	− 0.8	53.6	− 1.6	36.0	− 4.3	24.0	− 3.6	50.4	− 0.9
Warrenton	33.8	+ 4.6	37.6	+ 6.7	50.4	+ 7.9	51.6	− 3.2	60.2	− 4.7	69.1	− 4.3	79.2	+ 1.4	76.6	+ 0.1	68.6	− 0.4	57.8	+ 1.8	42.7	− 0.5	29.8	− 2.6	54.8	+ 0.6
Keokuk, Iowa	27.8	+ 2.9	33.2	+ 4.9	45.7	+ 6.8	49.4	− 2.9	57.2	− 6.6	69.0	− 3.5	81.0	+ 4.1	75.8	+ 0.8	67.8	+ 0.3	54.5	− 0.9	39.0	− 2.1	25.6	− 4.0	52.2	0.0
Division means	**30.3**	**+ 2.4**	**35.5**	**+ 4.7**	**48.5**	**+ 6.3**	**50.7**	**− 3.3**	**59.0**	**− 5.0**	**69.6**	**− 3.3**	**80.6**	**+ 3.4**	**77.0**	**+ 1.2**	**68.1**	**− 0.1**	**56.2**	**− 0.3**	**40.5**	**− 2.7**	**28.2**	**− 3.4**	**53.7**	**0.0**
Southeast Lowlands																										
Campbell	37.2	− 0.5	40.8	− 1.3	54.0	+ 6.0	54.8	− 3.9	63.4	− 3.9	69.3	− 6.2	80.9	+ 0.5	77.5	+ 0.3	68.2	− 3.4	59.8	− 0.3	46.2	− 1.4	31.4	− 7.0	57.0	− 1.8
Caruthersville	41.3	+ 2.2	44.2	+ 3.9	57.8	+ 6.4	58.2	− 2.0	68.7	− 1.1	74.7	− 3.7	83.5	+ 2.2	82.0	+ 1.7	72.8	− 1.7	63.7	+ 1.5	49.5	− 0.9	35.6	− 5.3	61.0	+ 0.3
Doniphan	39.6	+ 3.8	41.8	+ 2.5	55.3	+ 6.3	56.0	− 2.5	64.2	− 2.3	71.1	− 3.9	80.8	+ 2.2	79.7	+ 2.1	70.2	− 1.0	60.2	+ 1.7	47.0	− 0.3	32.8	− 5.0	58.2	+ 0.3
Jackson	37.8	+ 4.0	41.3	+ 4.8	54.4	+ 7.2	55.5	− 1.6	64.8	− 0.8	72 4	− 1.7	81.6	+ 4.0	79.6	+ 3.5	69.2	− 0.9	60.1	+ 2.2	45.6	− 1.0	31.0	− 5.6	57.8	+ 1.2
Marble Hill	38.8	+ 4.2	42.8	+ 6.2	55.1	+ 7.5	55.6	− 1.6	64.6	− 1.0	71.2	− 2.8	80.6	+ 2.8	79.0	+ 2.0	69.4	− 1.3	60.8	+ 2.6	46.8	+ 1.6	31.6	− 5.1	58.0	+ 1.3
Poplar Bluff	39.0	+ 3.0	42.4	+ 4.3	54.2	+ 5.6	55.8	− 3.7	64.8	− 2.7	72.0	− 3.4	81.4	+ 2.2	79.8	+ 1.8	69.4	− 2.3	59.8	− 0.3	46.4	− 1.3	32.0	− 5.8	58.1	− 0.2
Sikeston	39.6	+ 2.6	42.6	+ 5.4	55.2	+ 6.6	56.3	− 1.8	65.6	− 2.9	72.6	− 1.7	80.9	+ 2.3	80.0	+ 2.4	70.4	− 0.7	62.0	+ 2.7	47.3	+ 0.1	33.3	− 4.4	58.8	+ 0.9
Cairo, Ill	38.6	+ 3.7	41.8	+ 3.3	55.2	+ 8.0	56.4	− 1.7	65.2	− 3.2	72.6	− 3.7	81.2	+ 1.6	79.6	+ 1.8	71.4	− 0.1	61.6	+ 1.2	47.1	− 0.2	33.0	− 4.8	58.6	+ 0.4
Division means	**39.0**	**+ 3.4**	**42.2**	**+ 4.3**	**55.2**	**+ 6.8**	**56.1**	**− 2.4**	**65.2**	**− 2.2**	**72.0**	**− 3.4**	**81.4**	**+ 2.2**	**79.6**	**+ 2.0**	**70.1**	**− 1.4**	**61.0**	**+ 1.4**	**47.0**	**− 0.4**	**32.6**	**− 5.4**	**58.4**	**+ 0.4**
Ozark Plateau																										
Arcadia	34.6	+ 2.7	38.0	+ 3.9	51.2	+ 6.6	52.0	− 3.3	60.6	− 3.5	68.0	− 3.8	76.8	+ 1 0	75.2	+ 0.9	66.7	− 0.9	56.8	+ 0.8	42.5	− 1.4	29.4	− 4.9	54.3	− 0.2
Birch Tree(near)	36.4	+ 1.9	41.4	+ 5.1	52.7	+ 5.4	53.8	− 3.3	61.6	− 3.4	68.4	− 4.3	77.4	+ 0.8	76.2	+ 0.1	67.6	− 2.2	58.0	− 0.4	44.6	− 2.0	33.1	− 3.3	55.9	− 0.5
Crystal City	33.2[d]	.....	38.2[e]	.....	51.9	.....	52.4[a]	.....	60.4[e]	.....	71.0[d]	.....	79.8	.....	77.6[a]	.....	67.5[b]	.....	57.8[a]	.....	43.8[a]	.....	29.0[e]	.....	55.2	.....
Dean	37.2[a]	+ 1.3	39.2[a]	+ 3.5	52.6	+ 3.8	54.2	− 2.5	62.2	− 3.5	69.6	− 3.1	80.4	+ 3.1	79.7	+ 2.0	67.4	− 3.6	57.6	− 1.1	43.2	− 6.1	32.1	− 5.4	56.3	− 1.0
Eldon	34.0‡	+ 2.9	36.4[a]	+ 3.3	49.3[d]	+ 5.7	51.2	− 4.2	58.8[b]	− 5.4	69.2	− 3.8	80.3	+ 3.1	76.6	+ 0.2	67.8	− 1.6	56.4[a]	− 1.0	40.8	− 4.0	29.9	− 4.4	54.2	− 0.8
Farmington	36.2	+ 3.6	39.2	+ 2.3	49.8	+ 3.3	51.1	− 5.8	60.7	− 3.0	70.6	− 2.2	77.8¶	+ 1.5	75.8¶	+ 0.4	66.5¶	− 3.1	57.3¶	+ 0.5	44.2	− 0.6	31.6[e]	− 5.1	55.1	− 0.7
Garber	38.6	.....	42.0	.....	54.7	.....	56.6	.....	62.7	.....	70.0	.....	80 6	.....	79.4	.....	67.8	.....	58.4	.....	45.4	.....	33.9	.....	57.5	.....
Goodland	36.6	+ 4.0	40.0	+ 5.7	51.5	+ 6.5	52.6	− 2.4	61.2	− 2.8	68.0	− 3.9	76.7	+ 1.1	74.6	+ 0.1	65.2	− 2.6	57.5	+ 1 6	43.6	− 1.1	30.6	− 4.2	54.8	+ 0.2
Greenville	37.2	+ 2.2	40.3	+ 4.5	53.0	+ 5.3	53.7	− 2.9	62.0	− 3.9	69.2	− 4.4	78.0	+ 0.6	75.8	− 0.9	66.2	− 4.6	57.5	− 0.1	44.8	− 0.6	29.4	− 6.8	55.6	− 1.0
Koshkonong	38.6	+ 2.1	41.7	+ 2.6	54.6[a]	+ 5.2	56.2	− 2.3	62.8[a]	− 3.8	70.9[a]	− 3.5	79.6[b]	+ 0.8	78.0[b]	+ 0.1	70.3	− 1.1	60.4	+ 0.8	45.6[b]	− 3.4	33.4	− 5.0	57.7	− 0.6
Lebanon	32.8[a]	+ 0.3	37.2	+ 2.8	50.8[a]	+ 5.8	51.6	− 3.9	59.8	− 5.1	69.0	− 3.7	80.4	+ 3.5	77.4	+ 1.3	68.0[a]	− 1.4	57.2	− 0.5	42.2	− 3.4	32.6‡	− 2.2	54.9	− 0.5
Lockwood	36.7	+ 3.4	40.5	+ 3.5	53.6	+ 6.3	51.2	− 2.3	61.8	− 2.6	70.8	− 2.8	82.4	+ 4.8	79.6	+ 2.4	68.8	− 2.1	58.6	− 0.1	44.6	− 2.4	35.0	− 1.1	57.2	+ 0.6
Mountain Grove(near)	36 0	+ 3.2	39.2	+ 4.1	51.9	+ 6.5	52.7	− 2.2	60.3	− 3.5	68.2	− 3.6	78.4	+ 2.0	77.2	+ 1.7	68.0	− 0.9	57.8	+ 0.2	42.6	− 3.3	31.5	− 3.2	55.3	+ 0.1
Neosho	38.2	+ 3.1	40.7	+ 3.1	54.2	+ 6.1	55.0	− 3.3	63.0	− 3.0	70.4	− 3.4	80.0	+ 2.5	79.0	+ 1.9	67.5	− 3.0	58.2	− 1.0	43.7	− 3.6	32.4	− 4.7	56.9	− 0.4
Rolla	36.2	+ 4.3	39.2	+ 2.9	52.6	+ 7.1	53.6	− 2.3	61.3	− 3.2	68.7	− 4.3	78.8	+ 1.1	77.3	+ 1.1	69.5	+ 0.8	59.0	+ 2.5	44.5	− 0.5	32.2	− 2.4	56.1	+ 0.6
Salem	35.7	+ 3.1	38.8	+ 3.0	51 9	+ 5.5	52.6	− 3.4	61.6	− 2 9	69.0	− 3.4	78.8	+ 2.0	76.4	+ 0.5	66.8	− 2.4	56.7	− 0.9	42.9	− 3.2	30.5	− 4.9	55.1	− 0.6
Seligman	39.6	+ 4.5	41.2	+ 3.7	54.0[a]	+ 7.4	54.8[b]	− 1.8	61.4[a]	− 3.1	69.2[a]	− 3.2	79.8[c]	+ 3.1	79.2[b]	+ 3.0	67.8[b]	− 1.8	57.4[c]	− 1.6	44.4	− 2.9	34.2[a]	− 3.1	56.9	+ 0.4
Seymour(near)	36.1	+ 2.1	38.2	+ 3.2	51.4	+ 6.0	52.4	− 3.3	59.6	− 4.1	67.4	− 4.3	76.4	+ 0.9	75.8	+ 0.8	65.8	− 3.0	57.0	− 0.4	42.4	− 3.5	32.3	− 3.1	54.6	− 0.7
Springfield	35.4	+ 1.9	39.2	+ 4.0	52.8	+ 7.6	53.3	− 2.7	60.7	− 3.8	69.0	− 3 5	80.6	+ 3.8	78.6	+ 2.9	69.0	+ 0.1	58.1	− 0.1	42.6	− 3.1	33.0	− 3.2	56.0	+ 0.3
Versailles	35.2	.....	38.2	.....	52.1	.....	53.2	.....	60.6	.....	69.8	.....	80.8	.....	77.8	.....	69.6	.....	57.9	.....	42.7	.....	32.2	.....	55.8	.....
Division means	**36.2**	**+ 2.7**	**39.4**	**+ 3.6**	**52.3**	**+ 5.9**	**53.4**	**− 3.1**	**61.2**	**− 3.6**	**69.3**	**− 3.6**	**79.3**	**+ 2.1**	**77.4**	**+ 1.1**	**67.8**	**− 1.9**	**57.8**	**− 0.1**	**43.6**	**− 2.7**	**31.9**	**− 3.9**	**55.8**	**− 0.3**
Southwest Plain																										
Appleton City	33.8	+ 2.5	37.4	+ 3.5	50.8	+ 5.7	52.8	− 3.3	59.6	− 5.4	69.4	− 5.0	82.6	+ 4.4	78.6	+ 0.8	67.8	− 2.6	58.6‡	− 0.3	43.2	− 2.8	33.6	− 1.0	55.7	− 0.3
Clinton	32.5	+ 0.8	36.5	+ 2.9	51.0	+ 6.0	51.8	− 4.5	60.4	− 5.1	70.6	− 3.2	84.1	+ 5.8	80.4	+ 2.8	69.0	− 1.8	57.8	− 1.1	42.6	− 4.4	32.5	− 2.2	55.8	− 0.3
Harrisonville	29.8	+ 2.5	35.2	+ 4.5	50.2	+ 8.9	51.0	− 2.9	59.4	− 4.4	70.6	− 2.5	83.4	+ 5.7	78.1	+ 2.2	68.5	0.0	55.2	− 0.9	40.0	− 2.5	30.2	− 1.1	54.3	+ 0.8
Lamar	34.9	+ 2.8	37.8	+ 2.5	52.2	+ 6.2	52 5	− 4.1	61.2	− 4.4	70.2	− 4.0	82.9	+ 4.5	78.8	+ 1.1	67.8	− 3.0	57.6	− 1.3	42.6	− 3.7	32.8	− 2.4	55.9	− 0.5
Lamonte	31.6	+ 2.7	36.8	+ 3.6	49.4[a]	+ 5.4	51.2	− 4.0	59.5	− 5.1	69.4	− 4.6	82.4	+ 3.3	78.2	+ 1.1	68.4	− 1.8	57.0	− 1.0	41.4	− 3.0	32.6	− 1.3	54.8	− 0.4
Marshall	31.8	+ 3.9	36.8	+ 5.9	50.4	+ 7.4	51.9	− 2.9	59.3	− 4.9	69.2	− 4.0	81.5	+ 4.0	77.6	+ 1.6	68.6	− 0.2	56.6	0.0	41.4	− 3.8	31.8	− 0.1	54.7	+ 0.6
Nevada	35.0	+ 3.1	39.0	+ 5.1	52.5	+ 7.6	53.2	− 2.5	60.2	− 4.3	70.8	− 2.7	83.0	+ 3.4	79.6	+ 2 5	68.6	− 0.9	57.8	+ 0.2	43.4	− 1.4	33.9	− 1.4	56.4	+ 0.7
Warrensburg	33 0	+ 4.3	37.3	+ 4.8	50.8	+ 6.8	51.6	− 4.5	59.6	− 5.4	69.6	− 4.3	83.6	+ 4.8	80.1[a]	+ 3.0	69.5	− 0.7	57.6	− 0.4	42.4	− 2.6	31.0[f]	− 2.4	55.5	+ 0.3
Warsaw	36.2	+ 3.3	39.2	+ 3.6	53.6	+ 6.6	54.6	− 2.1	62.0	− 3.5	71.4	− 2.4	84.1	+ 5.8	80.8	+ 3.2	70.0	− 0.5	58.6	− 0.4	43.8	− 3.4	33.2	− 2.5	57.3	+ 0.6
Division means	**33.2**	**+ 2.9**	**37.4**	**+ 4.1**	**51.2**	**+ 6.7**	**52.3**	**− 3.4**	**60.1**	**− 4.7**	**70.1**	**− 3.6**	**83.1**	**+ 4.6**	**79.1**	**+ 2.0**	**68.7**	**− 1.3**	**57.4**	**− 1.2**	**42.3**	**− 3.1**	**32.4**	**− 1.6**	**55.6**	**+ 0.1**
Northwest Plateau																										
Bethany	28.0	+ 3.2	34.0	+ 6.5	46.3	+ 6.0	49.4	− 2.1	56.4	− 6.1	67.4	− 4.6	81.8	+ 5.5	77.2	+ 2.2	66.9	− 0.2	54.2	− 0.6	37.9	− 4.9	28.4	− 1.7	52.3	+ 0.3
Chillicothe	27.4	+ 0.6	34.0	+ 2.0	46.8	+ 5.7	49 5	− 3.6	57.8	− 7.4	69.4	− 3.5	82.2	+ 3.3	77.6	+ 1.9	66.9	− 1.7	54.8	− 2.0	38.2	− 3.5	27.6	− 5.3	52.7	− 1.1
Conception	26.7	+ 2.0	32.4	+ 4.2	45.3	+ 5.5	48.8	− 3.4	55.8	− 6.3	67.3	− 4.2	82.2	+ 5.6	76.1[b]	+ 1.4	67.8	+ 0.6	53.8	− 1.6	38.0	− 3.4	28.2	− 1.0	51.9	0.0
Edgerton	29.3[d]	+ 2.4	36.4	+ 2.1	49.6	+ 6.4	50.4[a]	− 3.4	58.4	− 4.6	68.9	− 3.0	82.4[a]	+ 6.3	77.2	+ 2.1	67.4[b]	− 0.5	54.6	− 1.7	40.0	− 1.8	31.1	+ 0.7	53 8	+ 0.4
Grant City	27.2	+ 2.4	32.4	+ 3.8	44.7	+ 3.4	48.4	− 3.8	56.0	− 6.0	67.0	− 3.8	79.9	+ 3.7	75.4	+ 0.5	65.0	− 2.0	52.2	− 2.9	36.6	− 5.3	27.1	− 0.9	51.0	− 0.9
Kansas City	32.4	+ 4.2	36.8	+ 5.6	51.2	+ 8.5	52.2	− 2.6	59.8	− 5.0	71.6	− 2.0	86.8	+ 8.7	80.3	+ 3.7	70.2	+ 1.3	56.2	− 1.5	41.5	− 2.2	32.2	− 0.3	55.9	+ 1.5
Kidder	26.3	+ 0.3	32.4	+ 4.0	44.2	+ 3.4	49.0	− 3.2	57.2	− 5.4	67.9	− 3.9	82.2	+ 5.6	77.0	+ 1.6	66.2	− 1.1	52.6	− 3.2	36.6	− 5.2	26.6	− 2.6	51.5	− 0.8
Lexington	30.2	+ 2.4	34.9	+ 3.9	48.4	+ 5.0	51.0	− 3.6	59.0	− 5.4	70.4	− 2.5	83.8	+ 6.4	79.2	+ 3.0	69.1	+ 0.3	55.9	− 1.6	40.4	− 3.8	30.8	− 1.2	54.4	+ 0.2
Maryville	27.0	+ 4.1	32.6	+ 6.8	46.2	+ 8.3	48.9	− 1.9	56.3	− 5.0	67.6	− 2.2	82.2	+ 6.5	75.8	+ 2.0	66.1	+ 0.5	52.4	− 1.1	36.4	− 3.0	27.4	+ 0.6	51.6	+ 1.3
Oregon	29.9	+ 5.8	35.6	+ 6.8	48.7	+ 9.1	50.6	− 2.1	57.8	− 5.4	68.9	− 3.3	83.8	+ 8 2	77.3	+ 2.1	67.8	+ 0.7	54.1	− 1.0	38.2	− 2.3	29.8	+ 1.1	53.5	+ 1.6
St. Joseph	30.2	+ 2.4	35.2	+ 2.9	49.0	+ 6.9	51.0	− 3.4	58.2	− 6.0	69 5	− 4.9	85.1	+ 5.9	78.4	+ 1.6	68.6	− 0.3	55.0	− 1.9	39.4	− 4.2	30.6	− 0.2	54.2	− 0.1
Tarkio	26.6	+ 3.7	32.9	+ 3.9	46.4	+ 6.3	47.8	− 4.4	56.0	− 6.6	67.4	− 4.4	82.4	+ 5.6	75.4	+ 0.2	65.1	− 1.2	51.9	− 2.9	38.0	− 2.1	27.5	+ 1.1	51.4	− 0.1
Trenton	28.2	+ 1.9	34.6	+ 5.2	46.5	+ 5.4	49.4	− 3.3	58.7	− 4.8	69.6	− 2.6	82.0	+ 5.2	77.0	+ 1.8	65.9	− 1.3	54.6	− 1.3	38.7	− 3.5	28.8	− 0.8	52.8	+ 0.2
Division means	**28.4**	**+ 2.7**	**34.2**	**+ 4.4**	**47.2**	**+ 6.1**	**49.7**	**− 3.1**	**57.5**	**− 5.7**	**68.7**	**− 3.5**	**82.8**	**+ 5.9**	**77.2**	**+ 1.9**	**67.2**	**− 0.4**	**54.0**	**− 1.8**	**38.5**	**− 3.5**	**28.9**	**− 0.8**	**52.9**	**+ 0.2**
State means	**33.0**	**+ 2.1**	**37.4**	**+ 4.3**	**50.4**	**+ 6.7**	**52.3**	**− 2.9**	**60.3**	**− 4.0**	**69.6**	**− 3.9**	**80.8**	**+ 3.0**	**77.7**	**+ 1.5**	**68.1**	**− 1.0**	**57.1**	**− 0.3**	**42.2**	**− 2.3**	**30.7**	**− 3.3**	**55.0**	**0.0**

¶ Estimated. ‡ Partially estimated. Letters of alphabet indicate number of days missing from report: thus [a] one day; [b] two days etc.

Monthly and Annual Precipitation for the Year 1935, with Departures from Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain																										
Boonville	1.81	0.00	1.30	−0.92	2.08	−1.06	2.97	−1.04	9.51	+4.42	7.34	+1.74	2.55	−1.18	0.63	−3.23	3.20	−1.51	2.68	−0.44	5.24	+2.92	0.98	−0.90	40.29	−1.20
Bowling Green	1.89	.....	2.03	.....	8.31	.....	2.53	.....	8.31	.....	2.77	.....	7.53	.....	1.23	.....	2.73	.....	2.32	.....	5.88	.....	1.03	.....	41.56	.....
Brunswick	2.26	+0.68	1.50	−0.29	1.64	−0.87	3.47	−0.08	10.92	+6.19	9.83	+4.34	4.13	−0.22	0.18	−3.66	3.64	−0.85	1.60	−1.32	5.81	+3.77	0.66	−0.99	45.64	+6.70
Canton	1.91	.....	1.66	.....	2.69	.....	3.75	.....	11.74	.....	6.77	.....	5.13	.....	1.75	.....	4.81	.....	1.74	.....	4.37	.....	1.09	.....	47.41	.....
Clifton Hill	1.23	−0.35	1.62	+0.19	2.10	−0.54	3.10	−0.76	9.05	+4.51	4.79	−0.10	3.59	+0.19	0.29	−3.72	3.00	−1.45	1.79	−0.77	4.37	+2.23	0.96	−0.67	35.89	−1.24
Columbia	1.74	−0.18	0.85	−1.19	2.88	−0.06	2.66	−1.11	8.19	+3.73	5.72	+0.96	3.89	+0.40	0.27	−3.33	2.77	−1.58	3.81	+1.20	6.71	+4.51	0.97	−0.89	40.46	+2.46
Downing	1.41	−0.02	1.74	+0.42	3.04	+0.71	2.64	−1.12	9.58	+5.85	7.87	+2.41	4.73	+0.24	1.68	−2.04	3.92	−1.68	1.65	−1.20	3.68	+1.82	0.89	−0.61	42.83	+4.78
Edina	1.10	.....	1.23	.....	2.11	.....	3.19	.....	10.40	.....	9.58	.....	4.11	.....	2.87	.....	5.53	.....	1.42	.....	3.57	.....	0.99	.....	46.10	.....
Elsberry	2.63	.....	1.49	.....	4.72	.....	2.78	.....	6.90	.....	3.84	.....	3.24	.....	1.11	.....	3.48	.....	2.67	.....	5.20	.....	0.70	.....	38.76	.....
Farber	0.98	.....	1.05	.....	3.27	.....	2.59	.....	9.31	.....	3.50	.....	7.37	.....	1.91	.....	3.04	.....	2.04	.....	6.50	.....	1.41	.....	42.97	.....
Fayette	1.78	−0.08	1.48	−0.32	3.15	+0.35	2.66	−0.96	9.86	+5.31	7.19	+2.40	4.43	+0.83	1.14	−2.12	4.02	−0.73	3.84	+1.16	4.56	+2.43	0.96	−0.72	45.07	+7.55
Fulton	1.96	−0.27	1.89	+0.13	3.23	+0.21	2.94	−1.24	8.29	+3.47	6.96	+2.29	6.14	+2.29	1.02	−2.45	3.96	−0.33	1.81	−1.28	6.79	+4.43	1.23	−0.80	46.22	+6.45
Gorin	1.29	−0.19	1.88	+0.44	2.88	+0.46	3.15	−0.68	10.25	+5.98	12.60	+8.31	4.87	+0.96	3.33	+0.21	4.49	−0.17	1.43	−1.37	3.51	+1.52	1.17	−0.49	50.85	+14.98
Hannibal	1.73	+0.01	2.00	+0.14	3.20	+0.60	2.97	−0.22	10.79	+6.44	6.30	+2.40	5.95	+2.86	1.98	−1.36	2.80	−1.17	2.33	−0.06	4.40	+2.34	0.91	−0.63	45.36	+11.35
Hermann	1.70	−0.39	1.43	−0.67	4.57	+1.51	4.01	+0.13	10.18	+5.81	6.24	+1.62	3.90	+0.26	0.98	−2.22	4.09	+0.11	2.18	−0.76	6.10	+3.33	1.03	−0.82	46.41	+7.91
Jefferson City	2.43	+0.30	1.78	−0.14	3.45	+0.35	3.44	−0.41	7.65	+3.13	7.33	+3.06	2.14	−1.31	1.81	−1.44	2.82	−0.71	1.86	−0.93	5.32	+2.95	1.12	−0.82	41.15	+4.03
Kahoka	1.57	.....	1.73	.....	3.22	.....	3.44	.....	9.38	.....	4.95	.....	4.17	.....	3.30	.....	4.80	.....	1.17	.....	3.76	.....	2.57	.....	44.06	.....
Kirksville	1.62	+0.17	1.66	−0.04	2.39	−0.33	3.55	−0.04	9.60	+4.84	9.42	+4.71	4.23	+0.16	1.66	−1.85	5.39	+0.93	2.16	−0.82	4.23	+2.32	0.98	−0.63	46.89	+9.42
La Belle	1.77	.....	1.60	.....	2.76	.....	3.75	.....	12.84	.....	9.17	.....	4.52	.....	1.81	.....	4.63	.....	1.53	.....	3.81	.....	0.84	.....	49.03	.....
Linneus	1.65	.....	2.52	.....	1.50	.....	3.59	.....	13.10	.....	7.80	.....	6.80	.....	0.73	.....	5.44	.....	1.04	.....	4.48	.....	0.54	.....	49.19	.....
Louisiana	1.82	−0.15	3.10	+0.82	4.85	+1.75	3.07	−0.37	10.33	+5.85	3.77	−0.42	3.82	+0.58	1.87	−1.95	3.20	−0.88	3.34	+0.45	4.22	+1.80	0.70	−1.06	44.09	+6.42
Lucerne	1.09	+0.11	1.20	−0.26	1.37	−0.46	1.87	−2.07	8.08	+3.71	8.20	+1.68	4.39	+1.27	1.32	−2.08	4.71	−1.17	1.48	−2.02	3.73	+1.87	0.77	−0.55	38.21	+0.01
Macon	1.62	+0.05	2.10	+0.28	2.18	−0.44	3.10	−0.26	9.73	+5.33	3.87	−1.02	2.87	−0.50	0.22	−3.32	3.42	−0.88	1.19	−1.81	4.74	+2.64	0.86	−0.68	35.90	−0.61
Madison	1.94	.....	1.78	.....	3.54	.....	2.44	.....	8.76	.....	6.54	.....	3.87	.....	1.81	.....	2.93	.....	1.35	.....	5.24	.....	1.50	.....	41.70	.....
Memphis	1.23	.....	1.75	.....	2.69	.....	2.92	.....	11.33	.....	8.96	.....	7.19	.....	4.67	.....	3.78	.....	0.86	.....	4.58	.....	0.85	.....	50.81	.....
Mexico	2.17	+0.16	1.72	−0.38	3.26	+0.43	3.29	−0.37	10.08	+5.39	8.86	+3.78	2.99	−0.61	0.66	−2.58	2.98	−1.62	2.00	−0.67	6.50	+4.12	1.68	−0.32	46.19	+7.33
Milan	1.60	+0.49	2.49	+1.08	2.09	−0.30	3.90	−0.02	9.65	+6.62	6.76	−0.09	7.15	+4.23	0 54	−3.26	5.00	−0.18	1.91	−1.90	4.63	+2.05	0.95	−0.46	46.67	+8.26
Monroe City	1.69	−0.34	1.66	+0.17	3.33	+0.61	2.82	−0 89	9.96	+6.35	7.84	+2.77	4.60	+0.87	0.57	−4.00	3.54	−0.47	1.33	−1.35	4.91	+2.78	0 87	−0 80	43.12	+5.70
New London	1.50	.....	1.93	.....	2.62	.....	2.74	.....	9.05	.....	5.54	.....	7.59	.....	0.88	.....	1.09	.....	1.24	.....	5.79	.....	1.47	.....	41.44	.....
Palmyra	1.82	−0.42	1.03	−0.92	1.88	−1.15	2.58	−1.04	11.05	+6.34	6.07	+1.62	6.22	+2.89	0.93	−2.57	3.31	−0.75	0.83	−1.41	5.43	+3.12	0.74	−0.93	41.89	+4.78
Paris	1.49	.....	1.46	.....	4.39	.....	2.63	.....	8.95	.....	4.26	.....	3.76	.....	1.24	.....	3.54	.....	1.19	.....	5.35	.....	1.00	.....	39.26	.....
Perry	1.56	.....	1.47	.....	3.04	.....	1.97	.....	9.01	.....	4.13	.....	4.77	.....	2.44	.....	2.95	.....	1.51	.....	5.18	.....	0.80	.....	38.83	.....
Philadelphia	1.64	.....	2.22	.....	¶2.67	.....	4.37	.....	10.99	.....	4.69	.....	5.89	.....	1.45	.....	2.76	.....	0.94	.....	5.28	.....	0.52	.....	43.42	.....
St. Charles	1.93	−0.26	1.57	−0.92	6.05	+3.01	3.04	−0.61	7.48	+3.18	4.39	+0.27	3.80	+0.68	0.67	−2.81	3.17	−0.14	2.65	−0.07	3.33	+0.81	1.88	0.00	39.96	+3.14
St. Louis	2.76	+0.42	1.27	−1.29	6.43	+3.05	2.50	−1.31	7.35	+3.01	4.37	+0.55	3.13	+0.15	1.82	−1.17	3.35	−0.11	2.56	−0.16	2.71	−0.12	1.11	−1.10	39.36	+1.92
St. Louis University	2.01	−0.50	1.01	−0.93	6.31	+2.93	2.86	−1.28	7.50	+3.29	3.90	+0.23	4.13	+1.66	1.55	−2.70	2.27	−1.97	2.42	−0.93	2.76	+0.14	1.19	−1.29	37.91	−1.35
Shelbina	1.45	−0.14	2.01	+0.08	2.79	−0.03	3.18	−0.40	10.63	+5.98	4.60	−0.41	5.02	+1.14	0.75	−2.27	3.55	−0.53	1.21	−1.69	4 69	+2.50	1.03	−0.60	40.91	+3.63
Shelbyville	1.03	.....	1.87	.....	2.64	.....	3.22	.....	10.42	.....	6.02	.....	4.25	.....	1.72	.....	3.71	.....	0 95	.....	5.39	.....	1.08	.....	42.30	.....
Steffenville	1.55	−0.50	2.06	+0.27	3.48	+0.52	4.69	+1.00	12.13	+7.51	7.53	+3.05	4.64	+0.37	2.75	−0.96	4.16	−0.21	1.60	−0.84	5.28	+3.17	1 39	−0.24	51.26	+13.14
Troy	2.08	.....	1.59	.....	3.80	.....	2.53	.....	7.74	.....	6.44	.....	5.63	.....	2.63	.....	3.79	.....	3.68	.....	6.63	.....	0.68	.....	47.22	.....
Union	2.32	+0.45	1.16	−0.17	5.42	+2.00	3.29	−1.39	7.99	+3.22	9.58	+5.14	8.70	+6.05	2.59	−1.97	2.66	−1.35	3.85	+0.05	3.42	+0.36	1.01	−1.35	51.99	+11.04
Unionville	1.34	−0.42	1.25	−0.52	1.44	−0.98	2.98	−0.74	7.73	+3.25	9.38	+4.29	5.75	+1.69	2.71	−1.86	4.66	−0.27	1.14	−1.69	4.16	+2.20	0.56	−1.06	43.10	+4.39
Valley Park	2.21	+0.49	1.34	+0.03	6.37	+2.99	2.81	−1.84	8.51	+3.76	3.64	−0.10	5.70	+3.64	2.69	−0.95	3.89	+0.48	2.60	−1.00	3.09	+0.40	1.07	−1.38	43.92	+6.52
Warrenton	2.80	+0.50	2.21	+0.16	4.79	+1.45	2.97	−1.19	7.64	+3.00	7.80	+3.58	7.60	+4.34	1.45	−2.95	4.02	0.00	2.35	−0.65	5.65	+2.96	1.01	−1.13	50.29	+10.07
Keokuk, Iowa	1.81	+0.25	1.79	+0.24	2.97	+0.59	2.48	−0.51	7.28	+3.35	6.40	+2.27	4.85	+1.44	1.90	−1.30	4.46	+0.62	1.66	−0.60	2.94	+1.00	1.00	−0.45	39.54	+6.90
Division means	**1.75**	**0.00**	**1.68**	**−0.16**	**3.32**	**+0.60**	**3.05**	**−0.73**	**9.45**	**+4.79**	**6.52**	**+2.11**	**4.93**	**+1.22**	**1.59**	**−2.26**	**3.68**	**−0.64**	**1.93**	**−0.79**	**4.75**	**+2.29**	**1.04**	**−0.77**	**43.69**	**+5.66**
Southeast Lowlands																										
Bragg City	7.00	.....	1.70	.....	11.47	.....	2.47	.....	5.60	.....	5.05	.....	1.59	.....	1.04	.....	2.37	.....	3.76	.....	2.92	.....	1.72	.....	46.69	.....
Campbell	5.60	+0.30	2.60	−0.73	14.27	+8.35	2.63	−1.63	7.57	+2.56	5.21	+0.97	1.88	−1.60	1.98	−4.00	3.17	−0.70	3.61	+0.51	1.96	−1.74	2.47	−1.48	52.95	+0.81
Cape Girardeau	4.02	+0.07	1.37	−0.96	10.74	+7.12	2.02	−2.04	5.18	+0.90	6.74	+2.37	1.64	−1.19	1.97	−1.82	4.17	+0.76	4.95	+1.76	2.38	−1.57	1.60	−1.79	46.78	+3.61
Caruthersville	4.44	−0.40	1.50	−2.12	10.66	+6.15	2.16	−2.29	5.96	+1.44	4.73	+0.71	2.78	−0.61	0.92	−2.46	1.80	−1.34	2.79	−0.31	2.48	−1.48	1.80	−2.48	42.02	−5.19
Dexter	5.11	−0.18	1.96	−0.85	12.90	+9.75	1.22	−3.74	8.52	+3.56	11.57	+7.01	1.19	−2.21	3.03	−1.28	2.28	−2 48	3 82	−0.62	2.02	−1.89	2.31	−1.03	55.93	+6.04
Doniphan	3.80	−0.60	1.36	−1.69	14.17	†10.06	1.24	−4.14	10.14	+5.71	9.58	+4.99	3.75	−0.36	1.13	−3.15	3.52	−0.20	5.58	+2.46	2.43	−1.10	2.20	−1.37	58.90	+10 61
Fisk	3.98	.....	1.94	.....	11.87	.....	2.36	.....	8.71	.....	11.56	.....	2.14	.....	1.94	.....	2.92	.....	4.24	.....	2.35	.....	2.79	.....	56.80	.....
Jackson	3.68	−0.10	1.35	−1.49	10.22	+5.92	1.63	−2.91	7.90	+3.46	8.73	+4.01	2.33	−1.15	1.27	−2 34	4.37	+0.59	4.37	+1.13	3.62	+0.19	1.60	−1.62	51.07	+5 69
Marble Hill	4.22	+0.55	1.09	−2.16	9.97	+5.56	1.99	−2.73	7.69	+3.10	8.50	+3.79	3.58	−0.82	2.25	−1.35	3.94	+0.20	4.27	+1.35	3.60	−0.03	2.35	−1.16	53.45	+6.30
Morehouse	4.46	−0.39	2.02	−0.92	14.18	+9.62	3.11	−1.97	7.00	+2.18	7.81	+2.78	1.26	−1.76	2.05	−1.93	2.23	−2.53	4.07	+0.55	2.49	−1.58	1.92	−1.85	52.60	+2.20
New Madrid	6.57	+1.21	2.32	−1.48	13.73	+8.46	3.56	−1.04	6.00	+1.36	4.76	+0.28	3 21	−0.82	1.28	−2.52	2.51	−1.12	3.86	+0.48	2.55	−1.48	2.66	−1.69	53.01	+1.64
Parma	6.76	+3.03	2.53	−0.19	13.74	+7.85	1.94	−2.65	7.09	+2.39	7.36	+3.47	2.79	−0.91	1.09	−3.06	2.39	−2.69	3.24	−0.18	2 23	−2.27	2.24	−2 53	53.40	+2.26
Poplar Bluff	4.70	+0.48	1.50	−1.41	10.16	+5.60	5.37	+0.67	9.88	+4.82	9.27	+4.60	1.77	−1.71	1.26	−3.11	3.00	−0.79	4.82	+1.68	2.12	−1.50	2.55	−1.39	56.40	+7.94
Sikeston	4.83	+0.39	1.80	−1.26	14.61	†10.18	3.96	−0.52	6.62	+2.26	7.51	+3.28	2.24	−2.13	2.06	−1.80	1.79	−1.54	3.59	+0.77	2.35	−1.39	1.92	−1.93	53 28	+6.31
Cairo, Ill	4.74	+0.98	1.34	−1.79	12.00	+8.25	3.69	−0.03	4.83	+1.12	7.51	+3.68	1.86	−1.21	5.99	+2.97	1.23	−1.66	5.00	+2.24	1.70	−1.98	1.99	−1.41	51.88	+11.16
Division means	**4.93**	**+0.42**	**1.76**	**−1.36**	**12.31**	**+7.88**	**2.67**	**−1.92**	**7.25**	**+2.68**	**7.73**	**+3.23**	**2.27**	**−1.27**	**1 95**	**−1.99**	**2.78**	**−1.04**	**4.13**	**+0.91**	**2.48**	**−1.37**	**2.14**	**−1.67**	**52.40**	**+4.50**
Ozark Plateau																										
Arcadia	3.14	+0.10	1.02	-1 92	9.22	+5.42	1.77	−2.91	6.37	+1.67	12.48	+7.79	7.30	+3.16	2.57	−1.25	3.85	+0.11	3.74	+0.62	5.39	+1.77	1.49	−1.48	58.34	+13.08
Birch Tree(near)	4.06	+0.87	1.46	−1.02	9.82	+5.67	1.66	−3.14	8.42	+4.05	11.82	+7.24	4.39	+0.53	1.41	−3.17	2.85	−0.78	3.50	+0.91	3.37	+0.24	1.83	−0.92	54.99	+10.48
Buffalo	1.97	.....	1.04	.....	6.32	.....	3.17	.....	7.65	.....	12.34	.....	1.54	.....	4.09	.....	1.45	.....	4.08	.....	3.74	.....	0.77	.....	48.16	.....
Caplinger Mills	2.29	+0.37	1.50	+0.19	3.06	+0.33	3.46	−0.13	8.42	+3.55	8.61	+2.45	1.00	−1.52	2.90	−1.65	1.56	−2.16	5.15	+1.27	3.75	+0.99	0.72	−0.98	42.42	+2.71
Crystal City	2.84	.....	1.29	.....	5.29	.....	3.47	.....	8.51	.....	9.31	.....	7.31	.....	1.84	.....	3.03	.....	2.44	.....	4.54	.....	1.12	.....	50.99	.....
Cuba	¶2.15	.....	¶1.42	.....	¶5.30	.....	5.27	.....	8.01	.....	12.15	.....	4.65	.....	3.09	.....	4.14	.....	2.52	.....	4.85	.....	‡0.94	.....	54.49	.....
Dean	2.58	+0.24	2.16	+0.38	9.05	+5.53	3.19	−1.41	6.22	+0.39	10 64	+4.60	1.87	−2.82	0.99	−3.17	3.68	−0.25	7.10	+3.29	2.76	−0.58	1.48	−0.79	51.72	+5.91
Eldon	‡1.54	−0.09	1.20	−0.60	2.20	−0.89	2.67	−1.89	8.63	+3.96	16.38	†11.71	7.41	+3.87	3.99	+0.17	3.16	−0.93	2.44	−0.82	6.02	+3.53	1.22	−0.86	56.81	+17.16
Farmington	2.01	−0.51	1.71	−1.25	9.02	+5.61	1.15	−3.09	13.36	+7.91	17.71	†13.06	¶6.58	+3.14	¶2.64	−0.93	‡3.62	+0.25	2.41	−0.53	5.06	+1.31	1.00	−1.76	66.27	+23.21
Fredericktown	3.19	−0.25	0.99	−1.61	9.45	+5.67	2.05	−2.94	8.83	+5.19	11.24	+6.05	5.45	+1.63	1.32	−2.74	2.18	−2.15	3.07	−1.34	3 12	−0.06	1.54	−1.22	52.43	+6.23
Galena	3.27	+0.98	1.18	−0.69	7.95	+4.76	1.67	−2.44	5.51	+0.35	12.38	+7.61	3.70	−0.27	3.95	−0.16	2.49	−1.83	4.65	+1.56	4.29	+1.02	1.36	−1.17	52.35	+9.72
Garber	2.64	.....	1.28	.....	10.28	.....	1.94	.....	7.43	.....	12.46	.....	0.91	.....	5.01	.....	3.60	.....	4.04	.....	5.54	.....	1.88	.....	57.01	.....
Goodland	2.72	+0.04	1.56	−0.76	8.93	+4.80	2.93	−2.07	5.49	+0.65	12.26	+8.00	6.25	+2.37	4.81	+0.83	5.44	+1.62	4.64	+1.25	5.59	+2.67	2.17	−0.38	62.79	+19.02
Greenville	4.35	+1.29	1.13	−1.87	10.58	+6.08	2.51	−2.48	8.71	+4.52	10.47	+5.69	8.82	+5.05	3.06	−0.29	4.02	+0.88	4.91	+2.04	3.50	−0.18	1.90	−1.13	63.96	+19.60
Hailey	3.78	+0.86	1.57	−0.23	11.99	+8.51	2.20	−2.19	6 82	+1.58	12.24	+6.64	1.35	−2.34	3.42	−1.52	3.00	−0.77	6.66	+2.36	2.33	−0.78	2.02	−0.30	57.38	+11.82
Koshkonong	4.96	+1.30	1.83	−0.92	10.20	+6.27	1.83	−3.44	8.98	+4.41	9.71	+5.00	2.51	−1.16	2.45	−1.89	4.35	+0.67	4.89	+1.70	3.60	+0.30	2.55	−0.86	57.86	+11.38
Lakeside	2.40	.....	1.05	.....	4.02	.....	3.00	.....	5.84	.....	11.87	.....	2.78	.....	3.92	.....	2.61	.....	3.23	.....	5.90	.....	0.90	.....	47.52	.....
Lebanon	1.85	−0.68	1.81	−0.48	7.65	+4.11	3.01	−1.35	7.60	+2.15	15.46	†10.21	1.65	−2.32	2.94	−0.94	2.45	−1.80	3.94	+0.61	2.29	−0.33	1.05	−1.43	51.70	+7.75
Leeper	4.04	−0.27	1.24	−1.12	10.18	+6.88	1.78	−3.85	9.81	+4.83	7.86	+1.57	3.27	−0.46	2.86	−1.07	3.64	+0.65	4.93	+1.06	2.41	−1.12	1.71	−1.48	53.73	+5.62
Lockwood	2.59	+0.85	1.52	−0.25	6.67	+3.84	3.11	−1.20	5.46	+0.50	8.99	+3.65	1.67	−3.04	3.09	−1.27	1.28	−3.28	7.06	+3.54	3.24	+0.79	1.17	−0.89	45.85	+3.24
Meramec Park	¶2.30	.....	¶1.32	.....	¶5.38	.....	¶3.75	.....	¶7.80	.....	¶9.86	.....	¶6.05	.....	¶2.68	.....	‡3.02	.....	4.86	.....	4.90	.....	0.97	.....	52.89	.....
Mountain Grove	2.46	−0.36	1.35	−0.87	9.32	+5.20	2.18	−2.78	7.63	+2.80	9.96	+5.18	3.73	−0.10	4.62	+0 30	3.09	−1.15	3.51	+0.26	4.07	+1.31	1.40	−1.08	53.32	+8.71
Neosho	2.47	−0.03	1.61	−0.63	7.42	+3.94	4.09	−0.35	5.20	−0.66	14.24	+8.43	0.08	−4.23	3.63	−0.51	4.08	−0.31	6.78	+3.30	2.92	−0.24	1.53	−0.96	54.05	+7.75
Owensville	1.90	+0.03	1.41	−0.14	5.53	+1.95	2.97	−0.77	6.67	+1.20	8.40	+3.11	3.55	+0.77	3.21	−0.15	2.24	−1.65	3.89	+0.31	4.00	+1.14	0.58	−1.66	44.35	+4.14
Ozark Beach	¶2.74	−0.10	¶1.18	−0.43	¶9.74	+7.82	¶1.73	−3.85	¶7.98	+2.90	¶¶	+8.00	2.66	−0.35	2.58	−1.90	2.73	−1.12	2.69	−1.32	4.06	+1.34	2.28	−0.56	54.21	+10.43
Rolla	2.40	−0.04	1.42	−0.73	5.06	+1.34	2.69	−1.93	6.84	+1.85	12.84	+8.58	3.10	−0.78	1.35	−2.73	2.96	−0.95	4.43	+1.38	4.26	+1.74	0.91	−1.25	48.26	+6.48
St. Thomas(near)	1.83	.....	0.77	.....	4.42	.....	2.64	.....	5.37	.....	11.52	.....	4.15	.....	0.93	.....	2.97	.....	2.19	.....	4.84	.....	0.62	.....	42.25	.....
Salem	2.32	−0.47	1.43	−0.84	7.34	+3.72	2.70	−1.93	5.28	+0.58	12.80	+8.10	3.43	+0.07	3.42	−1.06	3.13	−0.95	3.77	+0.04	3.98	+1.36	1.09	−1.29	50.69	+7.33
Seligman	2.25	−0.63	1.02	−0.87	10.36	+6.84	2.31	−2.03	7.51	+1.87	12.82	+8.47	0.65	−3.66	3.02	−1.02	3.31	−1.06	4.77	+1.42	5.73	+2.86	2.09	−0.41	55.84	+11.78
Seymour(near)	2.18	−0.37	1.05	−1.12	9.70	+5.83	1.99	−2.30	5.56	+0.31	9.86	+4.46	1.10	−3.14	2.53	−1.43	2.46	−2.01	4.79	+1.49	3.71	+1.04	1.37	−0.94	46.30	+1.82
Springfield	2.43	+0.09	0.99	−1.36	9.09	+5.70	1.86	−2.00	6.81	+1.62	11.31	+6.63	1.62	−2.59	3.93	−0.16	2.64	−0.88	3.88	+0.83	2.50	−0.29	0.62	−1.69	47 68	+5.90
Stover	2.74	+0.96	1.05	−0.44	2.63	−0.11	2.70	−1.64	7.49	+1.90	12.50	+7.05	2.00	−1.10	2.09	−1.58	3.82	−0.07	3.66	−0.65	6.47	+3.70	0.67	−1.23	47.82	+6.79
Versailles	2.86	−0.05	1.43	−0.14	3.53	+1.17	2.76	−1.68	9.58	+4.01	13.08	+8.25	3.36	−0.97	1.51	−1.47	4.01	−0.55	3.53	+0.13	5.73	+3.36	1.31	−0.56	52.69	+11.50

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Monthly and Annual Precipitation for the Year 1935, with Departures from Normal—Concluded

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Ozark Plateau—concluded																										
Williamsville	4.26	+0.06	1.85	−0.70	10.01	+6.48	2.15	−3.14	9.16	+4.80	9.24	+2.64	4.02	+0.66	2.34	−3.11	3.73	−0.02	5.80	+2.18	2.76	−0.89	2.03	−1.79	57.35	+7.17
Willow Springs(near)	3.51	+0.08	1.93	−0.71	10.18	+5 20	1.00	−3.80	5.70	+0.72	11.88	+7.12	5.41	+1.19	2.21	−0.77	2.56	−1.68	4.45	+1.38	4.23	+0.72	2.35	−0.48	55.41	+7.97
Division means	**2.81**	**+0.15**	**1.37**	**−0.84**	**7.70**	**+4.73**	**2.54**	**−2.26**	**7.42**	**+2.43**	**11.72**	**+6.80**	**3.44**	**−0.41**	**2.88**	**−1.29**	**3.11**	**−0.83**	**4.25**	**+1.01**	**4.16**	**+0.95**	**1.39**	**−1.06**	**52.79**	**+9.38**
Southwest Plain																										
Appleton City	2.51	+0.67	1.48	−0.30	2.24	−0.94	3.58	−0.83	8.35	+3.17	8.33	+3.08	0.13	−4.38	3.82	+0.14	2.51	−1.61	5.76	+3.19	6.61	+4.37	0.34	−1.32	45.66	+5.24
Clinton	2.71	+0.72	1.67	−0.30	2.70	−0.41	4.55	+0.24	9.54	+4.21	18.63	†13.61	0.50	−3.33	1.54	−1.83	3.82	−0.24	5.06	+2.01	8.06	+5.99	0.60	−1.27	59.38	+16.40
Concordia	2.80	+1.36	1.18	−0.49	1.94	−0.31	3.43	+0.11	9.03	+4.81	9.13	+3.84	1.90	−2.00	1.65	−1.04	4.43	+0.74	3.55	+0.98	5.20	+2.91	0.31	−1.55	44.55	+9.36
Harrisonville	1.58	+0.03	1.90	+0.04	1.80	−0.88	3.10	−0.44	9.74	+5.21	12.21	+7.58	2.44	−1.32	1.50	−2.55	3.58	−1.00	4.39	+1.56	4.79	+2.72	0.24	−1.45	47.27	+9.50
Joplin	2.34	+0.24	1.51	−0.64	5.01	+2.14	2.60	−1.91	8.69	+3.52	13.56	+7.92	0.56	−3.79	3.03	−1.19	3.87	+0.24	7.12	+3.63	3.01	+0.44	1.37	−0.57	52.67	+10.03
Lamar	2.73	+0.97	1.65	−0.44	3.56	+0.56	3.33	−1.15	5.96	+0.59	7.69	+2.44	1.49	−2.69	2.71	−1.52	1.75	−2.77	5.75	+2.59	3.34	+1.01	1.15	−0.83	41.11	−1.24
Lamonte	3.08	+1.10	2.70	+0.81	1.97	−0.93	3.17	−0.74	11.32	+6.37	10.85	+6.02	1.16	−2.79	1.74	−1.99	3.67	−0.95	3.76	+1.08	5.23	+3.07	1.42	−0.33	50.07	+10.72
Marshall	2.77	+1.06	1.83	+0.09	1.91	−0.88	3.38	−0.46	11.92	+7.07	5.25	+0.62	4.48	+0.64	4.65	+1.01	3.44	−1.70	2.73	−0.13	4.29	+2.03	0.28	−1.40	46.93	+7.95
Nevada	2.12	+0.09	1.34	−0.43	2.73	−0.22	4.44	+0.24	8.89	+3.58	7.09	+1.57	T.	−3.94	3.59	−0.05	3.25	−1.05	7.29	+4.30	6.42	+4.39	0.43	−1.40	47.59	+7.08
Warrensburg	2.52	+0.75	1.37	−0.66	2.25	−0.42	3.06	−0.29	7.42	+2.88	5.98	+0.95	0.44	−3.41	1.08	−2.41	4.25	+0.46	3.16	+0.44	5.67	+3.67	0.50	−1.26	37.70	+0.70
Warsaw	3.10	+0.82	1.22	−1.11	3 07	−0.51	3.72	−0.86	9.11	+3.99	16.23	†10.85	0.58	−3.51	2.49	−1.80	2.58	−2.14	6.16	+2.69	6.39	+3.80	0.81	−1.47	55.46	+10.75
Waverly	1.99	+0.46	1.69	+0.32	2.09	−0.80	4.06	−0.02	11.50	+6.82	7.57	+2.05	6.22	+2.60	1.87	−1.90	3.90	−1.41	3.55	+0.36	5.17	+2.80	0.35	−1.11	49.96	+10.17
Division means	**2.52**	**+0.69**	**1.53**	**−0.36**	**2.61**	**−0.30**	**3.54**	**−0.51**	**9.29**	**+4.35**	**10.21**	**+5.04**	**1.66**	**−2.33**	**2.47**	**−1.26**	**3.42**	**−0 95**	**4.86**	**+1.89**	**5.35**	**+3.10**	**0.65**	**−1.16**	**48.11**	**+8.20**
Northwest Plateau																										
Amity	0.61	.....	2.18	.....	1.64	.....	4.16	.....	13.13	.....	8.33	.....	1.35	.....	1.36	.....	5.95	.....	1.86	.....	5.93	.....	0.37	.....	46.87	.....
Bethany	1.16	−0.10	1.06	−0.39	1.15	−1.15	3 10	−0.17	9.73	+5.30	7.65	+2.83	0.66	−3.57	1.55	−2.40	6.92	+2.76	1.64	−0.81	2.83	+1.00	0.55	−0.70	38.00	+2.60
Chillicothe	1.56	+0.03	1.44	−0.42	0.61	−1.84	4.46	+0.17	13.30	+9.32	5.40	−0.44	2.66	−1.50	2.78	−1.68	5.82	+0.14	1.37	−2.36	4.66	+2.32	0.39	−1.07	44.48	+2.67
Conception	0.82	−0.09	1.15	−0.04	0.71	−1.01	2.76	−0.09	8.62	+4.25	6.70	+1.76	1.82	−2.51	0.98	−2.72	6.06	+1.94	3.03	+0.33	3.01	+1.54	0.21	−0.73	35.87	+2.63
Edgerton	0.50	−0.56	1.53	+0.17	0.29	−1.88	2.77	−0.68	10.89	+6.60	5.02	+0.52	1.46	−2.42	1.49	−1.73	4.14	+0.34	3.09	+0.44	3.65	+2.12	0.50	−0.71	35.33	+2.21
Gallatin	1.03	−0.13	1.87	+0.31	1.48	−0.73	4.68	+0.89	11.08	+6.33	7.33	+1.48	0.84	−3.24	1.46	−2.41	8.47	+4.04	1.32	−1.70	4.54	+2.63	0.35	−1.10	44.45	+6.37
Grant City	0.72	−0.17	1.03	−0.10	0.38	−1.67	1.89	−1.13	7.00	+2.74	12.12	+7.21	0.69	−4.14	1.78	−1.96	4.91	+0.65	2.76	−0.06	3.36	+1.74	0.34	−0.73	37.01	+2.38
Kansas City	1.13	−0.06	1.34	−0.41	0.69	−1.84	2.30	−0.84	9.99	+5.34	3.24	−1.75	0.51	−3 62	2.28	−1.81	4.60	+0.04	3.69	+0.77	3.84	+2.01	0.25	−1.08	33.86	−3.25
Kidder	1.07	−0.52	1.63	+0.12	1.12	−1.07	3.39	+0.21	12.27	+7.60	7.31	+2.31	0.22	−3.70	1.89	−1.98	7.36	+2.79	1.32	−1.59	3.47	+1.56	0.28	−0.98	41.33	+4.75
King City	1.03	−0.29	1.12	−0.21	0.72	−1.19	3.89	+0.62	8.71	+4.26	4.92	−0.50	0.35	−3.50	1.23	−2.48	6.05	+1.43	3.71	+0 87	2.77	+1.03	0.35	−0.72	34.85	−0.68
Lexington	1.72	+0.10	1.93	−0.05	1.30	−1.24	4.12	+0.40	10.29	+5.26	8.53	+3.41	2.05	−2.63	1.46	−1.99	4.80	+0.06	3.37	+0.39	4.91	+2.84	0.56	−1.22	45.04	+5.33
Maryville	0.62	−0.40	1.27	−0.12	0.40	−1.44	2.12	−0.93	8.85	+3.86	7.91	+2.82	1.49	−3.64	2.17	−1.79	5.89	+1.39	3.33	+0.52	2.31	+0.68	0.31	−0.69	36.67	+0.26
Oregon	0.85	−0.49	1.16	−0.44	0.93	−1.15	4.51	+1.19	8.20	+3.52	6.79	+1.78	0.46	−3.80	1.68	−2.33	5.04	+1.14	3.20	+0.55	2.86	+1.13	0.40	−0.97	36 08	+0.13
St. Joseph	0.72	−0.16	1.10	−0.25	1.61	−0.62	3.10	−0.11	7.92	+3.93	8.20	+3.17	0.11	−2.92	1.57	−2.09	4.23	−0.79	3.09	+0.40	2.71	+0.62	0.25	−0.85	34.61	+0.33
Tarkio	1.18	+0.44	0.89	−0.20	0.35	−1.37	1.65	−1.50	8.85	+4.56	8.94	+3.84	1.13	−2.61	2.24	−1.81	4 42	+0.58	3.96	+1.36	3.09	+1.61	0 35	−0.53	37.05	+4.37
Trenton	1.10	−0.25	1.77	+0.24	2.16	−0.26	2.89	−0.58	10.32	+5.51	6.01	+1.01	1.56	−2.50	1.68	−2.01	5.21	+0.68	1.60	−1.32	3.80	+1.92	0.50	−0.89	38.60	+1.55
Division means	**1.02**	**−0.18**	**1.35**	**−0.14**	**0.93**	**−1.23**	**3.18**	**+0.08**	**9.95**	**+5.23**	**7.15**	**+1.96**	**1.08**	**−3.09**	**1.72**	**−2.09**	**5.62**	**+1.15**	**2.65**	**−0.15**	**3.61**	**+1.65**	**0.37**	**−0.86**	**38.63**	**+2.33**
State means	**2.42**	**+0.20**	**1.55**	**−0.45**	**5.27**	**+2.09**	**2.89**	**−0.98**	**8.50**	**+3.69**	**9.25**	**+4.41**	**3.12**	**−0.65**	**2.26**	**−1.65**	**3.63**	**−0.50**	**3.52**	**+0.65**	**4.11**	**+1.51**	**1.13**	**−0.92**	**47.65**	**+7.41**

¶ Estimated ‡ Partially estimated † Indicates plus ¶¶ 13.84

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crops the year was not bad. Wheat, oats, hay, apples, pears, soybeans, and potatoes made fair to goods crops, generally speaking. The apple crop was unusually large.

Details of the weather of 1935 in Missouri, month by month, may be found in the publication, "Climatological Data", which is issued monthly from the St. Louis office of the Weather Bureau.

TEMPERATURE

The annual mean temperature for the State was 55.0°, or exactly normal. The highest annual mean was 61.0° at Caruthersville, and the lowest was 50.4° at Unionville. The highest temperature recorded was 110° at Dean, on August 8th and 11th; the lowest was 12° below zero at Conception, on January 21st. The greatest daily range was 55° at Goodland, on February 21st.

PRECIPITATION

The average precipitation for the State was 47 65 inches, or 7.41 inches more than normal. The greatest annual amount was 66.27 inches at Farmington, and the least was 33.86 inches at Kansas City. The greatest local monthly amount was 18.63 inches at Clinton, in June, and the least local monthly amount was a trace at Nevada, in July. The greatest precipitation in any 24 hours was 7.59 inches at Gorin, on June 1st-2d. The average number of days with 0.01 inch or more of precipitation was 106.

The snowfall averaged 5.0 inches, or 13.0 inches less than normal. The greatest annual amount was 17.6 inches at Edina, and the least annual amount was a trace at Harrisonville. The greatest monthly snowfall was 10.0 inches at Shelbyville and Steffenville, in April.

KILLING FROSTS, 1935

Stations	Last in Spring	First in Autumn	Stations	Last in Spring	First in Autumn
Northeast Plain			*Ozark Plateau (continued)*		
Brunswick	April 16*	Oct. 4*	Goodland	April 30*	Oct. 2*
Clifton Hill	April 16*	Oct. 4	Greenville	April 16	Oct. 7
Columbia	April 16	Oct. 4	Koshkonong	Mar. 17*	Oct. 7*
Downing	April 16	Oct. 4	Lebanon	April 16*	Oct. 24
Elsberry	April 16*	Oct. 2*	Lockwood	April 15*	Nov. 5
Fayette	April 16*	Oct. 4	Mountain Grove	April 16*	Oct. 6*
Fulton	April 16*	Oct. 4	Neosho	April 16*	Nov. 5
Hannibal	April 16*	Oct. 4	Rolla	April 16*	Oct. 24
Jefferson City	April 16*	Oct. 4*	Salem	April 16*	Oct. 6
Kirksville	April 16	Oct. 3	Seligman	April 15*	Nov. 5
Louisiana	April 16*	Oct. 4*	Seymour(near)	April 16*	Nov. 5
Macon	April 16*	Oct. 4	Springfield	Mar. 17	Nov. 5
Mexico	April 18*	Oct. 4*	Versailles	April 16*	Oct. 4
St. Charles	April 16*	Oct. 4			
St. Louis	Mar. 12	Oct. 6	*Southwest Plain*		
St. Louis Univ.	Mar. 12	Oct. 6	Appleton City	April 15*	Oct. 24
Steffenville	April 16*	Oct. 4	Clinton	April 16*	Oct. 5*
Unionville	April 16*	Oct. 4*	Harrisonville	April 16*	Oct. 6*
Warrenton	April 16*	Oct. 4	Lamar	April 15*	Oct. 24
Keokuk, Iowa	April 16*	Oct. 4	Lamonte	April 16*	Oct. 6
			Marshall	April 16*	Oct. 4*
Southeast Lowlands			Nevada	April 15*	Oct. 6*
Campbell	April 16*	Oct. 7	Warrensburg	April 16*	Oct. 24
Caruthersville	Mar. 7*	Nov. 22	Warsaw	Mar. 17	Oct. 6
Doniphan	April 16*	Oct. 7			
Jackson	April 16*	Oct. 7	*Northwest Plateau*		
Marble Hill	April 16*	Oct. 7*	Bethany	April 16	Oct. 6
Poplar Bluff	April 16*	Oct. 7*	Chillicothe	April 16*	Oct. 4
Sikeston	Mar. 17	Nov. 18	Conception	April 16*	Oct. 6
Cairo, Ill.	Mar. 9	Oct. 7	Edgerton	April 16	Oct. 6
			Grant City	April 16	Oct. 4
Ozark Plateau			Kansas City	April 16*	Oct. 6
Arcadia	April 16*	Oct. 6	Kidder	April 16*	Oct. 4*
Birch Tree(near)	April 16*	Oct. 7	Lexington	April 16*	Oct. 6
Crystal City	April 16*	Oct. 4	Maryville	April 16	Oct. 4
Dean	April 13	Nov. 5	Oregon	April 16*	Oct. 31
Eldon	April 16*	Oct. 4*	St. Joseph	April 16*	Oct. 6
Farmington	April 16*	Oct. 6	Tarkio	April 16	Oct. 4
Garber	April 16*	Nov. 6	Trenton	April 16*	Oct. 4*

* Occurrence of killing frost not recorded, dates given are last in spring and first in fall of temperature 32° or lower.

WBO, St Louis, 2-18-36—1170.

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